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THE IMPACT OF HIV/AIDS ON THE SOUTH AFRICAN HEALTH SYSTEM , POST NHI IMPLEMENTATION

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

ABSTRACT

The National Health Insurance Policy Paper (NHI) that was promulgated in 2011, marks the beginning of the South African Department of Health's journey into delivering a health system that offers universal coverage to all its citizens, that is free at the point of contact. (NHI, 2011) The implementation of this new health system faces many challenges such as the impact of HIV/AIDS. This research was conducted to ascertain what this impact would be according to subject matter experts in the field.

Twenty interviews with experts from the different stakeholder groups were undertaken.

The findings revealed that there is dire a need for a new health system to offer financial risk protection and universal coverage to all South African residents. Health Systems strengthening will form a significant part of the reformation that is needed to get the health system to work efficiently. HIV/AIDS must be monitored and managed carefully to avoid multi-drug resistant strains from emerging. An existing model has been adapted for the purposes of this study that allows focus on the various components of the health system. Each component or building block will need attention and strategic direction to ensure that the entire system can function holistically, seamlessly and efficiently.

KEY WORDS

NHI, HIV, Health System

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Thakhani Tshivhase

Date

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In the words of Albert Schweitzer: “At times our own light goes out and is rekindled by a spark from another person. Each of us has cause to think with deep gratitude of those who have lighted the flame within us.” Thank you to each of my research respondents, the experts from various fields in the health sector, who made the time to open my eyes and share knowledge.

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LIST OF ABBREVIATIONS

AIDS – Acquired Immunodeficiency Syndrome

ART – Antiretroviral Therapy

ARV – Antiretroviral drugs

CBO – Community Based Organisations

CPI - Consumer Price Index

CSO – Civil Society Organisations

DoH – Department of Health

HAART – Highly Active Antiretroviral Therapy

HIV – Human Immunodeficiency Virus

HCFA – Health Care Financing Administration

GDP – Gross Domestic Product

GFATM – Global Fund to fight AIDS, TB and Malaria

MAP – Multi-Country AIDS Program

MDG – Millennium Development Goals

NGO – Non Governmental Organisation

NHI – National Health Insurance

NHIT – National Health Insurance Taiwan

NHP – National Health Program (Canada)

NHS – National Health System

NPOBS – National Pension and other Benefits Scheme

NSSA – National Social Security Authority

OHSC – Office of Health Standards and Compliance

PEPFAR – President’s Emergency Plan for AIDS Relief

PHI – Private Health Insurance

PMB – Prescribed Minimum Benefit

SASSA – South African Social Security Agency

SHI – Social Health Insurance

STATSSA – Statistics South Africa

TB – Tuberculosis

UKAID – United Kingdom Aid Organisation

UNAIDS – Joint United Programme on HIV/AIDS

UN – United Nations

WHO – World Health Organisation

GLOSSARY OF TERMS

AIDS:

Is a disease caused by infection with HIV that is transmitted through contact with bodily fluids during sexual intercourse, the transfusion of infected blood, the sharing of needles or the transmission from mother to child during childbirth or pregnancy or breastfeeding. It's a disease that compromises the human immune system leaving the affected person vulnerable to opportunistic infections and cancers that can be fatal. Centre for Disease Control and Prevention (CDC), 2006)

HIV:

Is the human immunodeficiency virus that causes AIDS. (CDC, 2006)

CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1 Introduction

South Africa was able to peacefully and democratically transform itself from a racially segregated state wherein the majority were marginalised, into a state that strives for equality and justice for all. The leaders of the country have made great strides in providing basic infrastructure from housing, clean water, electricity and more clinics to provide basic health care to those who were previously excluded from these services. (Benatar 2004)

In 2012, 18 years after the new democracy was born, the leaders of the land still battled with a number of systems that needed to be further improved upon in order to ensure the entire population had access to basic human rights as stipulated in the bill of rights. The Bill of rights is an integral part of the constitution as it contains the rights of the South African people and it elaborates on the values of dignity, equality and freedom. (South African Constitution, 1996) Section 27 of the Bill of Rights of the Constitution stipulates that everyone has a right to access health care services and that the State must take legislative and other measures, within available resources, to achieve this right.

On the 12 of August 2011, the Department of Health of South Africa (DoH) issued The National Health Insurance in South Africa Policy Paper (NHI). The NHI is largely a financing system that will ensure that all South Africans and legal residents are able to access essential healthcare no matter what their socio-economic status is (NHI, 2011). The intention is to implement the NHI through phases over a fourteen year period and slowly reform and overhaul the existing health system.

There are various challenges South Africa will incur in the implementation of this system due to the extent of the overhaul that is required. According to the authors of the research conducted by the Centre for Development and Enterprise - Reforming Health Care in South Africa (CDE, 2011) the challenges include the financial modelling, strategic management and infrastructure enhancement of the entire medical system. The NHI implementation will also have to factor in the burden of disease which is the current reality within the South African Health system. These include Human Immunodeficiency Virus/Acquired Immunodeficiency (HIV/AIDS) and the co-infection of Tuberculosis (TB) that is prevalent in South Africa; the maternal, infant and child mortality; and finally injury and violence that currently plague the South African health care system. (NHI, 2011) This research paper focused entirely on the one burden of disease, namely, HIV/AIDS and the potential impact it will have on the health system, post the implementation of the NHI.

1.2 Motivation for research

HIV is a retrovirus that infects the immune system. The virus destroys or impairs the ability of the immune system to function. As the infection progresses, the immune system is compromised to such an extent that the infected person becomes susceptible to opportunistic infections. At an advanced stage of HIV infection, the infected person is then said to have full blown AIDS. The virus is transmitted from one human to another through unprotected sexual intercourse either anal or vaginal. It can also be transmitted through the sharing of contaminated needles or the transfusion of contaminated blood and also from mother to child during pregnancy or childbirth or when during breastfeeding. (CDC, 2011)

In August of 2012, there was still no known cure for HIV. Known and used methods of combating the disease are to prevent the initial spread of the virus from one person to another through the use of condoms, abstinence, the use of clean needles and the administration of Antiretroviral therapy (ART) for those that are already infected with the virus. ART can prolong the life of the infected patient and is also able to prevent the transmission of the virus from pregnant women to the child during the pregnancy. (CDC, 2011)

HIV/AIDS poses a serious challenge for health systems. This challenge is fundamentally different from other health problems that are dealt with by health systems. Musgrove and Horteiz (2009) stated that one of the ways to prevent AIDS from being a deadly disease that destroys millions of lives each year, one would need to transform HIV/AIDS into a manageable chronic illness. This means that one has to transform millions of patients world wide into chronic patients that will now for the rest of their natural lives, be in need of life-long and regular check-ups and medication. The efforts that have been made thus far in combating the illness would have to continuously be increased for many years to come (Musgrove and Horteiz, 2009). The multitudes of people who are infected with HIV need access to ART, placing an ever growing demand on the health system in South Africa. As more and more people are given access to the drugs, the amount spent by the health care system on ART will increase and so too will the total amount that the DoH will have to spend of the national budget.

According to the Joint United Nations Programme on HIV/AIDS (UNAIDS) in a report published on International World AIDS Day, December first 2011, the AIDS epidemic is at its most severe in the Southern African Region. Statistics South Africa (Statssa, 2011) reported that there were 5.38 million people living with HIV in South Africa in

2011. UNAIDS claimed that this figure was greater than any other country in the world (Unaid, 2011). If South Africa has the largest known HIV/AIDS population in the world, then South Africa will need to fund possibly the largest known amount in the world on providing a health care system that is able to provide basic health to each citizen in the country.

Table 1. Births and Deaths in South Africa

Births & deaths 2001–2011	Number of births	Total number of deaths	Total number of AIDS deaths	Percentage AIDS deaths
2001	1 170 773	532 482	215 907	40,5
2002	1 167 622	577 444	259 043	44,9
2003	1 162 612	618 293	298 297	48,2
2004	1 153 924	652 868	331 794	50,8
2005	1 143 062	678 386	356 209	52,5
2006	1 131 306	676 660	353 577	52,3
2007	1 116 931	664 009	339 666	51,2
2008	1 103 281	640 521	315 103	49,2
2009	1 090 567	611 338	283 437	46,4
2010	1 075 513	593 907	263 368	44,3
2011	1 059 417	591 366	257 910	43,6

(Adapted from Statssa, 2011)

The table above shows how many deaths can be attributed to AIDS as a percentage of the total deaths that occur per annum in South Africa. In 2011, 43.6 % of the deaths recorded in South Africa could be attributed to AIDS. Close to half the recorded deaths in South Africa were as a result of HIV/AIDS. This figure has improved in the period from 2001 to 2011, perhaps pointing to increased access to ART, as in 2005 this figure was at 52.5% of deaths being attributable to AIDS.

According to section 27 of the Bill of Rights, South Africa as a country must make sure, using the available resources, it can provide access to health care services to the entire population. In the formulation of this health system, there will have to be consideration of the HIV/AIDS pandemic and what its impact will be on this new health system. This research study intends to explore if the true impact of HIV/AIDS has indeed been considered in the drawing up of the NHI policy document and if the envisaged health system could support the South African population's health needs.

1.3 Research Aims

The UNAIDS report reports that the most substantial increase in antiretroviral therapy (ART) coverage has been in Africa, South of the Sahara to be exact. There has been an estimated 20% increase in the period between 2009 and 2010. Given the high HIV prevalence, resources will have to be allocated for the provision of ART to prevent further transmission and high mortality rates. South Africa is faced with the challenge, as it reforms its health system, of ensuring provision is made for the ever increasing demand for ART and also the impact of having such a large proportion of chronically ill people on the health system.

For this Reason, this research study aimed to explore the following main questions:

1. Post the implementation of the NHI, will the South African Health System be able to cope with the required level of chronic medication needed by the population in South Africa, given the demand for ART?
2. Can the proposed financial modelling of the NHI deliver universal access to treatment in a sustainable manner for the entire South African population?
3. What kind of health care system will best fit a low- to middle-income country such as South Africa, with a sizeable proportion of the population in need of ART?

The researcher studied the existing literature on the concept of universal coverage and surveyed the literature that covered the economic costs of ART. Various health systems were considered in literature to evaluate best practice in other countries. Financial modelling of the health system was perused as well. Finally, the researcher conducted interviews with subject matter experts in order to ascertain their views with regards to the funding mechanisms proposed by the NHI and if they think these will be possible and sustainable; what they believe will happen to the Medical Aid Schemes environments post the NHI implementation; what the impact, if any, will be on donor aid in the health system and if the NHI might result in some donor agencies being redundant and lastly if universal access or coverage would be possible or should a hybrid model be considered.

CHAPTER 2: LITERATURE REVIEW

2.1 The South African Health Care System

The current Department of Health (DOH) has set down considerable new legislation in the national health domain over the past few years, in order to meet goals and to ensure that access to health care across the nation is provided to all. Examples of this included the creation of a “district based system of primary health care, nationalisation of health laboratory services, greater regulation of health care professionals, compensation for occupational injuries and diseases, and health promotion.” (Benatar, 2004, 82)

Table 2. Health Legislation in South Africa since 1994

Year	Legislation	Provision
1996	Choice of Termination of Pregnancy Act	Liberalised approach to Abortion
1997	Nursing Amendment Act	Creation of a single Nursing Council
1997	Medicines and Related Substances Control Amendment Act	Introduction of measures reducing costs, a pricing committee and including the importation of generic drug
1997	Social Health Insurance Scheme	Aimed at the establishment of social health insurance as a component of a comprehensive social security system
1998	Medical Schemes Act 131	Prescribed Minimum benefit conditions; prohibited rating of risk and exclusions based on age, sex, sex or state of health
2000	National Health Laboratory Services Act	Creation of a single Health Laboratory Service
2001	Medical Schemes Amendment Act 35	Strengthening of policy goals of 1998
2001	Financial Advisory and Intermediary Services Bill	Regulation of brokers of medical Insurance Schemes
2001	National Health Laboratory Services Amendment Act 56	The amalgamation of 234 public sector Laboratories
2003	National Health Bill	Broad based framework for the Administration of the Health Care System
2005	Traditional Health Practitioners Act	Creation of a Regulatory framework to ensure efficacy, efficiency safety and quality of Traditional Health Services
2007	Foodstuff; Cosmetics and Disinfectants Act	Control of the Sale, Manufacturing and the importation of foodstuffs Cosmetics
2011	Radiation Control Act	The classification and management of hazardous material

(Adapted from Benatar (2004) and The DoH

The above table lists some of the changes to legislation that were made to ensure a more equitable health care system. These measures were undertaken to extend basic health care to those who were previously excluded in the hopes that there would be fewer demands on the secondary and tertiary health care systems that existed in only a few of the nine provinces previously. According to the World Health Organisation (WHO), “Primary Health Care is essential health care based on the practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self reliance and self determination” (Alma Ata Declaration, 1978). Primary health Care basically refers to the first level of general health services provided in a health system.

The WHO states that the ultimate goal of primary health care should be to provide better health for all and has even identified five key elements that need to be adhered to in order to achieve the goal. The table below is a summary of those five elements:

Table 3. Primary Health Care Elements

Elements	Area of Focus
Reducing exclusion and social disparities in health	Universal Coverage Reform
Organising health services around people’s needs and expectations	Service Delivery Reform
Integrating Health into all sectors	Public Policy Reform
Pursuing collaborative models of policy dialogue	Leadership Reform
Increasing stakeholder participation	

Adapted from WHO (2011)

Secondary health care services include the treatment and diagnostic services for a given population. Generally these services require more complex and specialised

skills and facilities than private health care health services. Secondary health care services often follow from a referral from a primary health care facility.

Tertiary Health care services provide the most complex services and specialist care often involving sophisticated treatment and diagnosis and are usually executed in major hospitals.

The South African Health system is comprised of a two tier health care system. The public health care system supports the majority of the population and the private health care system supports a minority. Discrimination in access to health care has now become skewed by access to care on an economic basis and no longer on the basis of race which was the case under the government of the day, prior to 1994. Those that can afford medical aid contributions and the out of pocket payments or co-payments make use of the private health system and those that can not afford medical aid or the co-payments make use of the public health system. Those that can afford the medical aid systems are generally representative of the middle to upper income brackets in South Africa and those in the lower income brackets are the users of the public health care system. (CDE, 2011)

Table 4. Expenditure on Health Care as Percentage of GDP

Country	% of GDP
South Africa	8.7
Sweden	8.9
Hungary	7.8
WHO Recommendation	5

(Adapted from CDE, 2011)

The above table illustrated the comparatively large amount spent by South Africa on its health system as compared to other countries. The authors of the CDE (2011) presented findings that showed that South Africa spent more on health than any

other African country in 2009 and yet the health system was ranked 175 out of 190 countries. The CDE (2011:24) authors viewed this as “The paradox of persistently poor health outputs and outcomes despite high health expenditure and many supportive policies”. South Africa is spending more than any African country on the continent but is not getting a return in outcomes congruent to the level of expenditure. This indicates a need to reform the health sector to ensure that resources are effectively and efficiently utilised.

