Charting a Preferred Future for Healthcare in South Africa

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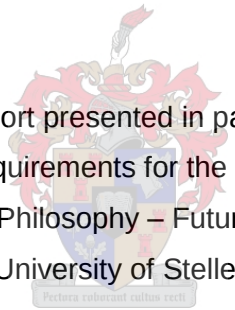

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Declaration

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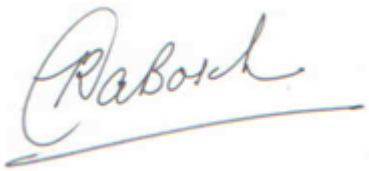

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Abstract

The objectives of this research report on a scenario planning exercise for the SA healthcare sector were to prepare the material that would feed into such a exercise, to document some ideas about how the planning workshops would run, and identify some possible role players in the process.

Several items of research regarding the SA healthcare environment are presented, including economic research data and an environmental scan of recent developments in the healthcare arena.

In addition, primer material on various futures studies techniques has been prepared. These are deemed to hold the potential to shift the prevalent thinking within the SA healthcare environment. The list of techniques includes scenario planning, systems thinking and causal layered analysis.

The set of data presented confirms that there are several critical issues facing the SA healthcare environment. These need to be tackled in a unified way by all players in the industry if the prevailing dynamics that give rise to these issues are to change. Scenario planning is proposed because it creates a forum within which to do so.

The effectiveness of futures studies problem solving techniques in addressing these challenges is demonstrated. This is achieved by recognising, for example, that the problems besetting the current industry are, in one sense, structural (from systems thinking) or that perceptions about the issues are seated in mental models which are not necessarily universally-held (from causal layered analysis).

Scenario planning is a first step to imagining an alternative future for SA healthcare which is different from the one toward which it is heading by default.

As a collaborative planning technique, it also starts to shift the mode of interaction of the various sectors that make up the SA healthcare environment. Instead of the de facto conflict-based adversarial modes of interaction designed to maximise individual interests (e.g. law suits and competitive dynamics), the scenario planning exercise creates a fresh space for co-operation and holistic thinking designed to optimise collective interests.

The relationships formed in this safe space often survive well beyond the duration of the scenario planning workshop (as was the case with the Montfleur scenario exercise), thereby adding a new dimension to the systemic operation of the healthcare environment.

Key words:

Scenario Planning; Systems Thinking, Causal Layered Analysis; Environmental Scan; Healthcare; South Africa; Anglo American Scenarios; Nedcor/Old Mutual Scenarios; Montfleur Scenarios; Dinokeng Scenarios.

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List of acronyms and abbreviations

ABSA	Amalgamated Banks of South Africa
AHPCSA	Allied Health Professions Council of South Africa
ANC	African National Congress
BHF	Board of Healthcare Funders
CLA	Causal Layered Analysis
CMS	Council for Medical Schemes
CPI	Consumer Price Index
DoH	Department of Health
FNB	First National Bank
GDP	Gross Domestic Product
GEMS	Government Employees Medical Scheme
HASA	Hospital Association of South Africa
HIV/AIDS	Human Immuno-deficiency Virus/ Acquired Immune Deficiency Syndrome
H1N1	Swine flu
HPCSA	Health Professions Council of South Africa
ICSTM	International Conference on Systems Thinking and Management
IMCI	Integrated Management of Childhood Illness
IPA	Independent Practitioners Association
LIMS	Low Income Medical Scheme
NCF	National Consumer Forum
NEHAWU	National Education Health and Allied Workers Union
NGO	Non-governmental Organisation
NHI	National Health Insurance
NHRPL	National Health Reference Price List
PESTLE	Political, Economic, Social, Technological and Legal and Environmental
REF	Risk Equalisation Fund
SAMA	South African Medical Association
SITA	State Information Technology Agency
SWOT	Strengths Weakness Opportunities and Strengths
TAC	Treatment Action Campaign
UN	United Nations
UNESCO	United Nations Education Scientific and Cultural Organisation
USA	United States of America
USSR	Union of Soviet Socialist Republics
WHO	World Health Organisation
XDR	Extreme Drug Resistant (form of Tubercolosis)

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

This report presents the results of a research study focussed on applying a key technique from the field of futures studies, viz. scenario planning, to the area of healthcare delivery in South Africa (SA).

The research report comprises a set of inputs to a scenario planning workshop regarding healthcare in SA. These inputs are itemised later in this chapter.

1.2 PROBLEM STATEMENT

By the end of 2009, the SA healthcare system (both its public and private sectors) had reached what appears to be a critical junction in its evolution.

1.2.1 Main problem

The long-ailing public healthcare system's ability to service South Africa's citizens continues to deteriorate (McIntyre, 2009), while the ostensibly complementary private healthcare system seems less and less able to provide affordable access to private health care services, in effect, facing a dwindling market (Mcleod, 2008).

In addition, there is a significant burden of disease on the South African economy arising from the HIV/AIDS pandemic, potential new pandemics such as those posed by the H1N1 virus, measles, and XDR Tuberculosis (McIntyre, 2009).

Furthermore, attempts to introduce legislation to improve the situation, or at a minimum, bring about increased equity in the delivery of healthcare have had limited success. They either have the opposite effect of what was intended (e.g. Competition Commission's regulations prohibiting collective bargaining by funders), or they end up mired in severe legal snarl-ups due to the continual challenges to the legality or constitutionality of such measures e.g. the Risk Equalisation Fund legislation and medicine price regulations from the Department of Health (Mcleod, 2008).

1.2.2 Subordinate problem

In the wake of the ANC's 52nd policy conference in Polokwane in 2007 (ANC 52nd National Conference Resolutions, 2007), government adopted what some commentators considered to be a much more deliberate, and consequently problematic stance regarding the structure of SA's healthcare system.