The following table 5 has been used to show the sectors in which the health expenditure is utilised. Half of the amount that South Africa spent on health is used to service only 35% of the population. It is evident that there was an inequality in the health system in South Africa where the amount spent per sector does not ensure that the entire population is able to receive equitable access to health care.

Table 5. South African Health Expenditure per Sector

Sector	% of GDP	% of Population Covered
Private Sector	4.3	35
Public Sector	4.2	64
NGO Sector	0.2	1
Total	8.7	100

(Adapted from CDE, 2011)

The World Health Organisation (WHO) recommends an average of five percent or less of GDP be spent on health for a middle- to low-income country such as South Africa. This means that South Africa has been spending a large amount of money towards its health sector and has as yet not been able to provide services that are utilised by the majority of its population. (CDE, 2011,9)

South Africa's Health Care system presents a challenge when it comes to the reformation thereof. The private sector which is dominated by private medical aid schemes, served 35 percent of the population through contributions and out of pocket payments and provided high quality care to those who could afford it. (CDE, 2011) The public sector has been comprised of a system that was poorly resourced and not strategically managed. This is what the NHI is intended to correct.

2.2 The Burden of Disease and the Economic Impact of HIV/AIDS

The DoH, since 1994, has been trying to establish an equitable health system that is accessible to all whom reside in the Republic. This has not been the only challenge faced. The DoH has what has been coined the quadruple burden of disease CDE (2011). This is comprised of the following: HIV/AIDS, Tuberculosis (TB), Injuries and Mother and child mortality.

For the reformation of the health care system to be effective, these have to be taken into account as well. In order for South Africa to be able to report better health outcomes, DoH would have to carry out the following strategies according to Harrison (2009):

Table 6 : Quick Win strategies to improve health care in South Africa

Key Strategies to improve Burden of disease	Key strategies to improve Health System
1. Implement a comprehensive portfolio of HIV prevention at sufficient scale for impact	6. Lead from the front: give health workers a clear vision of the health sector reform and work together for its implementation.
2. Scale up ART programme with specific targets and clear decisions on trade-offs between coverage and quality	7. Implement a national programme to improve quality care focused first on HIV, TB, STI's and maternal and peri-natal care and on district hospitals
3. High-vigilance detection of TB among people with HIV and greatly improved case handling	8. Implement a focused programme to improve operational efficiencies – include clear devolution of district hospital authorities; simplification and better use of management information and better financial and performance accounting.
4. Take the lead in implementing a comprehensive national programme to prevent alcohol abuse	9. Establish clear service provision norms for the public sector and implement a package of incentives to retain personnel and make better use of private sector personnel, academics & NGO's
5. Continue to strengthen policy instruments that help prevent non-communicable diseases.	10. Develop a clear plan for financing ART expansion over the next five years even as longer term financing options are being considered.

(Adapted from Harrison, 2009)

According to Statssa (2011) there were 50.58 million people in South Africa; of this figure 5.24 million were living with HIV. 10% of South Africa's total population are living with HIV and 16.6% are between the ages of 15 – 49 years. This is significant because it represents the economically active portion of the South African population that will require ART and it also bears mention that if this proportion of is unable to access ART, they will succumb to AIDS and eventually be too disabled to work. This reduces the economically active population and increases the cost of disability support.

The following table is adapted from Statssa (2011) indicates how many of the South African Population were receiving antiretroviral treatment.

Table 7: Number of people with HIV under treatment

Years	Adults (15years +)	Children	% Children on cotrimoxazole
2005	101 416	11 959	2%
2006	215 875	23 369	4%
2007	386 315	37 694	12%
2008	609 752	68 788	21%
2009	839 516	87 431	29%
2010	1 058 399	105 123	38%

In 2009 the World Health Organisation issued a policy that recommended that all children who are born to mothers who are HIV positive, should be provided with cotrimoxazole until the child's status could be confirmed. Tests available up until 2011 could not determine a child's status until the child is at least eighteen months old as the child would still have the mother's anti-bodies in their system. This means they could test positive for HIV, but falsely so. So as a precaution, the recommendation is that the child is kept on this medication until the age of five and then tested for their status again. (Statssa, 2011). The reason that this bears mention is because the table above shows how many people are currently receiving treatment and the figures of those living with the disease indicate a great divide. There are so many more people that the South African health care system is yet to reach. This is a substantial factor that needs to be taken into account with the reformation of the Health Care System.

"Antiretroviral treatment is complex and requires regular monitoring of adherence, efficacy and side effects, with consequent changes to the treatment regime when needed, requiring large inputs from local health services. Such treatment is expensive." (Canning, 2005, 121) The reason that these changes are necessary is because the HIV is known to mutate quite easily, and although the mutations are not as virulent as other retroviruses are known to be, resistance to the antiretroviral

drugs does emerge. The author commented further on a Brazilian study that was carried out which showed that the average duration of the benefits obtained from first line antiretroviral therapy was only for a period of 14.1 months. The Author also suggested the same pattern would emerge in Africa and the real problem lay in the fact that the cost of second line antiretroviral drugs could be as high as ten times that of the first line of antiretroviral drugs.

This was significant as South Africa has 5.24 million people living with HIV and about 4.19 million have still not gained access to ART. Should this figure present symptoms indicating the need to move to second line antiretroviral drugs every two years, this would place a serious economic burden that would have to be factored into planning as the NHI is implemented.

Canning (2005) also referred to the current WHO proposed treatment regime in low income countries which recommended that antiretroviral treatment be started on patients once their CD4 count reached the level of 200 or less. A CD4 test is used to measure the amount of T-helper cells that are present per cubic millimetre of blood. An HIV negative person will present a CD4 count of between 500 to 1200 cells per cubic millimetre, an HIV positive person would present a declining CD4 count. (Avert, 2009)

Waiting for the CD4 count to reach 200 or less was basically around the time when opportunistic infections were likely to present themselves. According to Canning (2005) this would mean that even more resources would be utilised to restore the patient to a level of wellness.

Canning continued to express the fact that “Development of an effective HIV/AIDS vaccine would bring enormous benefits because of the many millions of HIV

infections that could be avoided, which justifies large investments even if the probability of success is low.” (2005, 134)

The author argued that middle- to low-income countries should either focus on treatment of HIV or prevention and that it was not economical to focus on both as it required a large financial contribution. The author added further that most medical facilities in Africa were low on personnel currently, worse so in rural areas, making the roll out of any antiretroviral treatment difficult and the provision of universal access in the next few years would be hard to achieve.

“HIV infection has had a disproportionate impact on those countries and communities already struggling with poverty, income inequality, and lack of medical care.” (Christensen, 1998,2) The view of Christensen is in correlation with that of Canning as the author argues there are too many neo-classical views about how the pandemic will affect economies in the third world and that those who are vulnerable as a result of not having access to money, will not be able to negotiate for safe sex.

This research report is not intended to argue the merits of prevention over cure, nor is it intended to separate the two for HIV/AIDS management. Both prevention and cure are assumed to be part of one strategy for the purposes of this research report.

2.3 Universal Coverage and the South African NHI

Part of the government's aim in delivering NHI to the population of South Africa is to make health care free at the point of service to every legal citizen in South Africa. This is a view long promoted by the WHO and one that has been adopted by many first world countries around the world.

According to NHI (2011, 59) Universal coverage is “ The progressive development of the health system, including its financing mechanisms, into one that ensures that everyone has access to quality, needed health services and where everyone is accorded protection from financial hardships linked to accessing these health services.” The WHO defines it as “one that provides all citizens with adequate health care at an affordable cost.” South Africa did not propose to provide health care services to its citizens for free nor to cover the entire cost of everything. The NHI presents a case for a compulsory health system that is funded through public funds that would be able to provide basic health care services to all legal citizens. It further specified that, the funds would be collected by the South African Receiver of Revenue. (NHI, 2011)

The NHI would follow the classical universal coverage system with single payer mechanisms to health care providers. This would allow the NHI to negotiate pricing and minimum patient benefits. The NHI would however not have prevented the citizens from acquiring supplementary health insurance should they feel the need. The NHI would allow citizens the right to continue to contribute to their medical aid schemes if they deemed it necessary.

The CDE Research No18 (2011) warned against the South African state often blaming the private health care system for some of the ills that plague the health care system. The authors of the CDE (2011) further stated that it would be better to

view the two systems as having been complementary as the private health care system was able to provide services that the public health care system could not. And that reform and perhaps attitude changes were needed for the NHI to succeed in its goal to provide universal access to its citizens.

The authors of the Lancet Medical Journal (2009, 20) argued that it is “extremely difficult to provide universal access and quality health in a highly unequal society with such low rates of participation in the economy and at such high levels of poverty and the existing burden of disease.” The authors concur with the CDE No18 researchers; the only way in which universal access will be achieved with a measure of success would be through strategic use of all resources and the reformation of both the private and the public sectors.

2.4 Best Practice Examples of Universal Access

Literature provides a few examples where countries have been able to achieve universal access and have implemented it well into a functional system.

2.4.1 Lessons from Taiwan

The Taiwanese government implemented a universal health insurance programme in 1995 that they called the National Health Insurance (NHIT for distinction purposes). Lu and Hsiao (2003,77) argued that as a result of the implementation of the NHIT, the single payer system had allowed the government to manage their health spend inflation and “the resulting savings were offset largely by the incremental cost of covering those who were previously not ensured.”

Lu and Hsiao's (2003) study had revealed post implementation of NHIT in 2001, that 97% of the Taiwanese people were members of the system and that the NHIT consistently received above a 70% average public satisfaction rating. The authors also established that the new system had allowed for a health care system that provided more equal access and also offered financial risk protection in the financing of the system.

In Taiwan 63% of the doctors were employed by the hospitals and were paid on a salary basis under the NHIT. Productivity bonuses were also received. Private doctors not employed by the state did not have admittance privileges to hospitals so if hospital care was needed these doctors had to refer patients first to an admitting doctor. Lu & Hsiao's (2003, 79) study revealed this practice encouraged the development of large outpatient departments and primary clinics to contain the flow of outpatients.

The authors found that the NHIT provided the following comprehensive benefits:

- Preventative Medicine
- Prescriptive Drugs
- Dental Services
- Chinese Medicine
- Home nurse visits.

Co-payment funding financed the out patient visits to clinics and hospitals but this was capped at ten percent of the average national income per person to prevent cost escalation or inflation.

Lu and Hsiao (2003, 83) stated that this model could not simply be exported to another country as “Taiwan’s economy has advanced to a stage where most workers were employed in the formal sector, so a compulsory NHI can effectively collect premiums through employers. The government subsidises the coverage of the poor, veterans and farmers. Taiwan also has the organizational ability and human resources to manage a health resource scheme. Most developing nations do not; these nations can’t adopt the models of an advanced nation.” In contrast South Africa had large unemployment rates and only 5.9 million registered tax payers in 2010. This figure would not generate adequate resources to fund an NHI . (CDE, 2011)

In a study conducted by Chang (2011) it was found that it is vitally important to ensure that effective payment systems are adopted to maintain health care costs at an acceptable level. It was also found that information asymmetry and the monitoring and auditing systems are areas that can cause cost containment to fail. As doctors, hospitals and other health care providers act as agents of the NHIT, it was important to have the information running through all systems to be symmetrical and accurate and that the monitoring systems are effective and efficient so cost containment can occur and help keep the system running at full capacity with perfect information for decision making purposes.

Lu and Hsiao did not focus on the aspect of HIV and AIDS, nor was any mention made of the HIV/AIDS impact on a health system that seems to work very well and has achieved its objective of universal coverage.

2.4.2 Lessons from France

In 2000 the WHO judged France to have the best overall health care system. In 2005 the French spent 11.2% of GDP on health care services. Steffen (2010) explained that the French health system is one that provides universal access which is funded largely by the government. It is both state planned and operated. In the French National Health service, doctors are in private practice but a salary is drawn from public insurance funds. The state then reimburses up to 70% of the bill. Doctors are free to charge what they like but the state will only reimburse a certain amount which served as a natural deterrent to charge higher than average prices.

Steffen stated (2010, 357) “Complementary insurance is widely developed in France, despite the fact that the national health insurance covers all services. However, reimbursement has never been complete, except for severe acute or chronic disease, and as co-payments have been multiplied as a result of cost-containment schemes, nearly the entire population subscribes to a complementary health insurance policy.” These complementary health policies are not for profit organisations that participate with the state. Steffen (2010) explained that the problem with the French health system is that the expenditure on health has already outstripped countries like Japan, Sweden and the Netherlands that have comparable health systems. Steffen (2010) commented that 95% of the French population was covered by the Health Care system and the health system operated in such a way that the more ill a person became, the less they would end up paying. This means people with serious chronic illness could end up having their entire health care bill covered as the state would refund 100% of their expenses and would even waive their co-payments.

This would be what the NHI in South Africa ideally would like to provide but the provision of such a health service is costly as stated previously. South Africa's health system has over 195 medical insurance companies. (Botha and Hendricks, 2008) The South African NHI was not intended to disrupt private medical insurance companies nor did the NHI intend to prevent people from belonging to these. The French system is instructive as their complementary medical systems have formed a working model ensuring that the public and private medical systems complement each other.

2.4.3 Lessons from Zimbabwe

The researcher then tried to see what cases of best practice were like on the continent of Africa. One Country's health system that was explored was that of Zimbabwe, which borders South Africa on the North. Chikova and Chinamasa (2007) conducted a study on the impact of HIV/AIDS on the contribution to social security funds. The authors found that "Significant early retirement from work due to HIV/AIDS related illness is reducing the gainfully employed population and threatening the viability of the statutory social schemes run by the National Social Security Authority (NSSA) in Zimbabwe.(Chikova and Chinamasa, 2007, 23).

The authors explained that the NSSA was created by the Zimbabwean state to administer all social security schemes in the country. One of the funds under the management of the NSSA is the National Pensions and Other Benefits Scheme (NPOBS). This is a compulsory social scheme that all the formally employed people of Zimbabwe must belong to, with the exclusion only of domestic workers. The HIV/AIDS pandemic has compromised the base that contributes to this fund and it's upsurge and greatest infection figures are of those of the economically active,

namely, age 15 – 45. The authors of this study found that HIV/AIDS was thus having a negative impact on the social security income which relied on the population's contribution. HIV/AIDS was negatively affecting the number of contributions and the quality thereof. The authors of this paper were actuaries and they carried out calculations on what the effects would be if there was a ceiling imposed on how much people had to contribute to the NPOBS given the dwindling number of people who were still able to contribute towards it and also found that the ceiling would have a negative effect on the contributions.

The above quoted study pointed out how important the contribution base of a social fund is and how HIV/AIDS can undermine the very base that is meant to fund it. Would the NHI be able to survive the increase in numbers of those who will require more from chronic benefits from the system for an extended period of time? Would the NHI face the same fate as evidenced by the NPOBS in Zimbabwe? Will the NHI face the same conundrum of being dependent on the economically active population for contributions to the fund, yet having that same group threatened by ill health and thus rendered unable to work, or retiring at a younger age?

2.4.4 Lessons from North America (The United States of America & Canada)

“The United States is the only western industrialised nation (besides South Africa) without a national health program that assures access to health care as a basic right for all.” (Navarro. 1989, 36) For this reason the researcher has included a lesson from the United States of America as an example of how a first world country is able to function without the provision of universal access to healthcare for its citizens.

In 1989 most American citizens received health care cover through their workplace, via the employer-employee contribution. In Navarro's (1989) opinion, relating health benefits to work creates problems as the health cover is then affected by a wide range of variables such as recession, job loss and changes in the economic climate. The author goes on to emphasise the problematic nature of tying health benefits to the workplace by specifying that this merely adds an extra cost to the production that burdens employers. This practice also stimulated an economic behaviour among providers in which patients were evaluated and selected on their profitability. Health Care providers in the United States had started selecting "profitable" cases and discharging prematurely or refusing to assist those cases they deemed "unprofitable" such as HIV/AIDS cases, whose cost per case was \$120 000 in 1989.

Navarro (1989) compared the American health system to that which geographical neighbour Canada introduced in 1966. The Canadian National Health Program (NHP) gave the responsibility of insuring the population at a federal provincial partnership level. The Canadian Medical Act ushered in a period of federal funding into the health care system that was administered at a provincial level. These provincial health programs had to adhere to five basic health care principles:

1. Comprehensive Coverage
2. Universal application of program
3. Ability to transfer coverage to other provinces
4. Speedy accessibility to system
5. Public non profit administration (Navarro, 1989)

By 1984, Canada had passed the Canada Health Act that resulted in the holding back of federal funding from those provinces that permitted doctors to "extra bill" –

that is billing above the normal negotiated rates. Private Insurance was permitted but could only sell benefits that were not provided in the NHP. Canadians were automatically insured by the health system and it was thus impossible for anyone to be denied proper medical treatment.

Navarro (1989) explained the working of the NHP as follows: the doctors and hospitals bill the provinces for reimbursement. The rate at which they are reimbursed is determined by the government through negotiations with representatives of the medical profession. A capital budget is established each year at the provincial level and then through careful planning, the government allocates resources with that budget so that each community has access to affordable health care facilities.

Levi and Kates (2000: 1039) believe that “HIV offers a lens through which the underlying problems of the US health care system can be examined.” Levi and Kates (2000) stated that in 2000 there were an increasing number of new cases that kept occurring particularly among individuals with poor access to health care. The promising new treatments that the authors referred to being Highly Active Antiretroviral Therapy (HAART), was changing the model of care in the US from one of terminal care to one of chronic disease management. HAART requires that an individualised approach to treatment is followed, as the time when treatment is commenced, the combination of drugs and switching drugs should the initial combination not be working effectively, is all of utmost importance. (Levi & Kates, 2000) This is also costly because in order to know when treatment must commence, one needs to know the CD 4 count of the patient, which means visits to doctors offices are required, blood tests are then also required to monitor the effects of the drugs. “Adherence to the prescribed regimen is critical” (Levi & Kates, 2000; 1035) one of the reasons cited for the importance of adherence is that not adhering can

lead to the development of viral resistance which would then render HAART ineffective and also increase the public health threat of the possible spread of a multidrug resistant HIV. This led the authors to state the importance of the provision of services that made it easier for the patients to adhere to the treatment protocol.

Medicaid is the principal source of care financing for people living with HIV in the US. Eligibility to Medicaid is gained through being poor and disabled. These are about the same conditions in the US that would make one eligible for Supplemental Security Income. This means that financing is only available to the individual who has developed full blown AIDS and has become severely disabled. The poor in the US that are HIV positive have to wait until the disease has progressed to a stage where they are disabled before they are able to make use of the nation's principal system of poverty base care financing. (Levi & Kates, 2000). The US citizens who do not qualify for Medicaid have to rely on other safety nets such as the Ryan White Care, which is a drug assistance programme that also relies on funding to be able to provide this service. Some sort of primary health care would still need to be present, as in order to gain access to the drug assistance program, the individual would need a valid CD 4 count for purposes of monitoring the reaction to the drugs. (Levi & Kates, 2000).

The State of Maine gained approval from the Health Care Financing Administration (HCFA) to extend the reach of the Medicaid programme to those who were poor yet not yet disabled. Other states have subsequently been granted approval as well but the standards that were to be complied with; were set quite high. Budget neutrality had to be achieved and this proved problematic for some states as the bigger states had to negotiate with the pharmaceutical companies for the same kind of discounts, if patients needed a new cocktail of drugs this would impact the costs. Most states

managed budget neutrality by limiting the number of people that the expansion could cover. (Shirk, 2006)

Medicare was established to supplement Medicaid. Eligibility rules for Medicare demanded the following of the patient:

- Must be fully disabled
- Must have qualified for social security
- Must have received disability payments for a 2 year period

Medicare would thus only be available to those with sufficient work histories to qualify for the Social Security Disability Insurance Benefits. (Levi & Kates, 2000)

Levi and Kates (2000) concluded that both Medicare and Medicaid's eligibility rules ensured that enrolment was limited to those in whom HIV had progressed substantially thus resulting in the treatment being more costly and that if the USA perhaps had embraced the concept of universal access and coverage of health care, the people with HIV would not have had to face the challenges they did in accessing care. They elaborated further and stated universal access could have been offered to the people with HIV at little or no additional costs given the amount of funds that had been spent on supporting the multiple finance schemes that made up the USA health system.

In 2012 the Patient Protection and Affordable Care Act was passed. This was enacted to "expand health insurance coverage primarily by requiring individuals to obtain qualified health insurance; subsidising the cost of coverage for low-to-moderate-income persons and requiring other than small employers to offer health coverage to employees and to significantly expand eligibility of Medicaid."

(Harrington, 2010:705). This will ensure that by 2014, most legal residents of the United States will have health insurance that meets minimum requirements and there will be penalties levelled at those who do not have it. This will further mean that medical cover is expanded and private health insurance markets will change significantly as state-level exchanges will come into play. (Harrington, 2010)

The USA health system prior to 2012 demonstrated what South Africa would have become had the ideals expressed in the NHI of universal access and coverage not been pursued. The NGO and other donor fund agencies that operate in South Africa might possibly not be able to deal with those HIV positive people who have not been reached by the private or public health sectors for an indefinite period. The USA health system could be viewed as a model South Africa should guard against following if the latest health reform Act had not been passed.

2.5 Health Care Funding

2.5.1 Global HIV Funding

In 2000, the Multi-Country AIDS Program (MAP) was launched. This program is a World Bank commitment of an annual \$1 billion in the fight against HIV/AIDS in Sub-Saharan Africa. The primary object of this initiative was to assist in scaling up the multi-sectoral response to HIV/AIDS. (Harman, 2007)

The multiple sectors that are being referred to are the Non Governmental Organisations (NGO); the Community Based Organisations (CBO's); the line ministries and the state government. At its inception it was envisaged that MAP would play the role of leading and shaping the response to HIV/AIDS. It was also

believed that MAP would be able to garner state support, be a catalyst in generating an upsurge of community participation and encouraging the reconfiguration between the international organisations and the state and perhaps even assume a role of global governance. (Harman, 2007)

But what resulted was not quite in line with the above-mentioned ideals. MAP's foundation was built on rivalry between international organisations, limited community involvement and contention over state sovereignty. MAP was supposed to represent the turning point in the response to HIV/AIDS and even in the way the World Bank operated. This was a programme great in both ambition and scope. (Harman, 2007)

MAP presented the following conditions that states were to adopt:

- A National Strategic Plan
- A National co-ordinating body housed at the highest level
- A commitment to disburse 40 to 60% of funds to civil society organisations (CSO) (Harman, 2007; 490)

These three preconditions were easy enough to follow, which is exactly what it was supposed to embody. It was meant to be a way of getting away from expecting countries to be forced to meet multiple conditions that often led to a delay in the disbursement of funds, with catastrophic effects for those who were HIV positive and in need of treatment they could not afford. MAP offered the benefit of not having stringent requirements. The World Bank would commit to the \$1billion and then the Vice President of the region would approve the credits for the 28 individual countries.

With the envisaged involvement of all these sectors on the AIDS landscape there was a need for a single monitoring and evaluation system that could articulate a single plan. What was needed was a Country Co-ordinating Mechanism that would enable the implementation of the project. What resulted however, was some countries that were not used to dealing with international donor aid, did not have roles clearly defined, they also suffered from limited capacity and line ministry competition. International Organisations such as Care International and The Joint United Nations programme on HIV/AIDS (UNAIDS) started outsourcing their service in a bid to assist the flow of funds. (Harman, 2007)

Harman (2007;490) “MAP represented the imposition of a government agency at the highest level of state governance.” This was a precondition stipulated by the World Bank for the funding of the programme. To many member countries, this presented a situation that eroded state sovereignty even though the funds were badly needed.

Despite the set backs, the global efforts cannot be frowned upon entirely as some substantial efforts had been made. The President’s Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to fight AIDS, TB and Malaria (GFATM) are two global funds that have done sterling work in the bid to make treatment more affordable and accessible

Harman(2007) illustrated that there are many stakeholders in the HIV/AIDS dance: there are the NGO’s; the CBO’s; line ministries and the state government and all of these impact the handling of HIV in any given country. Will the NHI impact the amount of donor funding required in South Africa? Perhaps in the execution of the implementation of the NHI, changes might have to be built in. A number of HIV/AIDS NGO’s in South Africa receive funding for the much needed work, from PEPFAR,

USAID, The Global Fund etc. South Africa has as yet not been able to reach all who require access to ART and these NGO's currently supplement the efforts of the government in the fight against HIV/AIDS.

2.5.2 Social Grants

Raniga and Simpson (2011) stated that South Africa is fast joining the ranks of African countries with a rapidly aging population. The authors have estimated that by the year 2025 the number of older people (over the age of 60) will have increased to 5.3 million. The increase in the number of older people has implications for the social, health and economic planning services.

“Only three countries in Sub-Saharan Africa – Namibia, Botswana and South Africa operate large scale non-contributory pension schemes” (Raniga and Simpson, 2011, 75) South Africa will be implementing a compulsory contribution scheme that will fund the NHI. If the country becomes home to a rapidly aging population that is largely dependent on a non-contributing pension scheme then the economically active part of the population might have to contribute a substantial amount to ensure that everyone in the country has universal access.

The authors recommended that South Africa “requires a comprehensive and well thought-out social security system with renewed commitment to creating employment with living wages and health and social benefits and services for older person households affected by poverty and HIV.” (Raniga and Simpson, 2007; 78)

The people who are dependent on social grants in South Africa will not be able to contribute to the NHI but will need to be covered by it. This financial risk has to be

built into the financial modelling of the NHI if it is to be a successful programme. HIV could wipe out a significant amount of economically active people in society in South Africa if the health system is not able to extend itself toward them and provide assistance. This would then mean that there are not enough people in the country to help oil the wheels of production in the economy. The social security offered would eventually not be feasible and inflation would soar out of control. Once the pandemic has been managed to a stage where it is but a chronic disease, then premature death of the economically active population will be curtailed.

2.5.3 Global Health, Global crisis

Benatar, Gill & Bakker (2011) argued that although great strides had been made in improving global health, a paradigm shift was still required so health could be viewed as an aspect of human development; of human security and as a basic human right. The authors stated progress at having achieved the Millennium Development Goals (MDG) for health was significantly lacking and this was evidence of a global failure at making adequate advances in improving health for a greater proportion of the world's people.

Benatar et al (2011) argued that the challenges of global health had been made worse because of the global economic crisis that had gripped world markets. The authors cited the privatisation of public health care globally as a direct adverse influence on the state of global health. Privatised health care means that the private entities can discriminate by ensuring the poor cannot afford their services thus creating inequities in the system.

“Increasing health costs are associated with unregulated fee-for-service medical practice and laws that promote private intellectual property rights which prevent a sharing of information and keep prices high.” (Benatar et al, 2011: 648) The copy right laws that are referred to here are the ones that pharmaceutical companies use to ensure that cheaper generic drugs cannot be made and thus keep the price of medicines high, often at the disadvantage of poorer nations. Also, the authors stated that these very laws had enabled the pharmaceutical industries to focus their research on profitable medicines and not the one that afflicted the poor.

To illustrate the above mentioned even further, Benatar et al (2011) argued that between 1975 and 2004, about 90% of medical research expenditure on health problems accounted for only 10% of the global burden of disease. 50% of the global expenditure on medical research was funded by the pharmaceutical industry. Global medical research produced 1556 approved drug patents; of these drugs only 18 were for use against tropical diseases and three against TB, despite the great need for new drugs for these diseases.

Countries such as South Africa have viewed access to basic health care as an essential human right. This is why a new health system is so important and needs to be well considered as the country moves into the first phase of the implementation. Benatar et al (2011) agreed that health care is a basic human right and elaborated by saying that basic health care is a collective right. It is not an individual right such as the right to own property of the private ownership of a commodity. The authors further state that “Social solidarity in health care implies that governments should provide basic public good not only as a matter of economic and social efficiency but also as a public duty to their citizens.” (Benatar et al, 2011: 650)

As part of its duty to its citizens, South Africa must provide a health system that provides universal access to care that is free of discrimination on the basis of the economic status of the individual.

2.5.4 Financing South Africa's National Health System

One of the central reasons for introducing the NHI is to eliminate the current tiered system where those with the greatest need have the least access to health care and the poorest health outcomes. The NHI is intended to improve access to quality health care services and to provide financial risk protection from health related catastrophic expenditure for the whole population of South Africa. (NHI, 2011)

The NHI will be financed through a general tax. There will be special contributions by individuals who earn above a specified level.

In 2009, the Health Economics Unit at the University of Cape Town reported that the average spend on healthcare for each person covered by a medical scheme was R9, 972 per annum and the average amount spent for each person who relied on the public health services was only R1, 925. The NHI is meant to help redress this imbalance in the health system. (NHI, 2011)

The private sector health system is funded largely through the medical aid schemes. And the public sector is funded through national taxes and donations from various sources. The South African government sponsored the arrangement of other social insurance in the form of the Road Accident Fund and the compensation for accidents and injuries. (NHI, 2011)

The authors Botha and Hendricks (2008) declared that the public sector was overburdened and a provider of last resort and had to cater for 55% of the population on a budget that was less than 44% of the total health expenditure. They cited the reason for the low public health sector expenditure as being attributable to the limited funding and the declining budget allocations to government intermediaries. These, they said, had not been able to keep pace with the increasing proportion of the population that was dependent on the public sector. The reason the proportion was increasing was due to normal population growth but also due to declining medical scheme membership and the impact of the burden of disease.

Botha and Hendricks (2008) stated that the private sector by comparison was over-resourced and under utilised. For starters, the private sector received both direct and indirect subsidies. Direct subsidy through the tax exemptions received on medical aid contributions and indirectly through the health care workers whose training was state subsidised. Botha and Hendricks (2008:00) reported the following: “International experience shows that private health insurance tends to flourish in countries with wildly differing income levels and health systems structures.” South Africa, they stated, was not an exception.