Rhetoric such as that regarding the introduction of a National Health Insurance has sparked criticism from actors in both the public and private sectors (Thom, 2009).

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Worryingly, many skilled medical professionals have elected to pursue their vocation in other countries offering a more enabling environment (Erasmus, 2008).

1.2.3 Hypotheses

The dynamics underlying this situation bear the hallmarks of what futurists would term a “wicked problem” (Ritchey, 2005).

The underlying assumption driving this research report, is that an approach to dissolving this wicked problem, which brings to bear the key disciplines from futures studies practice, will lead to what futurists term a “preferred future” for all stakeholders. This preferred future is one of a range of possible futures facing the SA healthcare system.

1.2.4 Delimitation of study area

The research study will be limited to producing inputs required to run a scenario planning workshop with a variety of actors in the SA healthcare arena. The actual convening, running and documenting of the workshop are excluded from the scope.

The focus of the workshop will be the SA healthcare system, although information relating to healthcare systems in other countries will be included where it contains useful insights for the workshop participants.

Other national systems (e.g. education, banking) will not be included, although impacts on other national systems may be discussed.

All dimensions of the SA healthcare system will be in scope, including:

- the private and public health sectors;
- the full value chain from healthcare providers and pharmaceutical companies to funder entities (e.g. government, medical schemes);
- stakeholders at all levels from the individual level (citizens, doctors, etc.) to the national level (government, representative bodies, etc.); and
- considerations related to economic, demographic and healthcare outcomes, and spanning the political, economic, social, technological, legal and environmental dimensions.

1.2.5 Assumptions

The underlying assumption (or central hypothesis) of this proposal, is that the application of futures studies techniques can break the SA healthcare industry out of an apparently downward spiral.

A set of assumptions associated with the efficacy of a scenario planning exercise is also at play in this research proposal. These include that:

- a relevant and representive set of players from the healthcare industry can be assembled to participate in the planning workshop;

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- an effective facilitator (or team of facilitators) can be deployed to ensure that the critical techniques for a successful scenario planning exercise can be brought to bear; and
- during the course of the exercise, sufficient alignment can be achieved among the particpants to propel them towards an envisioning of a preferred future that is so compelling that it ignites collective action following the workshop.

This research reports draws from other scenario planning exercises conducted in the South African context, viz. Clem Sunter's High Road/Low Road scenarios, the Montfleur scenarios, and the recent Dinokeng scenarios (Dinokeng Scenarios Website, 2009).

The underlying assumption driving this element of the approach is that these larger scale South African scenario exercises can provide a practical and effective template for constructing a scenario planning exercise for the healthcare industry in South Africa on the basis that already embedded within them, is a set of dynamics which is particularly suited to South African contexts.

In addition, it is assumed that other countries wrestling with similar (or even dissimilar) healthcare-related problems have also at least attempted to deploy scenario planning as an approach to address them. Where literature about such exercises is available, it is assumed similarly that there is something common that can be extracted from these exercises related to the specific dynamics of a healthcare industry that may be of use to the workshop participants.

1.3 RESEARCH OBJECTIVES

Broadly, this research seeks to achieve the following objectives:

- Production of a set of inputs to the scenario planning workshop;
- Description of other aspects of the workshop (e.g. participants, workshop agenda and facilitation methods); and
- Demonstration of proficiency in futures studies disciplines, including environmental scanning, scenario planning, systems thinking, demography, and causal layered analysis.

All of the above with a view towards mobilising the execution of the scenario planning exercise.

1.4 CLARIFICATION OF KEY CONCEPTS

1.4.1 Healthcare funder

Any organised entity that pays for the cost of health products or service delivery. In the South African context, there are three primary funding entities, viz. the government, medical schemes and private health insurance providers. On a micro basis, individuals are also funders of healthcare, and on an indirect basis, tax payers contribute indirectly to the funding of public healthcare.

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1.4.2 Healthcare provider

Any entity engaged in the delivery of health products or services. These are usually private enterprise entities of varying scale, from small-scale operators, such as general practitioners, to large entities like hospital groups and pharmaceutical companies. The state is also a key provider of healthcare services through its public health infrastructure.

1.5 RESEARCH DESIGN AND METHODOLOGY

The approach was to prepare an "orientation pack" for scenario workshop participants. Broadly, this pack includes two categories of documentation:

- "Research documents" about the SA healthcare industry i.e. environmental scan documents, industry analyst reports, etc. As part of this research report, an original environmental scan has been produced on the SA healthcare industry for the month of November 2010. In addition, a review of economic analyst reports is also be included in the orientation pack.
- "Primer documents" about the various futures studies techniques that will be applied during the course of the scenario planning exercise (including scenario planning, systems thinking and causal layered analysis). These documents take the form of original products created during this research exercise by synthesising existing literature.

1.6 CHAPTER OUTLINE

The research report contains chapters as follows:

- Chapter 1 contains a brief introduction outlining the contents of the research report, and highlighting the objectives of the research.
- Chapter 2 entails a context setting overview of the current SA healthcare environment and an also explanation of why a well-functioning healthcare system matters.
- Chapter 3 presents an environmental scan of developments in the SA healthcare landscape for the month of November 2010. The scan is presented along the PESTLE dimensions, as indicated in the environmental scanning technique.
- Chapter 4 contains forecasts of qualitative and quantitative SA healthcare-related factors. In addition, a review of standalone economic research data related to the SA healthcare industry is presented**.**
- Chapter 5 provides an orientation to the scenario planning technique, and cites examples where this technique has been applied to constructive effect in South Africa.
- Chapter 6 provides a primer on systems thinking, and cites examples where this approach to problems has been applied to constructive effect or generated hitherto unseen insight and ultimately foresight about dealing with wicked problems.