Within the Private Sector in South Africa, lies the medical schemes environment. The practice with the medical schemes environment was such that health coverage was linked to employment. This would have meant benefits linked to income and the ability to pay. This, the authors argued, is far removed from the premise of equal care for equal need. (Botha and Hendricks, 2008)

The high health care costs incurred were due to medical inflation which is significantly higher than the overall consumer price index (CPI). The weak or non

existent cost control also played a part in raising health costs as did the poor risk selection and this resulted in a decline in the number of people who could afford private health care and with it was the decline in the coverage that was received from the medical aid schemes. This ultimately led to fewer people who were able to afford private health care and more people having to rely on the public sector as a provider of last resort. The public health system burden was increased. Botha and Hendricks(2008)

The underutilised and over resourced private sector existed alongside the public health sector which is characterised, in Botha and Hendricks (2008) opinion, by poor health status indicators; a decline in health budgets; resurgent communicable diseases; inadequate human resources in the health sector and a unimproved burden of disease largely due to the HIV/AIDS pandemic. This was all made worse by the fact of the differences in health population density. There were marked differences between the public, private, urban and rural areas in the public sector.

In 2000 the South African government appointed a committee of Inquiry into a Comprehensive System and Social Security for South Africa. This committee was appointed after the initial proposal of the NHI drew criticism for being too costly and rigid. This committee was called for the creation of the South African Social Security Agency (SASSA) and proposed the following conditions:

- NHI must be a single payer model
- All medical practitioners contracted to NHI
- All medical practitioners may continue to service those with “top-up” insurance
- General Practitioners (GP’s) contracted to provide services to defined number of patients in a defined geographic area.

- GP's to practice community health
- GP's given incentives to relocate to previously disadvantaged areas.

Botha and Hendricks (2008)

The NHI is largely a financing system that will make sure that all citizens of South Africa are provided with essential healthcare, regardless of their employment status and ability to make a direct contribution. The NHI fund will then provide finance to those health facilities that meet the required quality standards as issued and regulated by the Office of Health Standards and Compliance (OHSC). (NHI, 2011)

Financing could either be through tax or insurance. Countries such as the UK and Sweeden operated on the tax route and countries such as France, Germany and Latin America operated on the insurance route. (Botha and Hendricks, 2008)

In 2000 there were 27 countries throughout the world who had achieved universal access through social health insurance. These countries achieved this at varying levels of speed. Most developing countries use compulsory health insurance contribution as a financing mechanism and this is indeed what the NHI intends to achieve as well. Countries such as Germany, the Netherlands, Switzerland and Belgium have used medical schemes to advance their Social Health Insurance (SHI) system. In South Africa the medical aid schemes have made it difficult to use them to advance SHI. Medical Aid schemes in South Africa increased contributions, hospital and specialists costs annually, and these increases had no bearing on the quality of received health care and a decreased cost in medicine did not result in decreased costs. (Botha and Hendricks, 2008)

Van Heerden (2012) recommended that the following be built into the system during the financial modelling of the NHI: Budget models must be revised for public

hospitals in anticipation for decentralisation. The hospitals need to be recapitalised and renovated and this could be achieved through the use of the national financing mechanism to leverage off the decentralisation strategies. Van Heerden (2012) also recommends using the pilot period that commenced in 2012 to test the district health system to see if decentralised decision making could be incorporated effectively into the NHI and, when things stabilised, to institutionalise a purchaser provider split.

There are economic reasons relating to why it is important to sort out the health system in South Africa. Health affects social development and economic productivity as “a healthier population contributes to better wealth creation. Each extra year of life expectancy raises a country’s GDP per person by around 4% in the long run.” (Bloom, Canning, Sevilla, 2003: 4)

2.5.5 Health Care System Change

National Health Service (NHS) which is exemplified by the United Kingdom, Social Health Insurance by France and Private Health Insurance by the United States of America all have components in them that are not system specific. Over time these systems have evolved into less purer forms than when they were initially created. These elements have come about either through innovation or adaptation as time has evolved leading to the emergence of a more hybrid and increasingly similar set of systems. (Schmid, Cacace, Gotze and Rothgang, 2010).

“Since the state traditionally plays a greater role in the provision of hospital care, while providers prevail in the outpatient sector, this means an implicit shift to private provision.” (Schmid et al, 2010: 458).

This bears consideration in the implementation of the NHI and the eradication of the two tiered health system. Van Heerden (2012) went as far as to recommend that instead of eventually removing the private sector in South Africa, it might be prudent to accept that it forms a crucial part of the system of health social protection and medical scheme coverage is a great necessity as long as it is inclusive rather than exclusive and discriminatory.

2.6 Conclusion

Universal access to health care is paramount in the delivery of an equitable national health system. This will ensure that every South African citizen has access to health services. Literature has illustrated that the quality of the health care to be delivered needs to be ensured. The capacity to convert the deadly pandemic of HIV/AIDS into a manageable chronic illness must be created and thus reduce the burden of disease. It is evident from the literature that there are various stakeholders in the health sector in South Africa, these stakeholders must work together in public private partnerships in order to deliver a health system for the nation. In this way the stakeholders gain leverage from each others strengths. The importance of well managed and adequate human resources, monitoring and auditing systems have been emphasised in the literature as tools to help contain costs in the health system. It has also been demonstrated by the examples from various countries that in the evolution of a health system that is efficient and effective, a hybrid system that reflects the necessary characteristics might be the most optimal kind of health system.

The literature has also shown that countries south of the Sahara have the highest HIV/AIDS prevalence. There has as yet, not been a study on the kind of health system that such a country would need to effectively serve the needs of its citizens. The impact of this pandemic on a new health system such as the NHI has as yet not been explored. This research study aims to investigate this angle.

CHAPTER 3: RESEARCH QUESTIONS

Research has been done with regards to how countries have structured their health systems; how they have financed their health systems and how successful the final product is. Previous research has also shown how the populations of these countries accessed health care.

South Africa presented a unique set of circumstances: It is a country that was about to create an equitable health system; there was a large population that had previously not been exposed to health care for geographic and economic reasons and there was the burden of disease (HIV/AIDS). The main questions that the researcher has focused on are:

1. Post the implementation of the NHI, will the South African Health System be able to cope with the required level of chronic medication needed by the population in South Africa, given the demand for ART?
2. Can the proposed financial modelling of the NHI deliver universal access to treatment in a sustainable manner for the entire South African population?
3. What kind of health care system will best fit a low- to middle-income country such as South Africa, with a sizeable proportion of the population in need of ART?

The researcher conducted interviews in order to explore the views of subject matter experts and those that worked in the health care space. The researcher interviewed medical doctors in the private sector, those that worked in the public sector and those who held academic positions. The researcher also interviewed people who worked in the medical aid industry and those that worked for NGO's which provided care and assistance in the HIV space.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Research Design

Due to the fact the NHI has yet to be implemented in South Africa, this research lends itself to a qualitative nature as the results can, as yet, not be quantified. The research topic is exploratory, and therefore definite comparisons are not required in this research study. The subject pertains to the opinions, expectations and predictions by subject matter experts in the health system.

It was of importance, when this kind of research was carried out, that the qualitative approach was used as it provided deeper understanding and highlighted critical insights which could have been missed if a quantitative approach were designed. The qualitative process, however may have been seen to be far more subjective and can therefore tend to be skewed if not analysed properly. Qualitative data cannot be inferred which therefore limits the breadth of the study and its ability to contribute to a greater part of a population (Saunders, Lewis and Thornhill, 2009). This research followed an exploratory approach so that an in-depth critique was achievable.

The research tools that were used were in the form of interviews that had components that were structured and some that were semi structured in order to allow the respondents to provide their views in their own words. The case study method was considered, which lends itself more to a causal outcome of a given situation and from there on the researcher makes various inferences. Gerring (2007) states that there are many criticisms of the method itself saying that “Men who can produce good case studies, accurate and convincing pictures of people and institutions, are essentially artists; they may not be learned men, and sometimes

they are not even intelligent men, but they have imagination and know how to use words to convey truth” (Gerring, 2007. 7).

The author goes on to debunk the mystery that seems to surround the case study method and clarified that it could also be used for qualitative purposes. This researcher chose not to use this method as the causality of the NHI is not what was in question but rather what expert opinions believe the result of its implementation would be and what the impact would be on the current health care system. Despite there have being studies conducted into other countries that have also implemented a health system providing universal health and free at the point of service systems, the differentiating factor was that South Africa is a third world, middle to low income country which sets it apart from the rest. This is the reason for not using the case method, as comparability would need very much a longitudinal study and this paper was intended to be more of a cross sectional approach. A longitudinal study is one that is done over a long period of time and a cross sectional approach in one that is more of snapshot of a situation at a given time. (Saunders et al. 2009)

Data was collected through the usage of interviews and the research instrument. The interviews were designed to have closed ended questions as well as open ended questions. Open ended questions allow the respondent to elaborate on certain key topics thus allowing for depth to emerge during the interview.

4.2 Population

The Population for this research was defined as subject matter experts who currently operate in the South African Health System. The sampling frame included those that operated in the following segments of the health system in South Africa: Public Health, Private Health, Medical Aid Insurance Organisations and NGO's. In the Public, NGO and Private sectors of the Health System of South Africa these were represented by medical doctors mainly and in the Medical Aid sector these were represented by senior managers as they were the ones who would have a broad overview of the health system landscape in South Africa.

4.3 Sample Size and Method

Almost all qualitative research conducted attempts to draw an inference from a sample about a population. The authors Bock and Sergeant (2002) warn that when a small sample size is being employed in a study, researchers should be mindful of ensuring that any inferences made are appropriate given the data. Purposive sampling according to Bock and Sergeant (2002: 241) "is based on informational , non statistical considerations. Its purpose is to maximise information, not facilitate generalisation."

The researcher chose to conduct 20 interviews with the subject matter experts in the South African Health System. The criterion used to determine when to stop sampling would be informational redundancy and not a statistical level of confidence. (Bock and Sergeant, 2002) This meant that once a pattern had begun to emerge from the answers solicited from the respondents and the pattern was recurring with each interview, it could be assumed that informational redundancy had been achieved.

It was important to ensure that the sample of those interviewed was representative and included all the relevant types of people. The researcher did this by ensuring that all the major role players in the health system were included. This was done by ensuring that all those who represent the different sections of the South African Health system were represented. This the researcher achieved through convenience sampling initially as many of the subject matter experts were known to the researcher. After that, further respondents were referred, thus employing the snowball sampling technique.

It was critical for the study to focus within a specific narrow framework in order to give justice to the findings. The snowball method was selected for this research study due to the given constraints of the study. (Saunders, Lewis and Thornhill, 2009) Through the use of the snowball sampling method, the derived information provides great insight because the respondents would likely know other more knowledgeable sources and would thus refer the researcher to those. Also because the researcher would be referred by someone familiar, the next respondent would be more trusting of the researcher allowing rapport to be created faster. Subject Matter Experts or the Elite Interviewee, as Gillam (2005) refers to them, are within the health care system and know each other and each other's areas of expertise. The reason why the snowball method of sampling worked so well is because the respondents were able to give the researcher access to their network and the referral made developing rapport with the next interviewee much easier.

4.4 Research Instrument

The research instrument was designed over two phases. The first phase involved the collection of demographic information. This was done through an emailed questionnaire with prescribed limited answers about where the respondent fitted in the health care space.

The second phase of the research instrument was the design of the interview questionnaire. Part of the questionnaire had open ended questions that were aimed at collecting information about the attitudes, perceptions and other qualitative aspects from the respondents. This was done through a personal interview. Kannan (2008) suggested the following to ensure the validity and reliability of this instrument:

- A pilot study must be conducted
- The questionnaire must be designed in such a manner that ambiguity in the framing of questions of complexity of the language be avoided
- Adequate explanation be given to the respondents in case of doubt regarding questions or rating of the instruments.

The above suggestions were followed by the researcher. The questions that were asked in the questionnaire were formulated based on the literature presented. The details of which authors prompted which questions are contained in Appendix 1: Consistency Matrix.

4.5 Interview Process

All the interviewees were contacted via email, text and telephonic calls to confirm a date and time for the interview to take place. All demographic information was mailed

at this point allowing for a shorter interview period. It was explained that all the responses would be treated confidentially. The interviews were recorded electronically and extensive note taking occurred at the interview as well to mitigate against corruption of the recording. The interviewer confirmed that the interview would last no longer than 30 to 45 minutes in total.

4.6 Data Analysis

The Interviews were recorded on audio equipment and this was then transcribed into written documentation. “Transcription is a process of producing a valid written record of the interview” (Gillam, 2005;121) The researcher needed to be aware of the fact that there might be a tendency to interpret what the respondent said the wrong way. To guard against this limitation, it was found to be best to transcribe the interview very soon after the actual interview had happened to avoid the essence of what was being said getting lost. The researcher transcribed the recorded interview in no less than four hours after the actual interview had happened. The researcher did the transcription in person rather than outsourcing this function as the drawback to having someone else do the transcription was that it would have been more costly to outsource this function and because the other person would not have been present at the interview in order to hear what was actually said and the context in which it was said. They would also not be party to verbal cues and non-verbal cues that could have been present. The researcher also took detailed notes to mitigate risk of technical failure.

The data was then reduced to categorical content analysis and was also combed through for thematic analysis. Categorical content analysis is when common themes are observed in the content of the data and then grouped into themes or categories,

making analysis much easier. Themes are a horizontal category that develop through the interview and can often be found to be apparent in each interview as the data is analysed. Narrative analysis was also allowed for, so that expressions of a topic or a view that is completely unique were catered for. (Gillam, 2005)

4.7 Research Limitations

The researcher had limited experience in conducting primary research. Respondent bias could also affect the reliability of the study. All means were used to avoid potential threats. The researcher intended to achieve this through avoiding asking leading questions during the unstructured phase of the interview and the use of appropriate language and terminology.

The researcher also conducted pilot interviews with two medical doctors to test the research instrument and ensure that the flow and standard made sense. This was done to mitigate the risk of the limited experience. The researcher also attended the HIV/AIDS symposium on Strengthening Health Systems for Better Outcomes: Shifting Paradigms to ensure that the views collected throughout the interview process, reflected the views held by health workers across the spectrum in South Africa. This symposium was attended by health practitioners in the public, private, NGO sectors and also the Medical Aid industry.

CHAPTER 5 – RESULTS

In chapter five, the responses given by the interviewees are reported. These responses were received against the questions posed in the questionnaires.

The face to face, semi-structured interviews were conducted with doctors and senior managers working within the health services sector in Gauteng. The interviews consisted of some closed and some open ended questions. There were four different questionnaires designed for the four different stakeholders identified.

5.1 Description of Sample

Twenty interviews were conducted with doctors and senior managers in the health sector in South Africa, these were divided as follows:

Table 8: Number of Respondents per Sector.

Public Sector	Private Sector	NGO	Medical Aid
5	5	5	5

An equal number of respondents were sought from each sector of the South African Health System.

Table 9: Race of Respondents per Sector

	Public Sector	Private Sector	NGO	Medical Aid
Black	4	1	3	1
White	1	4	1	3
Indian				
Coloured			1	1

Table 8 below above, illustrates the race and gender demographics of the respondents interviewed. The largest group of respondents were white and black people were the next.

Table 10: Race and Gender of Respondents per Sector

	Male	Female	Total
Black	3	6	9
White	6	2	9
Indian	0	0	0
Coloured	1	1	2
Total	10	10	20

The gender split worked out to be an even 50/50 split.

Table 11: Years of experience

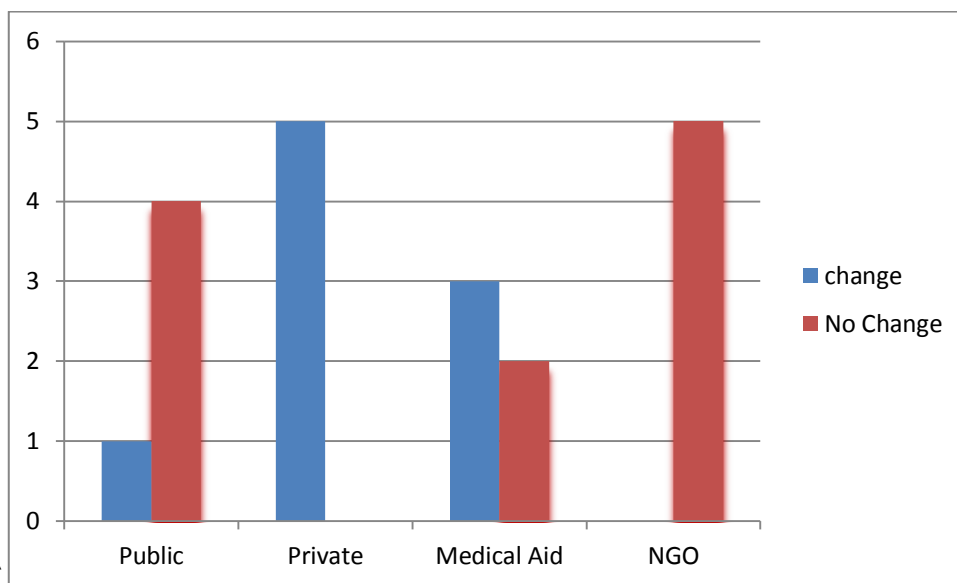
	Private	Public	Medical Aid	NGO
1 - 5 years	1			2
6 - 10 years		3	1	1
11 - 20 years	1	2	3	
21 years +	3		1	2

The above table showed the distribution of years of experience per sector.

5.2 Research Question 1: Post NHI, will the South African Health System be able to cope with the required level of chronic medication needed for ART?

5.2.1 Do you think the patient mix would change significantly post NHI implementation?

Table 12: Change of patient mix post NHI implementation



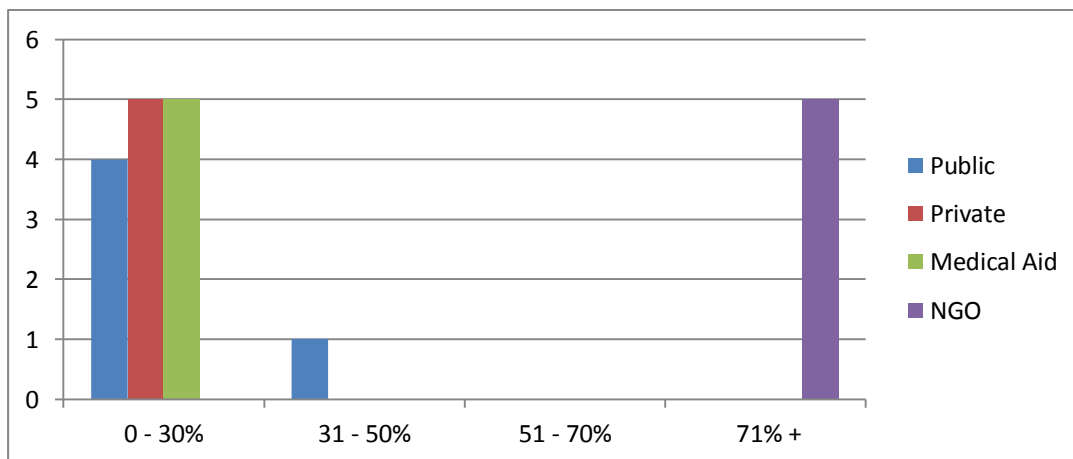
The above chart reflected the views of how the NHI might affect the patient mix in the various places in the health system. Various views were expressed as to why there would be a change or why there would not be a change in the various sectors of the health system. These views are tabulated below in Table 13.

Table 13: Views on the change in patients mix

Sector	Comments
Private	Presumably yes. That is the reason for the implementation. Not that I will be around once its implemented though. Maybe not even in your life time. It's a good concept though but it's a massive undertaking. And I think its unaffordable. America turned it down and Britain can't afford it, who are we going to afford it? We don't have enough tax payers.
Private	In my practice the patient mix will change because now the bill will be picked up by the government, so more people will come
Public	I don't really think we offer anything different in public vs private besides the environment. It seems to me that the middle class people just want a nice environment. There is no real difference in the experience of the personnel; maybe there is a difference in the equipment. So if they can improve the wards I am sure you would have middle class people using public hospitals. The only difference between public and private is the hotel experience and also the waiting.
NGO	There will be a change because NHI will want people to receive health care in predetermined regions and clinics. This will change the patient mix immediately.

5.2.2 What proportion of your patients are HIV Positive?

Table 14: Percentage of HIV positive



The above table depicts the percentage of HIV positive people in the health system in South Africa in the different sectors. In the public sector, the doctors informed that the high rate of infection is prevalent predominantly in the obstetrics ward as it was compulsory for young mothers had to be tested for HIV and half of those that walked in were infected. The remaining doctors interviewed were based in other areas of the

public health system. They were also not informed of the HIV status of the patient unless the patients ART treatment would impact on the treatment or surgery.

In the private health sector the rate of infection was 0 – 30% across the board. Those from the NGO space generally worked for HIV/AIDS related NGO's so all of their patients were HIV positive. Patients serviced by the medical aids would generally obtain their services from the private health facilities and this is evidenced by the same figure reflected by the private health practitioners.

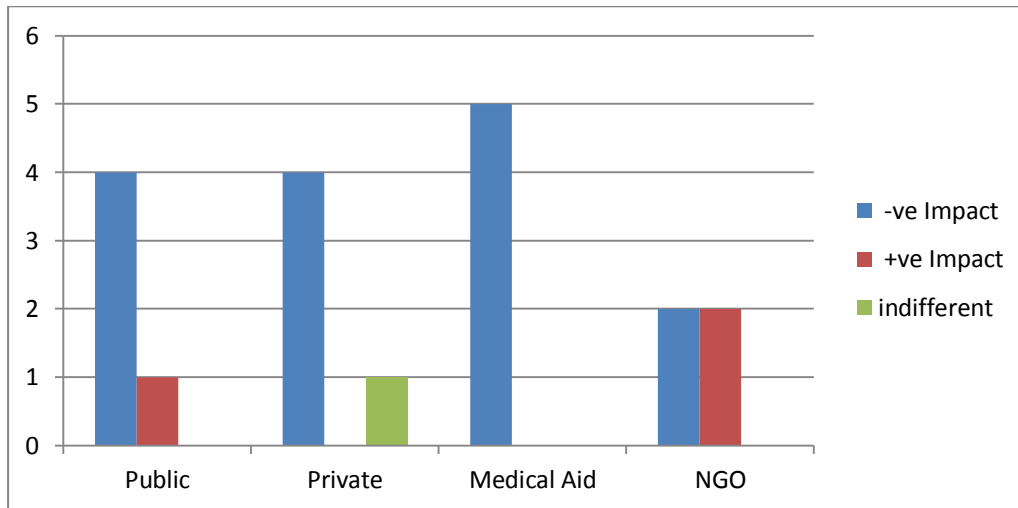
Table 15: Views on HIV Prevalence

Sector	Comments
NGO	If ART is not managed properly, resistance will develop. In Lusaka and Blantyre one in five or at best one in ten are resistant to first line ART, the general drugs that are available in that community. They acquire resistant strains before they have even started treatment. Ultimately you get a virus that you can't treat. You have to have a degree of scientific understanding to grasp that this could be our reality in South Africa if we are not careful. I am not sure that people in government have that and if they have the understanding, they have no interest.

Table 15, above, portrays some of the views that were expressed regarding HIV prevalence in the South African health system.

5.2.3 What, in your opinion will be the impact of HIV/AIDS on the new Health System?

Table 16: The impact of HIV/AIDS on the new Health Care System



Out of the 20 interviewees only three felt that South Africa’s new health system would be able to handle this particular burden of disease. The biggest cited reason for why HIV/AIDS would have such a negative impact on the new system was that the new system would not be administered or implemented properly and the flawed new system would not be able to cope with this burden of disease. There was one dissenting voice whose opinion is detailed in Table 17.

Table 17: Impact of HIV on the new health system – indifferent

Sector	Comments
Private	Their (The government’s) obsession is empowering people to be able to pay for health care rather than the provision of superb quality of health care. I am saying if they improve this thing and just make it well equipped, have nurses, doctors and equipment because people are already obtaining health care from there (Public Hospitals). The NHI addresses the ability to pay for health care it does not address the quality of the health care that will be provided or the availability of the services.

This respondent felt that the focus of the NHI was all wrong and that South Africa is not in need of a financial system but rather a strengthening of what exists so that people are able to access quality healthcare as the public hospitals are open to every person who walks in.

Table 18: Impact of HIV on the new health system – Negative Impact

Sector	Comments
Public	I just think that the system will be overwhelmed with the NHI. And together with such a burden, such a high rate of HIV/AIDS , I think its going to exacerbate it. It will result in simply more difficulty.
Public	Africa can barely afford primary health care for the majority of its population and yet we are listening to the west and pumping ARV's into the system. The state cannot afford to sponsor the maintenance of your life on chronic medication. Perhaps it is best to let people die of chronic illness and focus on research for a vaccine! But the last regime left under a cloud for saying the same thing, so I wouldn't tamper with that. Ultimately I agree that we should look after our sick and improve their lives but first primary health care must be sorted out.
Medical Aid	HIV will place huge pressure on the fund, increase expenditure and the overall risk.
Medical Aid	As long as the stigma remains and people are afraid to be tested, afraid to be treated and afraid to disclose their status; HIV/AIDS will continue to wreck with any health system, so in my opinion it will wreck havoc with the new health system
NGO	I am not convinced that the new health system will be able to cope without NGO involvement and that means that the New Health system isn't able to deal with the problems that their population has. Perhaps if the stigma is eventually fully eroded from having HIV/AIDS, perhaps if corruption is removed from the system it will work. I just don't believe it will happen.
NGO	For example, if a person were to come in with a condition called Cryptosporidiosis and they were HIV positive, right now in an ordinary public hospital, this would equate to death sentence. The treatment for it costs R11,000 and would require a two weeks in a hospital bed. But because of the financial constraints, what treatments are available to patients is limited. So the patient usually ends up with a hospital bed, an intravenous line and some ART. They die a slow death in two to three weeks. Current protocol requires special permission be granted to get the medication for R11,000 and it must be justified. The system moves too slow for a decision to be made that might save a patients life because of the procedures that need to be followed. If the new health system can respond quickly, I would be happy.
NGO	HIV/AIDS is still going to have a very serious impact on the health system. We have not made a big enough dent in the ART rollout. It will also be very expensive to reach and treat all those who need it and I do not believe that the structures will be in places to handle this.

There was a general negative sentiment reflected from the respondents. Very little confidence was given to the State in being able to administer this new health system and service delivery strikes were cited as evidence of the State's inability to deliver basic services to the population.

Table 19: Impact of HIV on the new health system – Positive Impact

Sector	Comments
Public	Contrary to popular belief, HIV will continue to have the same effects on the health system as it has now. The only change, in time, will be as the stigma lessens, patient management will become more efficient. In time the hope is that it will be like any other chronic disease ie. Hypertension and diabetes. At present only lack of information should be the stumbling block in this fight. Many patients, and statistics are available, are doing well on HAART. More education is needed to further reduce infection rates, increase numbers on therapy . Ultimately with adequate education HIV should not be a burden on the new health system.
Private	I think the impact of HIV/AIDS on the health system post NHI implementation will be substantially less because right now we are reinventing the wheel of logistics and distribution and the monitoring systems.

There were a few respondents who believed that the impact of HIV/AIDS wouldn't be a big problem for the new health system. The disease is after all a chronic illness and with proper monitoring this would be manageable as are all other chronic illnesses handled within the current health system.

5.3 Research Question 2: Can the proposed modelling for NHI deliver universal access to treatment in a sustainable manner for the entire South African population?

5.3.1 What Proportion of your patients are able to pay for the medical services rendered?

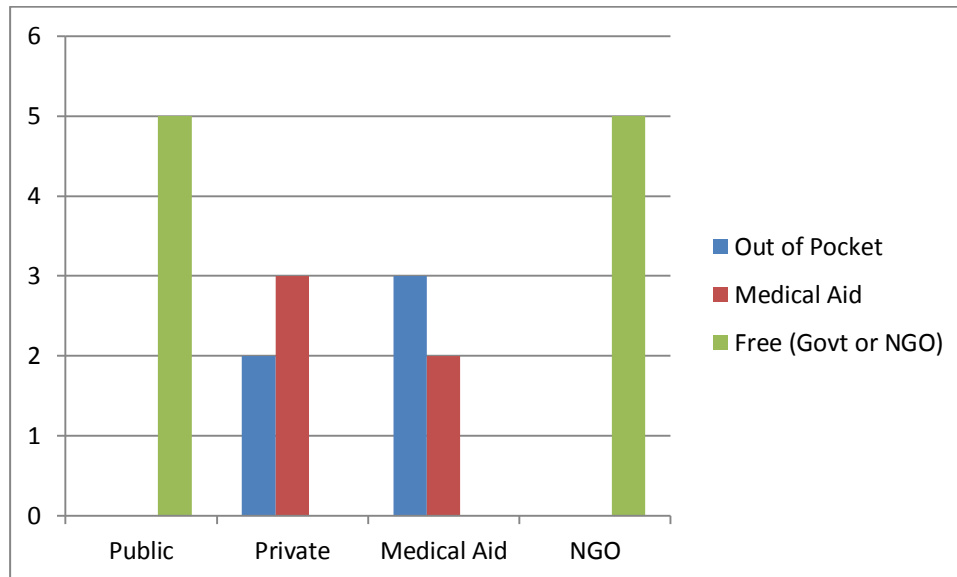
Table 20: Patients able to pay for services

	0 – 30%	31 – 50%	51 – 70%	71% +
Private Sector				5
Public Sector	5			
NGO	5			
Medical Aid				5

In the public sector the great majority were not able to pay for the services received and relied fully on the state's subsidy. In the private sector, patients paid either through medical aid or out of pocket settlements but they settled their bills in full at the point of service. In the NGO sector the patients were reported to be indigent and unable to pay for the services rendered. And medical aid clients all had to pay a monthly premium that allowed them most services for free at the point of contact and some of the services had to be paid out of pocket.