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- Chapter 7 provides a primer on causal layered analysis, and cites examples where this technique has allowed alignment and deepened understanding to emerge, especially in conflict situations.
- Chapter 8 outlines the particular scenario planning process that will be followed for the SA healthcare environment. Mimicking, to some extent, the approach followed for the Dinokeng Scenarios, all the pre-workshop engagement activity (in which the information showcased in this report will be used) will also be explained in this chapter.
- Chapter 9 identifies the “wish list” of stakeholders representing various camps in the SA healthcare arena who will make the proposed scenario planning exercise comprehensively representative. In addition, the facilitation team, as well as other actors in the process (e.g. guest speakers) will be proposed.
- Chapter 10 presents some concluding reflections on the process of preparing for the workshop.

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CHAPTER 2
THE SA HEALTHCARE ENVIRONMENT

2.1 INTRODUCTION

This chapter provides a contextual overview of the SA healthcare environment for the purposes of orienting the reader of this research report.

Participants in the envisaged scenario planning workshop will typically be drawn from within the SA healthcare environment, and will have their own perspective on information presented here that informs their participation in the sessions.

This chapter opens with a discussion about the impact and resultant importance of healthcare systems, and a description of the attributes of a well-functioning healthcare system.

The various components of SA's healthcare system are then analysed from the viewpoint of two reference models. This analysis includes a digest of the key problems that exist in each component of the healthcare system.

Integration problems across components are also discussed.

Finally, a review is presented of various interventions undertaken by role players in the SA healthcare system over the past 20 years.

2.2 WHY A WELL-FUNCTIONING HEALTHCARE SYSTEM MATTERS

A healthy population is a key driver of a vibrant, active economy. Conversely, a population burdened by disease or poor health status progressively becomes a drag on society, which has to shoulder the burden associated with the cost of care of that unhealthy population.

Good health enables progress to be made in education of the broader population and sets them up to become active participants in the economy, thereby raising the general levels of prosperity of South African society.

A healthy population is therefore a critical success factor for a developing society, and it follows that a healthcare system which produces and sustains the good health of that population is a key enabler of achieving that success factor (Wilkie, Young, 2009).

Culyer and Newhouse, in their "Handbook of Health Economics", highlight the notion that the "growth of health expenditure and of its share in Gross Domestic Product (GDP) is a phenomenon which is constantly the subject of comments and discussions among politicians, administrators and academics in many countries" (2000, p. 13).

They argue that a further reason for the focus on the healthcare systems is that they are predominantly funded by public money. This has the effect of turning the topic of healthcare into a

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matter of national interest, drawing commentary from, as well as involvement of, a variety of players at all levels of society.

Culyer and Newhouse further state that healthcare has been shown to differ from other economic commodities, because of the simultaneous presence of four characteristics. These include: 1) demand for healthcare being a derived demand (for health); 2) externalities; 3) informational asymmetries between providers and consumers (patients); and 4) uncertainty with respect to both the need for and the effectiveness of healthcare (2000, p. 67). As such, healthcare is more prone to market failure, the problematic consequences of which have already been outlined above.

The World Health Organisation (WHO) defines a well-functioning healthcare system as "respond[ing] in a balanced way to a population's needs and expectations by: 1) improving the health status of individuals, families and communities; 2) defending the population against what threatens its health; 3) protecting people against the financial consequences of ill-health; 4) providing equitable access to people-centred care; and 5) making it possible for people to participate in decisions affecting their health and health system." (WHO Website, 2010).

The WHO goes on to describe the components of a well-functioning healthcare system:

- Leadership and governance well-adapted to the country-specific context, but consistent with a universal set of good practices and features;
- Health infomation systems forming a basis of understanding the health challenges, the broader environment and performance of the healthcare system;
- Health financing targeting universal coverage through removal of access barriers and the adverse financial effects of catastrophic healthcare expenditure;
- Human resources for health bringing to bear and retaining the skills required to meet the health needs of the population;
- Essential medical products and technology; and
- Service delivery which is reliable and effective.

2.3 STRUCTURE AND CHALLENGES OF THE SA HEALTHCARE SYSTEM

The analysis of the SA healthcare system proceeds from the basis of two analytical models viz. sectoral and value chain. The sectoral analysis inspects the healthcare environment from the perspective of sectors defined within society. The value chain analysis inspects the healthcare environment from the perspective of the exchange and flow of value within the healthcare system.

2.3.1 Sectoral view of SA healthcare

The SA healthcare system comprises three commonly understood sectors viz. public sector (state hospitals, clinics and trainee doctors), private sector (medical aid schemes, private hospitals, medical practitioners in private practice) and non-governmental organisations (charitable foundation-funded medical service providers).

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By default, the public sector services the largest component of the SA population's healthcare needs. This leads to long waiting lists for access to healthcare services and a general shortage of resources (human and other) with which to service the population who are dependent on the state for their healthcare (Mahmood, 2007).

The private sector services a decreasing proportion of the SA population who can afford the escalating costs of belonging to a medical scheme. South Africans who are in full-time employment generally belong to some company-subsidised medical aid scheme (either restricted or open). This private sector struggles primarily with the need to demonstrate a return on the capital invested to establish facilities with higher quality health outcomes than what is acceptable to the segment of the population who make up the market for their services. And also with the escalation of cost required to secure the expertise and skills to operate these facilities (Macintyre, 2010).

Non-governmental organisations include entities like Doctors without Borders or Treatment Action Campaign, who lobby to raise funds to provide treatment either directly or in collaboration with public or private sector programmes. These NGOs struggle with securing donor funding to advance their particular cause on the one hand, and on the other hand, are restricted by that donor funding to addressing only a small slice of what is often a syndrome of issues plaguing a poorly serviced community. This restriction can apply to the condition (e.g. AIDS, or Tubercolosis) or to the geographic location of the community the NGO is directed to support by its funding mandate e.g. church mission, rural communities, etc.

2.3.2 Value chain view of SA healthcare

A value chain view of SA healthcare identifies three primary actors:

Healthcare consumers, who from time to time find themselves in need of healthcare. Their primary challenge is finding affordable quality healthcare.

Healthcare funders, who pay for the healthcare needs of their constituents. Depending on the sector that the funder represents, these constituents can be members of the healthcare insurance schemes in the case of private funders or the public at large, in the case of the government.

Consumers directly finance healthcare funders through a variety of mechanisms including taxation and contributions to funding pools. In some cases, consumers also directly fund their healthcare expenditure "out of pocket".

Funders also have the challenge of securing quality affordable healthcare for their constituents, but through the aggregation of buying power, are able to interact more directly with providers to enter into agreements for delivery of such healthcare.

Healthcare providers, who provide the healthcare services needed by healthcare consumers. Their primary challenge is to sustain a market for their services, and also to secure returns on the capital invested to establish facilities in which to deliver these services.

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The flow of services then typically, is from providers to consumers, while the flow of payment is from consumers via funders to providers.

In a value chain analysis, a fourth category, called **healthcare enablers,** can be distinguished. Such entities typically function in support of the primary actors. Examples include switching companies which facilitate electronic transaction switching between private healthcare providers and private healthcare funders or medical scheme administration companies to whom medical schemes outsource their administration.

All primary sectors are regulated by governmental and professional organisations.

A key feature in South Africa is that competition regulation prohibits vertical integration, which places limitations on the ability of funders to establish provider networks and vice versa. The government is the only entity allowed to establish a closed-loop value chain, in which the funder of medical services also "owns" the infrastructure through which medical services are provided.

2.4 INTEGRATION PROBLEMS IN THE SA HEALTHCARE SYSTEM

In addition to the sector or value chain specific problems identified above, a number of additional problems emerge through the nexus of these various components of the healthcare system.

In the sectoral view, a commercial tension exists between providers and funders, which is systemically exacerbated by competition legislation prohibiting vertical integration and collective bargaining.

Increasing polarisation of private and public sector spending, results in widening gap between the two in terms of cost and healthcare outcomes (Macintyre, 2008). This is an ironic outcome because the private healthcare sector is a key component in the government's strategy for securing provision of healthcare to South Africans overall, by off-loading the burden of healthcare associated with those citizens who are prepared to fund their own healthcare expenses (either directly or via membership of a medical scheme). The extent to which coverage by a medical scheme is unaffordable to an increasing number of the SA populace is the extent to which public sector healthcare facilities have to carry the burden of those citizens.

The advent of the HIV/AIDS epidemic in South Africa has also challenged all sectors in the healthcare environment. It highlights integration problems at the sectoral boundaries, generating sector-specific crises (e.g. viability of private insurance pools with high rates of infection in their insured population) and inter-sector conflict (e.g. attempts by regulators to block moves by insurers to restrict cover for HIV/AIDS sufferers, NGOs demanding that government implement universally accessible treatment programmes, etc.).

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2.5 INTERVENTIONS IN SA HEALTHCARE IN THE PAST 20 YEARS

A report by the Henry J. Kaizer Family Foundation (2009) targeted at government health leaders highlighted ten significant accomplishments since 1994.

Under the category “Legislation and Gazetted Policy”, the report identified:

- free primary healthcare;
- essential drugs programme;
- choice on termination of pregnancy;
- anti-tobacco legislation; and
- community service for graduating health professions.

Under the category “Better Health Systems Management”, the report identified:

- greater parity in district expenditure;
- clinic expansion and improvement;
- hospital revitalisation programme;
- improved immunisation programme; and
- improved malaria control.

While the Kaiser Foundation’s report focussed on achievements by government in the context of public healthcare, government regulation has also seen interventions in the private sector, notably related to medical aid schemes.

Mahmood’s review (2007) of medical scheme-related legislation lists the following milestones:

- 1984 - 1993: Review of of medical aids in favour of “free market” and “risk rating” reforms.
- 1998: Reforms in the Medical Schemes Act to drive the industry back to social solidarity.
- 2000: Open enrolment, community rating, prescribed minimum benefits legislation.
- 2003: Establishment of Risk Equalisation Fund (REF) task group.
- 2004: Chronic disease list included in the prescribed minimum benefits.
- 2005: Regulations mandating minimum solvency levels.
- 2006: Report on consultatative investigation in Low Income Medical Scheme (LIMS).
- 2005: National Health Reference Price List introduced by Council for Medical Schemes.
- 2002 - 2007: Investigations into feasibility of Social Health Insurance as an interim reform.
- 2007: Resolution by ruling party to introduce National Health Insurance (NHI).

Another set of interventions highlighted by Macintyre (2010) relates to consolidation within the healthcare provider sector. This includes the culmination of a recent period of consolidation within the private hospital sector resulting in a concentration of over 75% of the nearly 30 000 private hospital beds into the hands of 3 private hospital groups. She also points to a concentration of

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pharmaceutical production power into the hands of two large groups, Adcock Ingram and Aspen Pharmacare.

2.6 CONCLUDING COMMENTS

Arguments presented in this chapter suggest that the improved effectiveness of the SA healthcare system will have positive effects for the SA economy and for South African society. A scenario planning exercise for a preferred future for SA healthcare is therefore significant enough to warrant the attention and support of the various healthcare role-players described in this chapter.

It has been argued in this chapter that the SA healthcare environment is comprised of a set of discrete camps that interact to create healthcare delivery. This partitioning of the environment has been illustrated from two perspectives, viz. from the perspective of the sectors that exist in the environment, and also from the perspective of how value is exchanged in the environment.

The research presented also indicates that the various interventions in the healthcare environment over the past 20 years have generated some success in raising the effectiveness of healthcare delivery in SA and have progressively shaped the environment into what exists today. However, there remain significant challenges in this environment which seem impervious to incremental or sector-bound interventions. Addressing these challenges would appear to require a more comprehensive, cross-sectoral approach. This notion will inform the design of the scenario planning exercise discussed in later chapters.