5.3.2 How do your HIV positive patients pay for ART?

Table 21: Financing ART

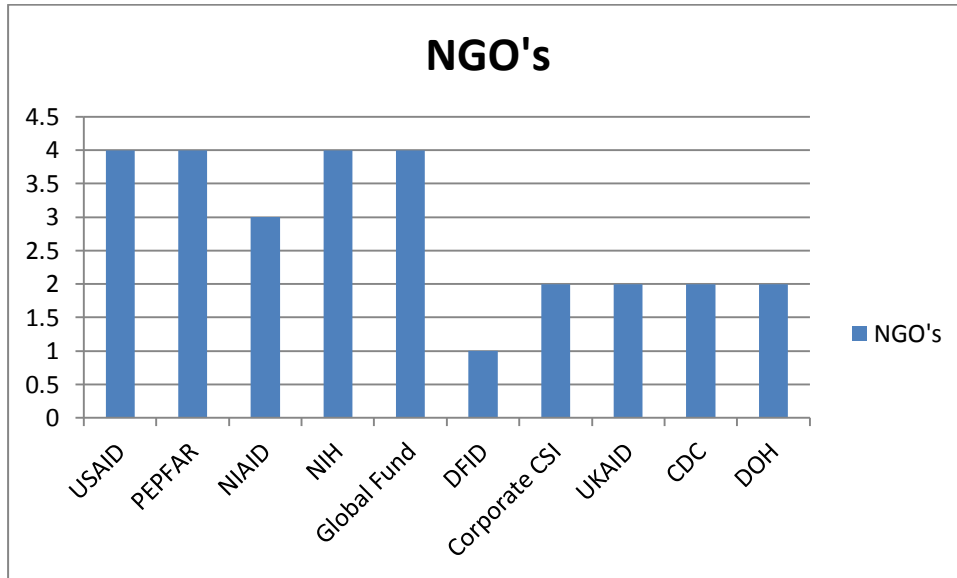


The table above details how people in the South African health system access ART financially. The respondents from the public and NGO's sectors informed that their patients accessed care for free. There were however patients from the aforementioned sectors who could actually afford to pay for their ART but preferred to get their treatment from the clinics that are more academic as they felt safer. These clinics specialise in HIV/AIDS treatment and happen to be NGO's.

In the medical aid and private sector patients paid for their ART through the minimum prescribed benefit for chronic medication or through out of pocket payments when they had exceeded the limits stipulated by the package they paid for through monthly premiums to the medical aid.

5.3.3 Where does your funding come from?

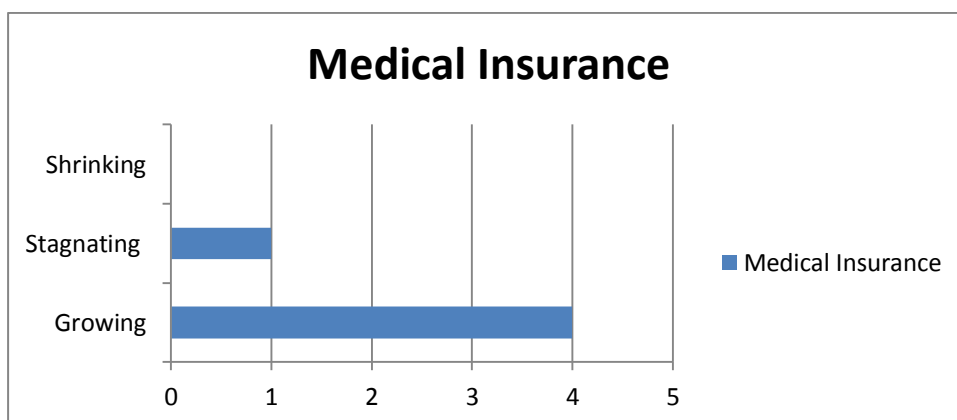
Table 22: Funding NGO's



Most NGO's had multiple donors. The greater majority of the NGO's interviewed received their funding from United States of America.

5.3.4 Medical Aid Market Share

Table 23: Medical Aid Market Share

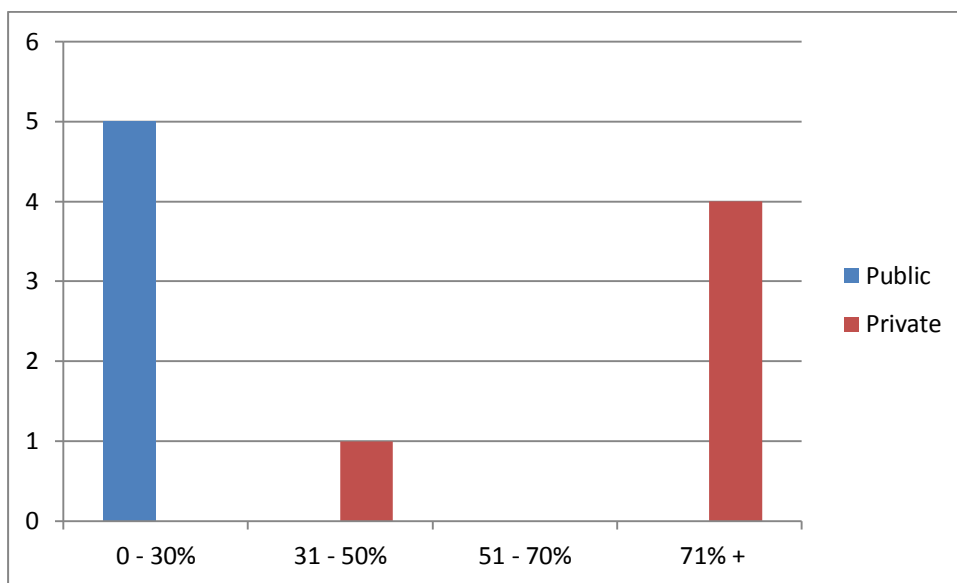


The question that was asked was: How has your market share been over the last year? Of the five medical aid companies that were interviewed, only one stated that

the market share had stagnated. This company looked after medical insurance for the low income market in South Africa. It was reported that many low income purchasers of medical insurance bought hospital basic hospital cover plans. The rest that were interviewed had markets that were still growing at a fair rate.

5.3.5 What proportion of patients have medical aid cover?

Table 24: Medical Insurance Cover



All the respondents who worked in the public sector reported to have patients who had no medical aid cover. Those respondents from the private sector had a majority of patients that had medical cover.

5.4 Research Question 3: What kind of Health Care System will best fit a low- to middle-income country such as South Africa, with a sizeable proportion of the population in need of ART?

5.4.1 Health System

In this section the respondents were asked to rank health system types from one to four. One, being the most preferred system and four being the least.

Table 25: Health System Preference

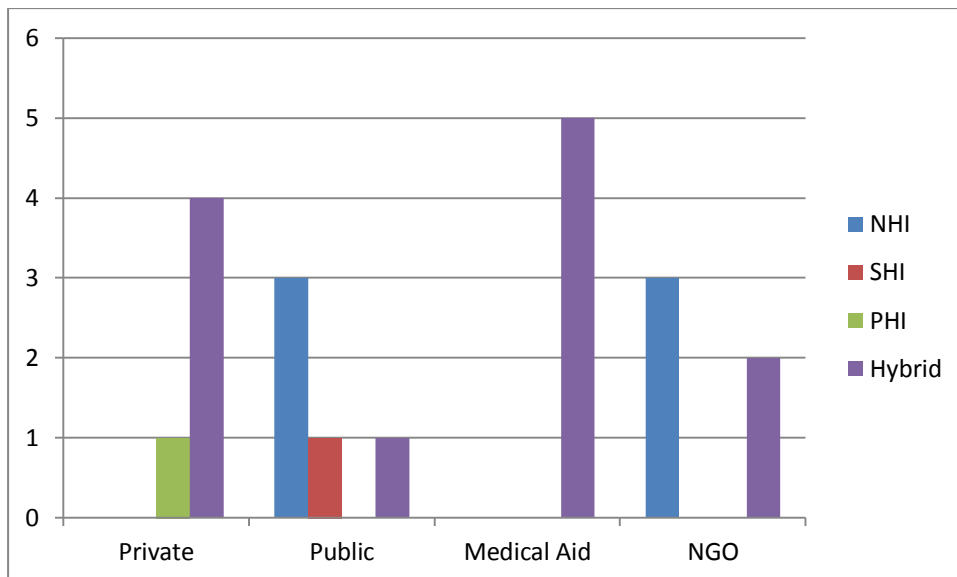


Table 25 showed that the hybrid form of health system was the more preferred. The majority of the respondents wanted a system that ensured that the indigent people in the country had cover that was contributed to by those who had wealth. Yet, the ability for those who could afford to belong to private health insurance was not taken away. Below, in table 26, are the comments are recorded of those who needed to elaborate on the kind of health system that would be ideal in South Africa

Table 26: Health System Preference - Commentary

Sector	Comments
Private	And NHI type of system will drain financial resources no doubt. Private doctors are capitalists, they work hard, they don't want to share the risk of a health system. They worked hard and studied to be where they are. I think with capitation and a national health system and less commitment from the doctors. There is nothing to drive them in Public Practice. Money drives people.
NGO	So the government knows what kind of health care and at what level of professionalism it should be delivering because it's has a Folateng in all the big provincial hospitals. You go there and instantly find a clean environment, paper towels, soap, running water, clean and hygienic bathrooms. As long as the government is fully in charge of health care we will provide these poor indigent people with something that will hopefully keep them quiet and if they don't know any better it will be an unhealthy and unhappy place. It's a double standard.
Private	Affordability to me is a big thing. And the massive infrastructure that has to be developed to implement the whole thing is not going to come cheap. It's just phenomenal.
NGO	So will the NHI work? I imagine it will be forced on people. There will be the grandiose blueprint, the SABC and the newspapers will trumpet it saying how wonderful it is and how the people of South Africa will benefit but the level and standard of care will be at such a low level, that it will just be nonsense.

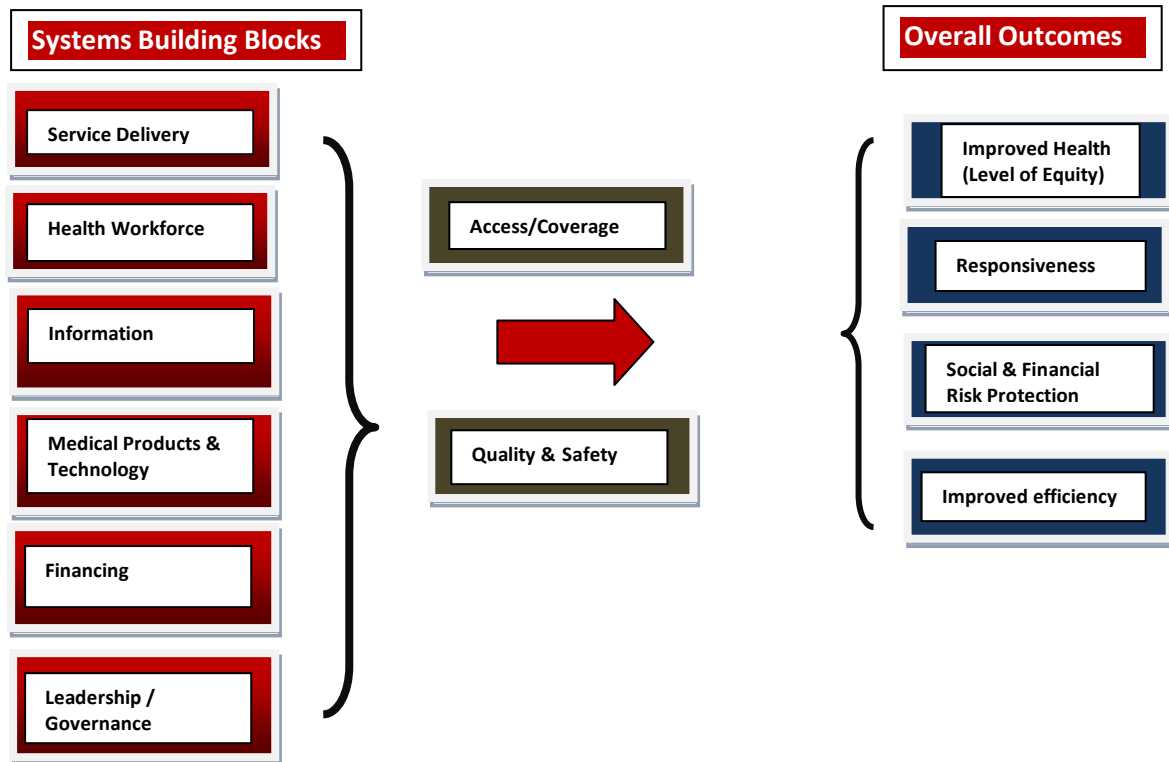
CHAPTER 6 – DISCUSSION OF RESULTS

In this chapter the research questions posed in chapter 3 will be discussed in light of the results presented in chapter 5.

6.1 Post NHI, Will the South African Health System be able to cope with the required level of chronic medication needed for ART?

This question was posed in order to determine if the new health system in South Africa would be able to cope with the health requirements of the population. According to the CDE (2011) South Africa has been spending a large amount of money towards its health sector and has, as yet, not been able to provide services that are utilised by the majority of its population. Canning (2005) explains how expensive ART is because it is complex and requires regular monitoring of adherence and for side effects, resulting in possible changes to the treatment regime. South Africa's health system post NHI needs to be able to cope with this. Presented below is a framework developed by WHO which stipulates what a health system that delivers universal coverage should have as its pillars.

Table 27: The WHO Health System Framework



Adapted from WHO (2011).

The blocks in red represent the building blocks that are needed to support a national health system. The blocks in blue on the right indicate the outcomes. This framework will be used to analyse the responses of the study to ascertain if the South African health sector has what is needed to create a viable health system.

6.1.2 Change of the patient mix post NHI Implementation

The question posed in the research instrument was: Do you think your patient mix will change significantly post NHI Implementation? This question was asked to explore if there was a perception that those people who might not have access to health care in the present were going to be able to have access post the implementation of NHI. Access and coverage is visible in the middle part of the

model as the bridge between the systems building blocks and the health outcomes from the system.

In private practice the general view was that because access to the health system would be free at the point of service, more people would now have the means to access doctors that they could not access before thus the existing composition of patients would change. An increase in lower income patients was expected. The services of medical practitioners in the private sector are largely accessed by those with medical aid insurance and those that can afford the out-of-pocket payments required. This, the respondents believed, would change as the NHI would render the services free at the point of contact (NHI, 2011). Of the sample of respondents from the private sector, 90% happened to have their practices in affluent areas and so they expected a change in the mix but not really a significant change in the number of people coming to see them. The remaining 10% was based in an area known to be low-to-middle class and expected a great change in the number of patients as well as the mix as a lot more people from the area would be able to use the services once NHI had rendered them free at the point of service. This observation reinforced the need for district based health services and clinics so that those who are now given coverage through the NHI are also able to access these services geographically.