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CHAPTER 3
ENVIRONMENTAL SCAN OF SA HEALTHCARE ENVIRONMENT

3.1 INTRODUCTION

This chapter presents an environmental scan for the SA healthcare environment.

The timeframe of the scan has been limited to one month for the purpose of this research report - activity in the SA healthcare environment tends to generate a large amount of media activity and therefore a one month time period was selected in order to produce a scan document approximately 50 pages in length.

November 2010 was chosen as a focus month to ensure the most current developments in the SA healthcare environment were captured into this research report.

This environmental scan provides scenario workshop participants with a digest of contextual information about dynamics unfolding within the SA healthcare industry and as such, it represents a common point of reference for the participants.

The actual scan document is attached as Appendix A. Articles are presented along the categories of Political, Economic, Social, Technological, Legal and Environmental developments.

A summary of the main themes emerging from the scan is presented in the body of this chapter.

A variety of print and internet media sources has been scanned, as indicated in the scan document. Ordinarily, other media sources, academic journals and books would also form part of the material included in the scan document. However, they are not present in this instance, and for the purposes of the scenario planning exercise, this scan is sufficient to present participants with an overview of events unfolding within the industry.

The services of commercial media monitoring company, Newsclip (www.newsclip.co.za), were used to identify the media articles to be reduced and included into the final scan document.

3.2 ENVIRONMENTAL SCAN SUMMARY

The articles contained in the environmental scan document attached in Appendix A span eleven themes as follows:

- consolidation and merger activity;
- curatorships;
- healthcare leadership developments;
- establishment of healthcare ombudsman and health standards compliance office;
- HIV/AIDS-related developments;
- innovations in healthcare delivery;
- medical fraud and disputes;

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- National Health Insurance;
- healthcare pricing;
- private sector profitability; and
- shortage of medical skills.

The main developments in November under each of these themes will be summarised in this section.

3.2.1 Consolidation and merger activity

The merger of Moremed Medical Scheme and Clicks Group Medical Scheme has been confirmed by the Council for Medical Schemes. The merger is effective from 1 January 2011.

The documentation detailing the proposed amalgamation of Bepmeds medical scheme into the TopMed medical scheme has been opened up for public scrutiny by the Council for Medical Schemes.

3.2.2 Curatorships

The curatorship of Pro Sano medical scheme which has been in force since 2007 has been lifted, effective 1 November 2010. The newly appointed principal officer, Aglaak Mahmood, takes over management of the scheme from outgoing curator, Joe Seoloane.

The Council for Medical Schemes has placed the Protea Medical Aid Society under curatorship effective 1 November 2010. The court-appointed curator is Mr. Velaphi Petsana.

3.2.3 Healthcare leadership developments

Under the banner of public/private partnerships, Discovery Health has donated R100 million over the next two years to fund the cost of 3600 cataract operations for the needy and Clicks has reached a milestone of 20 000 HIV tests performed free-of-charge on state patients in support of the government's campaign to get 15 million South Africans tested by June 2011.

On the ethics front, an article by Dr Robert Vivian argued that the universal right to healthcare driving the advocacy for a National Health Insurance scheme is a flawed notion which, if pursued, may create unintended constitutional problems for South Africa.

Industry commentators Ann Berstein and Paul Davis also asserted that bold state leadership is required to avoid continued deteroration of South Africa's life expectancy statistics. This bold leadership would include a dramatic new approach to the private sector, market forces and recruitment of foreign skills.

Ike Diale, writing in the City Press, bemoaned the poor performance of elected officials to deliver on healthcare-related promises made during elections, arguing that these officials were more pre-occupied with the scramble for personal wealth.

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The Council for Medical Schemes also signalled its concern with the high level of industry non-compliance to provisions in the Medical Schemes Act around provision of Prescribed Minimum Benefits.

Several articles were also published advocating a healthier lifestyle, including three pieces proposing ways to better manage medical costs, either directly or by reviewing medical scheme option choices, taking a more integrated approach to mental health and long-term illness as advocated in the Mental Health Day Seminar held at Tara Hospital in Johannesburg, and corporate wellness initiatives such as those undertaken by Wits University and Discovery Health to establish a Health Company Index.

3.2.4 Establishment of healthcare ombudsman and health standards compliance office

Health minister, Aaron Motsoaledi announced the formation of a health ombudsman to deal with poor healthcare service delivery. The ombudsman function, together with the establishment of an Office of Health Standards Compliance, were proposals under the National Health Amendment Bill, which has been approved by cabinet.

3.2.5 HIV/AIDS-related developments

Finance minister, Pravin Gordhan, announced the allocation of an additional R100 million to the Department of Health in the fight against HIV/AIDS. The funding will be targeted at accelerating the roll-out of anti-retroviral drugs in under-resourced township clinics and promotion of male circumcision services.

A pilot project in the North West Province has shown increased effectiveness in the rollout of anti-retrovirals can be achieved through partnership between public health services and private practitioners.

3.2.6 Innovations in healthcare delivery

The role of a doula, acting as a bridge between the medical staff and parents in the run-up to a birth of a new baby, can raise the effectiveness of the very costly intervention of in-hospital child-birth. Trained in the usual medical interventions during birth, doulas can offset some of the high workload demand on costly obstetric staff during the birthing process.

The SANS828 smart card standard has been proposed as the identity verification standard which will become necessary to ensure effective implementation of the National Health Insurance system.

A case study on Malaysia's Selayang Hospital was published, describing the successes and benefits Selayang has achieved moving to a paperless and filmless hospital operation.