Those in the medical aid space were split because there were two medical aid companies interviewed that serviced low income clients and they believed that those clients might not renew their membership if they were covered by NHI. Medical aid insurance companies that serviced the lower income market believed they would no longer have a market if and when NHI was implemented as the market would have their needs catered to by NHI.

The NGO space felt no change would come about as they serve the indigent and there currently wasn't a system in South Africa that would be able to absorb these people.

The general view expressed was that post implementation of the NHI there would be a change in patient mix if the facility offering the services was located close to an area where the people were previously financially prevented from accessing the services. Those medical facilities that offered medical services to those who were indigent did not expect much of a change in the foreseeable future.

6.1.3 The Percentage of people who are HIV positive

This question was asked in order to determine the how health workers felt about the level of HIV in the country. It was only in the NGO space there was a 100% positive rate and this was due to the fact that the NGO's interviewed specialised in HIV. The other sectors reported a 30% HIV prevalence. Stassa (2011) informed of the 5.24 million people who are living with HIV in South Africa, 4.19 million had still not gained access to ART. The majority of respondents expressed comfort with the ability to deal with the current volumes of HIV positive people in their care. There was one view that once NHI comes into play that this would not be the case and that the volumes might overwhelm the system. Another issue that was raised in the public health sector was how there was no need to focus on HIV specifically as there were other issues that required just as much if not more attention. This view was shared by Harrison (2009).

It is of great importance that the HIV prevalence in South Africa be adequately managed and monitored. This is not just about the logistics of getting the drugs to where they need which is a critical issue but as the comments from table 15 state;

information which is a system building block is also an area that must be looked into. Information relates to the monitoring of the virus itself in order to prevent the emergence of a strain of multi drug resistant HIV.

The existence of HIV/AIDS in the health system requires careful consideration as ART is a complex and expensive treatment as Canning (2005) stated. Harrison (2009) pointed out that there are times when a trade off might need to be made between coverage and quality because of the scarce resources that are available to combat the disease. This trade off is represented in the WHO (2011) framework and the bridge that links the system building blocks and the health outcomes. It is this trade off that will determine what kind of health outcomes are achieved and it is thus vital to get this right. This is a challenge that the DoH will face with NHI.

The findings revealed that DoH relies quite heavily on the NGO sector currently for service delivery and ART administration. This means that our health system is not able to deal with the level of HIV/AIDS prevalence without external funding and service provision in its current state. The NHI will have to build this capacity in the future. It was also evident that it is important to manage and monitor HIV/AIDS properly to prevent the emergence of a multi drug resistant virus.

6.1.4 The impact of HIV/AIDS on the new health care system

This question was asked so insight could be gained into what subject matter experts believed the impact of HIV/AIDS would be on the new health system. Levi and Kates (2000) stated that HIV provided a lens through which the underlying problems in health system could be examined. This question was aimed at teasing out these issues so that the problem areas inherent in the South African health system could

be more apparent. The responses were arranged for analysis based on whether the comments were given were challenges being pointed out, or if there was praise being lauded at how an aspect of the health system was handled and a final area for those that were neither a challenge nor praise.

The dissenting view was that South Africa should not be creating a new health system in the first place. In the creation the NHI, DoH was focusing on the country's ability to pay for health services rather than being focused on the ability to access quality health services. The argument was that instead of focusing a national health insurance, the focus should be to fund an operation to improve existing services. Van Heerden (2012) stated that a total of 70% of the population already went to public hospitals for their health needs. Improving the quality in public health would mean there would be no need for people to be assisted to access services elsewhere.

Christensen (1998) spoke about the disproportionate impact that HIV/AIDS had on low-to-middle income countries who were already struggling to provide basic health care to citizens. This view was supported by respondents indicating that HIV/AIDS would have a negative impact on the new health system. In table 18 some of the different views are tabulated. The one argument raised agreed with Benatar's (2011) comments regarding how a low-to-middle income country would not have enough financial resources in the health system to spend money on ART, fund research for a vaccine and provide primary health care to a population who desperately needed PHC. Strategically placing resources into the primary focus of what the health system needed to deliver. Another argument was that the public health system was already overburdened and under-resourced in terms of equipment and personnel and that the introduction of the new health system would just overwhelm a system

already struggling with the weight it carries. The final view expressed was that the current health system lacked responsiveness to information and cues due to bureaucracy or limited knowledge and that this caused the loss of many lives. In the HIV/AIDS game this was causing treatable diseases to turn into a fatal prognosis. This implies that the systems building blocks have to be stacked in such a way as to avoid unnecessary loss of life within the health system. The system as a whole must allow communication and real time reaction.

6.1.5 Conclusion

A small percentage of the respondents were of the view that HIV/AIDS would not have a significant impact on the new health system as it was after all, just a chronic illness and would eventually fall into its allotted space with all the other chronic illnesses such as diabetes and hypertension. As the lessons regarding drug supply chain logistics and the monitoring of patients were being learned now, there would be no need to build in additional functionality to cater for this in the new system.

It was the view of the majority of respondents that HIV/AIDS could have a negative impact on the new health system if it is not adequately considered from the beginning. DoH has to start with the end in mind and work backwards in order to ensure that the health system constructed, was a functional system.

6.2 Research Question 2: Can the proposed modelling for NHI deliver universal access to treatment in a sustainable manner for the entire South African population?

6.2.1 Patients able to pay for services

Van Heerden (2012) stated that there are roughly 35 million people that access their health services from the public sector and 15 million who access their health from the private sector. This means that 70% of the South African population is currently dependent on the public health system for medical services. The results from this study indicated that people who rely on the public health system and the NGO system were often not even able to pay the nominal fee that was asked for and that they could certainly not afford to pay for the specialist care they sometimes received as the specialist fee would just be too high for them. This means that only 30% of the population is actually in a position to pay for the medical services they need. These statistics prove that there is no doubt that a health system that provides universal access to medical services is needed. DoH intends to provide universal access to medical services through the NHI system. (NHI, 2011)

Table 19 displays the responses gathered from asking: How many of your patients are able to pay for the medical services received? This question was asked to gain insight into patients paid for the medical services and if they did not pay, what entity did.

6.2.2 The Financing of ART

In the private sector most patients finance their ART through the PMB offered by the medical aids. The PMB is mandatory for every single medical aid in the country but the regulation of it is not rigorous so it allows room for interpretation and manipulation and eventually works out to be an area in which medical aids are able to ensure that they are still able to limit the funds that they disburse in this area. The PMB limits often run out before the year is out leaving the patient with a large co-payment or the patient can elect to then use the services of the public health care clinics.

Some of the respondents in the public and NGO space felt that this causes a problem in the national management of the HIV/AIDS pandemic as a lot of patients, particularly those that are pregnant are automatically started on second line treatment when they are accessing ART through the private sector. This is a standard practice in first world countries. It is WHO protocol for countries with high resources. But there are setting for countries that have low resources and South Africa is a low-to middle- income country. This means that when the patient can no longer afford cover in the private sector and has to access ART through the public sector they might not respond to the first line treatment that everyone else is on within the public sector. This means that these patients will then cost the state even more as they have to use second or third line treatment. When HIV/AIDS is not managed well at a national level, there is the danger of incubating resistant strains of the virus and also multiple strains of the virus. This could prolong the period of the pandemic and cause a whole lot more deaths as the medical practitioners scramble for an appropriate drug regime.

One of the aims of NHI is the provision of financial risk protection from the escalating cost of medical care NHI(2011). Those that rely on public health were not afforded this protection and without it, are now unable to purchase medical services for the most part. Poverty has forced them to rely on a system that quality of service delivery leaves a lot to be desired. According to Botha and Hendricks (2008) the public hospitals were in the state that they were in because of the declining budget allocations and the burden of disease.

6.2.3 Where does NGO funding come from?

The reason this question was included in the study was to find out who is paying for services that NGO's provide to the population. The respondents in the NGO space had multiple funders and strategic partnerships that were established. The bulk of the funding came from international donors in PEPFAR, USAID and UKAID. This funding is has proven vital to the lives of many indigent people who would other wise not be able to pay for their ART and it has thus saved many lives in South Africa. Not only does the funding provide access to ART but the NGO's also provide technical assistance and support. This is done through the training of nurses and doctors in the treatment of HIV/AIDS and the transferring of knowledge to ensure that longevity is achieved. Some NGO's provide physical support aswell.

It is important to bear in mind that PEPFAR and USAID stipulate that funding is available in 5 year tranches and after that the country being assisted must have progressed to another level where aid is either needed in another form or not needed at all as the country has become self sufficient. The NGO's work as supporting structure to the Doh, where the department has difficulty reaching the public be it for financial or structural reasons, the NGO then steps in and ensures that the service is

delivered to the public. This means that the DoH needs to ensure that during the time the AID is provided that it is able to develop its own capacity in human resources, equipment and finances.

Some of the NGO respondents did mention that there were pockets of the staff that they worked with who were very low on morale and just generally did not want to work. They had no real hunger for the new knowledge and that this made skills transfer that much harder. This is another aspect that will have to be addressed. There are aspects of the development and sharing of a common vision motivating, engaging the staff that needs to take place if this new system is to be developed so it can benefit the society at large.

Harman (2007) talked about the imposition of donor rules having the ability to cause controversy as states might feel their sovereignty is in jeopardy. Bilateral relationships between the donating and receiving state also have to be on good or neutral diplomatic grounds in order for the receiving country to gain access to the much needed donor aid.

6.2.4 Medical Insurance Market Share

In the Medical insurance sector, companies are growing at solid pace. There is not much tapering off of acquisition of new clients. The medical aid companies themselves do not see the NHI as a threat to their environment in the foreseeable future as they believe that it will take a whole lot longer than 15 years to revamp and restore the public health care system to a level that is on par with what is available in the private sector. This means that people will choose to be hospitalised and treated in the private facilities as long as they have money to pay for these service and thus people will continue to renew and upgrade their membership.

People will vote with their wallets. The NHI does not prohibit belonging to a medical insurance company to supplement the medical cover offered by it. It takes a very long time to restore infrastructure to a level where it operates very well once it has fallen into neglect. The hospitals in the public sector have not been maintained and neither has the equipment housed therein, this means that the hospitals are in a state of disrepair and this needs to be addressed before renovations and improvements can be carried out.

Namibia presented a case where a public private partnership enabled their department of health to deliver quality medical service. They enlisted the help of private company that built the hospital complex and supplied and maintained the equipment and also built the feeder primary health clinics. The Namibian state then provided the personnel that worked in these much improved conditions and the public were now able to receive quality medical service. This is suggested as a route the DoH needs to consider in the implementation of the NHI.

6.2.5 Conclusion

Finance is an integral part of the new health system and forms one of the basic building blocks in the health systems framework. The manner in which the health system is financed is important as this will greatly impact how sustainable the model will be. Chikova and Chinamisa (2007) spoke about how funds that were collected for social security in Zimbabwe were eroded through the early retirement and disability created by HIV/AIDS. Those that were rendered disabled or forced into early retirement were the economically active part of the population that formed the contribution base. Given the size of the pandemic in South Africa was important to

understand if the contribution base was not at risk of being compromised by the pandemic.

6.3 Research Question 3: What kind of Health Care System will best fit a low-to middle-income country such as South Africa, with a sizeable proportion of the population in need of ART?

6.3.1 Health System Preference

This question was asked to extract information about the kind of health system that medical practitioners thought the patients they served, needed. From the NGO sector it was made clear that there are a lot of indigent people who had no where else to go for their medical needs. There was thus a serious need for a health system that provided for those who currently were too poor to provide for themselves. An aspect of Social Health Insurance is necessary in South Africa where there are people who are not gainfully employed and thus can't pay for the medical cover they need. Statssa (2010) tells us that there are

The NHS as seen in the United Kingdom was referred to by many respondents as a system that would work quite well in South Africa, if the standards were maintained and the public hospitals were renovated and revamped so that they offered services on par with those in the private sector. There was also concern raised with regards to the management and regulation of such a system. The current regulatory framework would need to be upgraded as it was too archaic so that it would be able to move nimbly enough when new drugs needed to be introduced into the system or patient flow relooked if a particular treatment regime were not going to work. There was general agreement that some form of PHI also needed to be evident in the system for those who wanted elective surgery, referral to a specialist etc. The view

that private doctors should be able to reap the financial rewards of all the time they have spent studying and that they might not be motivated to receive a standard salary from the NHI every month. Some even stated that this might de-motivate and lead to complacency and poorer health outcomes as the doctors might not apply themselves as much as payment in the form of a monthly salary would be guaranteed. Those in public practice enjoyed the freedom to be able to move between public and private health when the need arose. Public health doctors enjoyed the environment in the secondary and tertiary hospitals as these provided teaching, learning and management experience and one had the support of junior and senior colleagues who shared cases allowing for the medical profession to keep advancing in knowledge and the care it was able to offer.

There was concern raised about the rural or remote areas as none of the respondents interviewed expressed a wish to relocate and stated that the incentives offered by the NHI were not appropriate for them to relocate. There were those practitioners who expressed that they could understand that if their circumstances were different that they might consider moving but that rural areas often came with short comings when it came to schools for their children and religious institutions and this might prevent others from relocating.

6.3.2 Conclusion

All the respondents were in agreement that a national health system was needed and that there was a great need for reform in the health space. Objections to the NHI were raised more in connection with the fear of mal administration and governance. For this reason the majority believed that a hybrid system was needed that would allow for synergies to be leveraged from both the private and the public sector

(Schmid et al, 2010). South Africa has a unique set of circumstances that developed nations might not have. For one, South Africa has the quadruple burden of disease (CDE, 2011) that it is currently battling with.

HIV/AIDS presents a unique challenge when building a new health system as ART is expensive and does require monitoring and testing and medication that will be quite costly. This must be taken into account when elements of PHI are introduced into the new health system so as to ensure that prescribed minimum benefits offered by insurance companies do not exclude too much making the disease debilitating from a financial perspective.

The DoH will however need to contend and mitigate against the current conditions in the health system and these are the fragmentation of health services; the high cost of receiving care; the largely curative nature as opposed to being preventative; the hospi-centric focus of the current health system and the excessive and justifiable charges that are predominantly in the private health care space. These conditions make the current health system completely unsustainable and inaccessible to a lot of people in South Africa.

The government intends to establish the NHI which will be a government owned entity that will be publically administered. It will eventually become a single payer system that has sub national offices. The NHI will provide a comprehensive package of services. The NHI will be funded by the NHI fund which will have as its main purpose the pooling of funds to be used to purchase health services on behalf of the population. Membership to the NHI will be mandatory but supplementary membership to PHI will not be prohibited and will be elective.

Some respondents felt that PHI should also be compulsory to ensure health cost protection.

In order for the NHI to have a positive macro-economic impact, it needs to address the current institutional and staff constraints that are evident in public health. It needs to significantly improve South Africa's health indicators and achieve the productivity gains and most importantly remain affordable. This will be best achieved by the public and private sectors working together to leverage off synergies and deliver a system that works for the entire population of South Africa.