Yarona, an independent healthcare provider network, announced the launch of a pay-as-you-go healthcare insurance product that includes coverage for consulting the services of sangomas (traditional healers). The product is aimed at the emerging market, a segment where affordability

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and product complexity issues associated with conventional medical schemes act as a barrier to coverage.

3.2.7 Medical fraud and disputes

The Council for Medical Schemes launched an investigation into two former trustees of the Community Medical Aid Scheme in connection with fraudulent abuse of member funds. Former head of the Council for Medical Schemes, Patrick Matshidze, was also named in the announcement as a target in the investigation, as he allegedly failed to disclose his business dealings with the trustees under investigation.

An East London-based member of Hosmed Medical Scheme won a five-month battle to have membership fees deducted from his salary refunded. The dispute related to fees deducted for a period during which the member claimed he was not covered by the scheme. Hosmed agreed to the refund as a gesture of good faith.

Netcare hospital group was fined R4 million rand for performing illegal kidney transplants. The donor kidneys were acquired through illegal means, and Netcare pleaded guilty to the charges.

The tally of Port Elizabeth doctors held for issuing bogus sick notes and defrauding money from medical schemes has risen to three.

3.2.8 National Health Insurance

The topic most vigorously discussed in November was the proposed National Health Insurance scheme. The ANC tabled its discussion document on NHI at its national general council meeting. Many private sector-based commentators (e.g. an actuary from Old Mutual) have criticised the government's proposals on the basis of the cost implications and implementation hurdles. Public sector and NGO sector commentators (e.g. NEHAWU) on the other hand have called for its urgent implementation as a way to address what is seen as exploitative practices in the private sector. Several commentators across the sector spectrum (e.g. SAMA and KPMG) however have suggested practical ways to make the NHI more feasible than what is contained in the government's latest proposals.

Health minister, Aaron Motsloaledi highlighted the six key problem areas which need to be tackled before implementation of National Health Insurance. These include cleanliness of hospitals, safety and security of patients, attitude of healthcare workers, long queues, treatment and infection control.

3.2.9 Healthcare pricing

Two pricing-related developments attracted media attention.

The publication by the Department of Health of revised dispensing fees for pharmacists was welcomed by the pharmacy community. It puts to rest a six-year legal battle on the matter.

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The high court scrapped the Department of Health's contentious National Health Reference Price List, on grounds of procedural unfairness. This opens the way for healthcare funders and healthcare providers to negotiate tariffs freely and without government intervention.

3.2.10 Private sector profitability

Private sector companies in the healthcare environment posted strong results with Discovery declaring that executive bonuses at the insurer could increase by 300% over those paid in 2009, pharmaceutical manufacturer Adcock Ingram announcing cash trading surpluses of nearly R1 billion (a complete reversal of its net debt position of R250 million in 2008), and pharmacy group Dischem reporting that it is closing in on its target of 60 stores for 2010.

3.2.11 Shortage of medical skills

The Democratic Alliance announced plans to submit proposals to the Department of Health on how to address the shortage of doctors and nurses in South Africa.

SAMA suggested that independent practitioners associations could help address the shortage of doctors and nurses at state hospitals, but that government was not fully tapping this resource.

Econex research published in November forecasts a decline in the absolute number of doctors in SA over the next 10 years. This research also showed that South Africa is way behind comparable countries in terms of the coverage of doctors. South Africa has an average of 55 doctors per 100 000 people, whereas Greece and Mexico, with similar economic levels to South Africa, report an average of 349 doctors per 100 000 people.

3.3 CONCLUSION

The environmental scan illustrates a high degree of activity in the various sectors of the industry over even a relatively short period of one month. This activity is focussed on a few high profile topics like HIV/AIDS, the National Health Insurance and recent legal rulings with respect to pricing within the industry.

There are encouraging dynamics unfolding around what is potentially a very charged stand-off situation between the public and private sectors of SA healthcare i.e. evidence of willingness to explore public/private partnerships.

The scan also shows some inventive thinking around ways to make a more universal and inclusive healthcare system feasible in the context of South Africa.

The high degree of fraudulent behaviour and legacy of protracted disputes however, is a cause for concern. This element of the culture within SA healthcare poses a serious challenge to the prospect of transforming the current healthcare system into one that delivers better outcomes for the citizens of South Africa.

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CHAPTER 4

ECONOMIC FORECASTS FOR THE SA HEALTHCARE ENVIRONMENT

4.1 INTRODUCTION

This chapter presents recent economic research about trends affecting the South African healthcare industry.

A variety of research study findings is presented in this chapter, including:

- Macro-economic outlook reports for South Africa produced by SA's four largest banks;
- United Nations (UN) World Population Prospects data for South Africa to 2050;
- Econex research papers on the proposed National Health Insurance and Health Reform in South Africa;
- Children's Institute's 2010 report identifiying child health trends in SA;
- National Treasury representative, Andrew Donaldson's, presentation at the Board of Healthcare Funders conference in 2009; and
- Council for Medical Schemes (CMS) 2009-2010 annual report.

These have been selected and ordered progressively to build up a forecast picture, based on economic and demographic data, within which the scenario planning deliberations will take place.

The SA banking institution and UN Population Prospects forecasts build an economic and population outlook outlining the broader context within which South Africa's healthcare future is projected to unfold.

Independent NGO and academic research is then presented to provide a healthcare-specific view of trends in the South African environment.

Government-driven economic research into health system change is presented to provide a public-sector perspective on the overall healthcare system in South Africa.

The CMS annual report forms the basis for a view of healthcare trends within that sector of South African society which is able to participate in the private healthcare industry, either as a consumer or as a provider.

4.2 MACRO–ECONOMIC OUTLOOK FOR SA

Table 4.1 contains First National Bank's (FNB) 5-year forecast for growth in Gross Domestic Product (GDP), as well as financial indicators to the year 2014. Historical data from 2005 is also presented to illustrate 10-year trends (Bruggemans, 2010).