The issue in the South African context as identified by the DoH, is that both the funding of the NHI and the quality of services delivered by the NHI need to be addressed as they prepare to launch the new health system. Schmid et al (2012) stated the emergence of three health care types on a global scale - NHS, SHI and PHI and how these types had integrated non-system-specific or innovative elements. The authors spoke of the emergence of hybrid health systems. The hybridization occurs, they continued, because of the evolving mix of regulatory instruments becoming increasingly similar across systems.

The authors spoke about how health systems change and are adapted to a society, they may not look like their vanilla parents as convergence would take place.

The respondents in the private sector agreed that they believed that a change in the patient mix would occur. Their only difficulty was believing that the new system would come into play.

CHAPTER 7: CONCLUSION

7.1 Findings from the study

Most of the health care practitioners that were interviewed were apprehensive about the NHI and its implementation because of the current state of affairs in the health sector in South Africa. Concerns were raised about the current fragmentation that was evident in the system, the inefficiencies which cause wastage and loss and the low morale among those that serve the public. Those working in the Public Sector and NGO sector stayed there despite sometimes very challenging conditions because they were able to first and foremost provide assistance to those who had no means to go anywhere else and because their environment was one which fostered learning and teaching and the transfer of knowledge and support from colleagues who are senior. Their environment was a centre of excellence.

The NHI in principle was seen as a wonderful initiative if implemented correctly could benefit all South Africans.

HIV/AIDS can be managed and people can be reached if the resources at hand are used efficiently and effectively. The stigma associated with the disease still prevents a lot of people from accessing care. The stock-outs of medicines and the lack of strategic planning and management also cause further challenges to a system that is already burdened. HIV/AIDS will eventually become like any other chronic illness that needs management and monitoring thus allowing those afflicted to lead healthy productive lives.

The financing of the NHI will need careful modelling as South Africa already spends a substantial amount to deliver a fragmented health system that yields poor outcomes.

7.2 Recommendation to the Government

1. Elimination of corruption will go a long way to improving the efficiency of the public health system.
2. A pure NHI might not be possible given the quadruple burden of disease and the fact that South Africa has a disproportionate amount of contributing tax payers to those who need to use the system that the tax revenue will fund. Thus a hybrid system with public private partnerships will work better.
3. Reform of governance is needed to ensure that all agents of the state do what they are supposed to do. The regulatory body must be one that has the muscle to effect penalties on non adhering parties.
4. Risk equalisation will need to be part of the financial modelling to ensure that an equitable system is created.
5. Prices will need to be regulated as a way to ensure that cost containment is achieved as health systems across the globe have demonstrated that even with a well conceived NHI, cost can still continue to outstrip revenue.
6. The quality of health service between public and private hospitals needed to be equalised. This will prevent the overburdening of one over another. Only then can financial access to the health system be fully meaningful.
7. Medical insurance cover should be encouraged and the benefits should be restructured to ensure that the PMB is at a level where it retains catastrophic cover.

7.3 Areas for further Research

The researcher identified a number of potential areas for future research as an outcome of this study. These include the following research questions:

- How can health workers help overcome the stigma surrounding HIV/AIDS
- What kind of monitoring systems can be used in a new Health System to assist patient to comply with the treatment regime.
- How can the South African Health system be strengthened so that it is able to react rapidly and efficiently to cases that require speed and agility in order to save the lives of the patients.
- Is mobile technology being fully exploited in the design of the new health system's decentralised hospital systems.
- Is South Africa ready for the information systems upgrade and creation that would be needed to monitor and regulate a national health system.
- Has the power of primary health care been fully harnessed in the private sector and the public sector.
- Should South Africa be following the USA lead with regards to the health reforms that will result from PPACA.
- Does South Africa need the NHI or would slow reform work better for the health sector in South Africa.

7.4 Conclusion

The NHI had not been implemented in South Africa at the time this study was undertaken. The researcher hopes that these findings will encourage further study and investigation into the new health system that is to be implemented so that when implementation does happen, that the right synergies are being leveraged off and changes are carried where improvement is needed and what needs to be preserved is indeed preserved.

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Appendix 1

Consistency Matrix

Title: The Potential Impact of HIV/AIDS on the South African Health System post NHI Implementation

Questions	Literature Review
<p>Will the NHI be able to cope with the required level of chronic medication required?</p> <ul style="list-style-type: none"> - What proportion of your patients are HIV positive? - What is your experience in prescribing medication among the HIV positive people? - What proportion of the HIV positive people pay through medical aid ? - What proportion of the HIV positive people pay out of pocket? - What proportion of the HIV positive people depend on the public sector for the payment? 	<p>Canning (2005)</p> <p>Benatar (2011)</p> <p>Van Heerden 2012</p>
<p>In Universal Access to treatment possible given the financial Modelling suggested by the Doh</p> <ul style="list-style-type: none"> - In your opinion: are the South African tax payers going to be able to carry the burden of the new NHI? - Do you think Universal Access is an ideal that third world countries can aspire to? - What time frame would you predict for the achievement of Universal Access, given South Africa's burden of illness? - Has the medical treatment of HIV positive people improved over the years? 	<p>Lu & Hsiao (2003)</p> <p>CDE (2011)</p> <p>Botha & Hendricks (2008)</p> <p>Benatar (2011)</p> <p>Van Heerden 2012)</p>
<p>What kind of health Care system (Hybrid/Universal access) is most likely to suit South Africa</p> <ul style="list-style-type: none"> - If you had to design a health care system for South Africa, what would it cover? - In order of preference rank the Health system presented - Why have you chosen that particular health system 	<p>Lu & Hsiao (2003)</p> <p>CDE (2011)</p> <p>Botha & Hendricks (2008)</p> <p>Levi & Kates (2000)</p>

Appendix 2

Research Instruments

Medical Aid Interview Questionnaire:

I am conducting research on the potential impact of HIV/AIDS on the South African health system, post the implementation of the NHI. I am trying to find out what kind of health system we can expect and how it will impact the various stakeholders that currently make up the South African health system. Our interview is expected to last about 35 minutes and will help us understand the impact on the private sector, the public sector and the NGO and foreign aid arena. **Your participation is voluntary and you can withdraw at any time without penalty.** All data will be kept confidential. If you have any concerns, please contact me or my supervisor. Our details are provided below:

Researcher Name: Thakhani Tshivhase

Research Supervisor Name: Verity Hawarden

Email: tt@tshivhase.com

Email: pvharden@global.co.za

Phone: 083 234 2267

Phone: 082 331 3575

Signature of participant _____

Date _____

Signature of Researcher _____

Date _____

Question 1: How many years have you been in the Medical Insurance Space?

1 – 5 years	6 – 10 years	11 – 20 years	21 years +
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Question2: How has your market share been over the last year:

- Growing
- Stagnating
- Shrinking

Question 3: What proportion of your clients have basic hospital plans?

0 – 30%	31 – 50%	51 – 70%	71% +
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Question 4: Do you think that your client mix will change significantly post NHI implementation? Explain.

Question 5: Do you think the number of Clients that you have would change significantly post NHI implementation? (Explain how)

Question 6: What role do you see your organisation playing post NHI implementation?

Question 7: Will the NHI impact service delivery for your organisation?

Question 8: What Proportion of your clients are on your HIV benefits cover programs?

0 – 30%	31 – 50%	51 – 70%	71% +
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Question 9: Is the HIV cover part of the minimum prescribed cover?

Question 10: Do you think more of your clients will have access to ART once NHI is implemented?

Question 11: What in your opinion will be the impact of HIV/AIDS on the new health system?

NGO Interview Questionnaire:

I am conducting research on the potential impact of HIV/AIDS on the South African health system, post the implementation of the NHI. I am trying to find out what kind of health system we can expect and how it will impact the various stakeholders that currently make up the South African health system. Our interview is expected to last about 35 minutes and will help us understand the impact on the private sector, the public sector and the NGO and foreign aid arena. **Your participation is voluntary and you can withdraw at any time without penalty.** All data will be kept confidential. If you have any concerns, please contact me or my supervisor. Our details are provided below:

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Phone: 082 331 3575

Signature of participant _____

Date _____

Signature of Researcher _____

Date _____

Question 1: How many years have you been in the Health NGO space?

1 – 5 years	6 – 10 years	11 – 20 years	21 years +
-------------	--------------	---------------	------------

Question 2: Where do you get your funding from?

Question 3: What proportion of your patients are able to pay for the services?

0 – 30%	31 – 50%	51 – 70%	71% +
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Question 4: Do you think that your patient mix will change significantly post NHI implementation? Explain.

Question 5: Do you think the number of patients that you have would change significantly post NHI implementation? (Explain how)

Question 6: What role do you see your organisation playing post NHI implementation?

Question 7: Will the NHI impact service delivery for your organisation?

Question 8: What Proportion of your patients are HIV positive?

0 – 30%	31 – 50%	51 – 70%	71% +
---------	----------	----------	-------

Question 9: How do the HIV positive patients pay for ART?

- Out of Pocket
- Medical aid Insurance
- Free (govt or NGO sponsored)

Question 10: Do you think more of your clients will have access to ART once NHI is implemented?

Question 11: Which health system do you think would work for South Africa:

(Please Rank these, 1 being first choice, and 4 being the least favoured option)

- One where we have compulsory contribution to the NHI and optional medical aid membership? (NHS)
- One where we contribute through taxes to help cover the very poor so they have access to free services (SHI)
- One where everyone gets medical insurance that they can afford and thus cover themselves (PHI)
- One where we all contribute to SHI and those that can afford have the option to access PHI

Question 12: What in your opinion will be the impact of HIV/AIDS on the new health system?

Private Health Interview Questionnaire:

I am conducting research on the potential impact of HIV/AIDS on the South African health system, post the implementation of the NHI. I am trying to find out what kind of health system we can expect and how it will impact the various stakeholders that currently make up the South African health system. Our interview is expected to last about 35 minutes and will help us understand the impact on the private sector, the public sector and the NGO and foreign aid arena. **Your participation is voluntary and you can withdraw at any time without penalty.** All data will be kept confidential. If you have any concerns, please contact me or my supervisor. Our details are provided below:

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Email: tt@tshivhase.com

Email: pvharden@global.co.za

Phone: 083 234 2267

Phone: 082 331 3575

Signature of participant _____

Date _____

Signature of Researcher _____

Date _____

Question 1: How many years have you been in Private Practice?

1 – 5 years	6 – 10 years	11 – 20 years	21 years +
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Question 2: Why do you choose to Private Practice over Public Practice?

Question 3: What proportion of your patients are on medical aid?

0 – 30%	31 – 50%	51 – 70%	71% +
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Question 4: Do you think that your patient mix will change significantly post NHI implementation? Explain.

Question 5: Would the NHI make you change from Private to Public health care?

Question 6: What factor would most likely make you change from Private to Public Health?

(Please rank your answers, 1 being the highest ranking and 3 the least.)

- Secure salary every month from NHI
- Set Number of Patients that are geographically determined

- The ability to practice primary health care and refer cases to secondary and tertiary health care

Question 7: Would the incentives offered by the NHI be sufficient in getting you to move to more remote areas in South Africa?

Question 8: What Proportion of your patients are HIV positive?

0 – 30%	31 – 50%	51 – 70%	71% +
---------	----------	----------	-------

Question 9: How do the HIV positive patients pay for ART?

- Out of Pocket
- Medical aid Insurance

Question 10: Do you think more of your clients will have access to ART once NHI is implemented?

Question 11: Which health system do you think would work for South Africa:

(Please Rank these, 1 being first choice, and 4 being the least favoured option)

- One where we have compulsory contribution to the NHI and optional medical aid membership? (NHS)
- One where we contribute through taxes to help cover the very poor so they have access to free services (SHI)
- One where everyone gets medical insurance that they can afford and thus cover themselves (PHI)
- One where we all contribute to SHI and those that can afford have the option to access PHI

Question 12: What in your opinion will be the impact of HIV/AIDS on the new health system?

Public Health Interview Questionnaire:

I am conducting research on the potential impact of HIV/AIDS on the South African health system, post the implementation of the NHI. I am trying to find out what kind of health system we can expect and how it will impact the various stakeholders that currently make up the South African health system. Our interview is expected to last about 35 minutes and will help us understand the impact on the private sector, the public sector and the NGO and foreign aid arena. **Your participation is voluntary and you can withdraw at any time without penalty.** All data will be kept confidential. If you have any concerns, please contact me or my supervisor. Our details are provided below:

Researcher Name: Thakhani Tshivhase

Research Supervisor Name: Verity Hawarden

Email: tt@tshivhase.com

Email: pvharden@global.co.za

Phone: 083 234 2267

Phone: 082 331 3575

Signature of participant _____

Date _____

Signature of Researcher _____

Date _____

Question 1: How many years have you been in Public Practice?

1 – 5 years	6 – 10 years	11 – 20 years	21 years +
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Question 2: Why do you choose to Public over Private Practice?

Question 3: What proportion of your patients are able to pay for the services?

0 – 30%	31 – 50%	51 – 70%	71% +
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Question 4: Do you think that your patient mix will change significantly post NHI implementation? Explain.

Question 5: Would the NHI make you change from Public to Private health care?

Question 6: Would the incentives offered by the NHI be sufficient in getting you to move to more remote areas in South Africa?

Question 7: What Proportion of your patients are HIV positive?

0 – 30%	31 – 50%	51 – 70%	71% +
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Question 8: How do the HIV positive patients pay for ART?

- Out of Pocket
- Medical aid Insurance
- Free (govt or NGO sponsored)

Question 9: Do you think more of your clients will have access to ART once NHI is implemented?

Question 10: Which health system do you think would work for South Africa:

(Please Rank these, 1 being first choice, and 4 being the least favoured option)

- One where we have compulsory contribution to the NHI and optional medical aid membership? (NHS)
- One where we contribute through taxes to help cover the very poor so they have access to free services (SHI)
- One where everyone gets medical insurance that they can afford and thus cover themselves (PHI)
- One where we all contribute to SHI and those that can afford have the option to access PHI

Question 11: What in your opinion will be the impact of HIV/AIDS on the new health system?

Appendix 3

List of Respondents

Title	Name
Dr	Palesa N Mogane
Dr	Muthopi Mofogane
Dr	Tshili Mbeki
Dr	Ilan Steyn
Prof.	Ramaranka Mogotlane
Mrs	Star Jacobson
Mr	York Zucchi
Dr	M Mosalakae
Dr	M Jammy
Dr	N James
Dr	Sindi van Zyl
Dr	David Spencer
Dr	Oliver Peterson
Dr	Coceka Mnyani
Mr	Thato Kamanga
Mr	Mohale Kenosi
Mr	David Gill
Ms	Lethabo Neluheni
Mr	Mathew De Klerk
Mr	Toni Bianco

Appendix 4

List of Companies

Anova Health Institute

AIDS Priorities

Right to Care

Soul City

Discovery Health

1Doctor Health

Bonitas

Medihelp

Unique Nursing Solutions

Life Health

Hello HealthCare Group