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Table 4.1: First National Bank macro-economic forecast for South Africa to 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP Growth (%)	5.3	5.6	5.5	3.7	-1.8	2.5	3.0	3.5	3.7	4.0
Exchange Rate R/$ (average)	6.36	6.77	7.05	8.25	8.43	7.30	7.00	7.75	8.25	8.75
CPI % (average)	2.1	3.2	6.1	9.9	7.1	5.0	5.0	5.5	5.8	6.0
Prime Rate % (average)	11.7	11.1	13.1	15.0	11.9	10.0	10.0	12.0	13.0	13.0

Source: First National Bank macro-economic outlook for SA, 2010

Table 4.2 contains ABSA's 3-year forecast for growth in Gross Domestic Product (GDP), as well as financial indicators to the year 2012. Historical data from 2008 is also presented to illustrate 5-year trends (ABSA Economic Research Team, 2010).

Table 4.2: ABSA macro-economic forecast for South Africa to 2012

	2008	2009	2010	2011	2012
GDP Growth (%)	3.7	-1.8	3.0	3.7	4.0
Exchange Rate R/$ (average)	8.26	8.44	7.39	7.05	7.69
Headline CPI (%)	11.0	7.1	4.1	4.3	5.5
Prime Rate % (average)	15.1	11.3	9.8	9.0	10.5

Source: ABSA key annual forecast for SA, 2010

Table 4.3 contains Standard Bank's 4-year forecast for growth in Gross Domestic Product (GDP), as well as financial indicators to the year 2013. Historical data from 2006 is also presented to illustrate 8-year trends (Du Toit et al, 2010).

Table 4.3: Standard Bank macro-economic forecast for South Africa to 2013

	2006	2007	2008	2009	2010	2011	2012	2013
GDP Growth (%)	5.6	5.5	3.7	-1.8	2.9	3.4	3.7	4.0
Exchange Rate R/$ (average)	6.77	7.05	8.22	8.42	7.36	7.46	7.82	8.20
Headline CPI (% y/y) annual average	4.6	7.1	11.5	7.1	4.2	4.3	5.5	5.5
Prime Rate % (average)	11.2	13.08	15.13	11.81	9.90	9.00	11.00	12.00

Source: Standard Bank macro-economic perspectives for SA, 2010

Table 4.4 contains Nedbank's 4-year forecast for growth in Gross Domestic Product (GDP), as well as financial indicators to the year 2013. Historical data from 2006 is also presented to illustrate 9-year trends (Nedbank Group Economic Unit, 2010).

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Table 4.4: Nedbank macro-economic forecast for South Africa to 2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
GDP Growth (%)	5.3	5.6	5.6	3.6	-1.8	2.5	3.0	3.5	3.7
Exchange Rate R/$ (average)	6.38	6.78	7.06	8.26	8.44	7.34	6.89	7.61	8.55
CPI (new measure) %					7.1	4.3	4.6	5.9	6.0
Prime Rate % (end of period)	10.50	12.50	14.50	15.00	10.50	9.0	9.0	11.0	13.0

Source: Nedbank facts and forecasts of key economic variables for SA, 2010

While the detail numbers differ somewhat, analysts at all four institutions agree that following a recessionary period in 2009, SA's GDP growth is projected to increase progressively over the horizon of their respective forecasts. This means the South African economy will continue to expand over the coming years.

Financial indicators show a relatively stable picture over the medium term (compared with fluctuations exhibited in the historical data). However, the consensus view projects a deterioration in the rand/dollar exchange rate i.e. weakening of the rand against the US dollar. This may have implications for the cost of healthcare especially in cases where foreign-produced healthcare delivery equipment is imported into South Africa.

CPI on the other hand is projected to remain relatively stable compared with the wide fluctuations shown the history data. Analysts at all institutions project a steady increase for CPI %, with FNB forecasting an additional 1% over the forecast period to 2014, while Nedbank analysts forecast an additional 1.7% over their forecast period to 2013.

While medical-related inflation has consistently exceeded CPI over recent history, it has followed CPI trends (Schussler, 2008). This implies that the cost increases related to medical expenses could exhibit the same stable, albeit higher, increase patterns as other expenses.

Interest rates are forecast to increase steadily over the forecast period, with the consensus view being that prime is projected to move to between 12% and 13% by 2013. This will have implications for capital expenditure projects, as the cost-of-capital hurdle rate to justify expenditure will rise accordingly, and which may curb feasibility of health-related infrastructure investments which require financing (e.g. constructing and equipping of hospitals).

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4.3 UN POPULATION PROJECTIONS FOR SOUTH AFRICA TO 2050

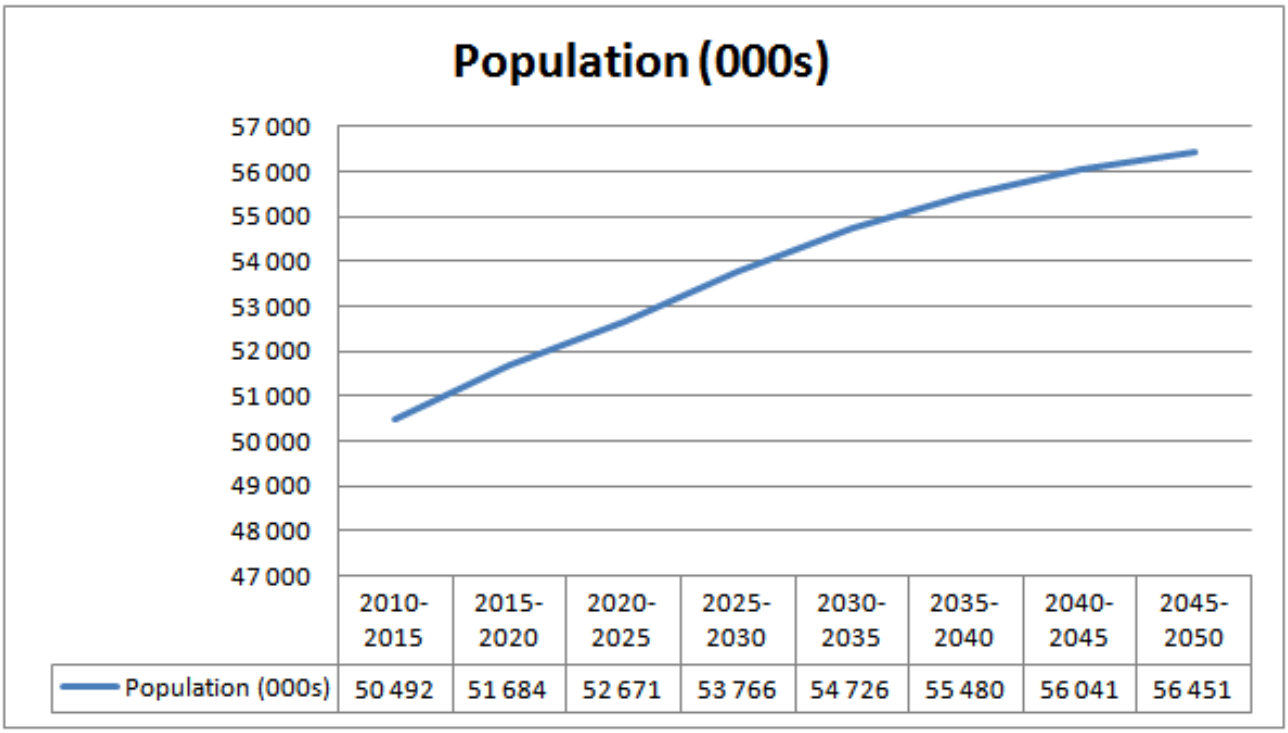

Figure 4.1: Population projection for South Africa to 2050

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

Figure 4.1 contains the 40-year forecast for South Africa's population (United Nations, 2009).

The table data shows that South Africa's population will increase steadily from its current level of 50 million to more than 56 million over the forecast period. This increase represents the additional population that will have to be serviced by South Africa's healthcare system.

Additional projection data from the UN Population Prospects database relating to the South African population is graphed in the figures below to illustrate the projections made for these factors. Associated implications for South Africa's healthcare system are also discussed.

4.3.1 South Africa's population growth rate to 2050

As shown in Figure 4.2, South Africa's population growth rate is expected to decline progressively over the forecast period, which indicates a stabilising population base (at least in terms of adding numbers) that the South African healthcare system will have to support over the medium term.

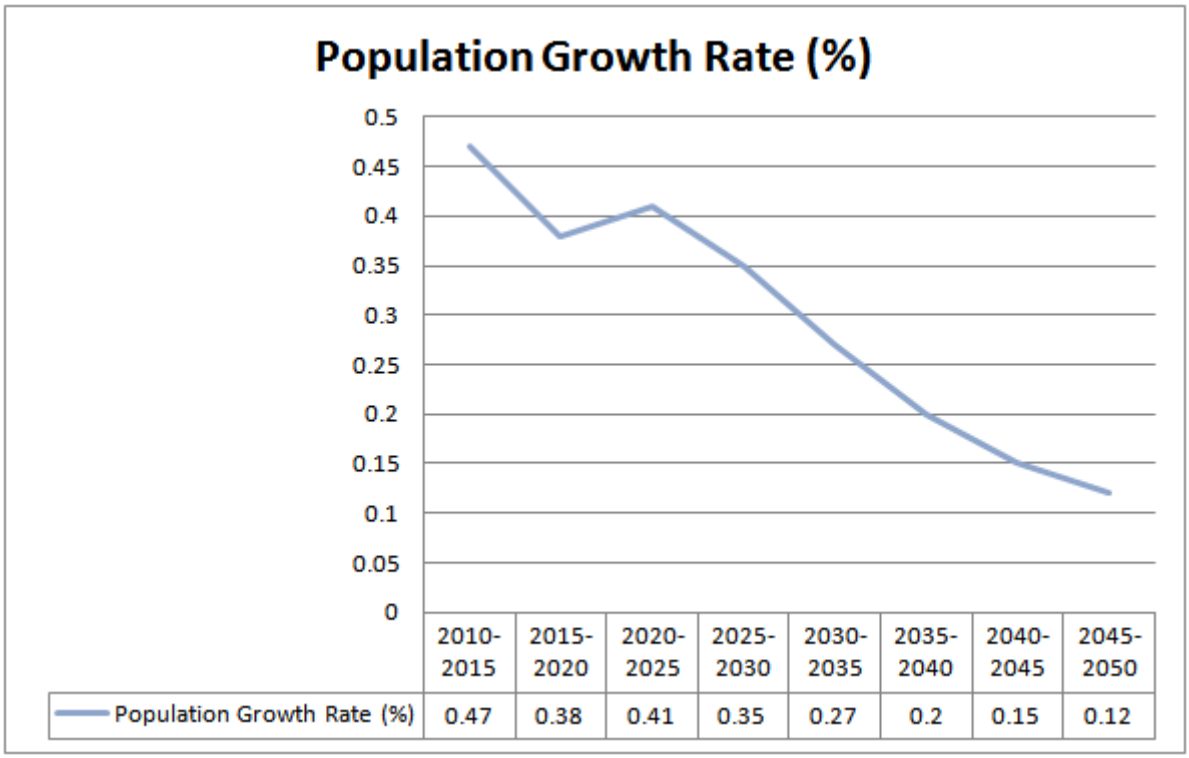

Figure 4.2: Population growth rate projection to 2050 – South Africa

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

4.3.2 South Africa's total fertility rate to 2050

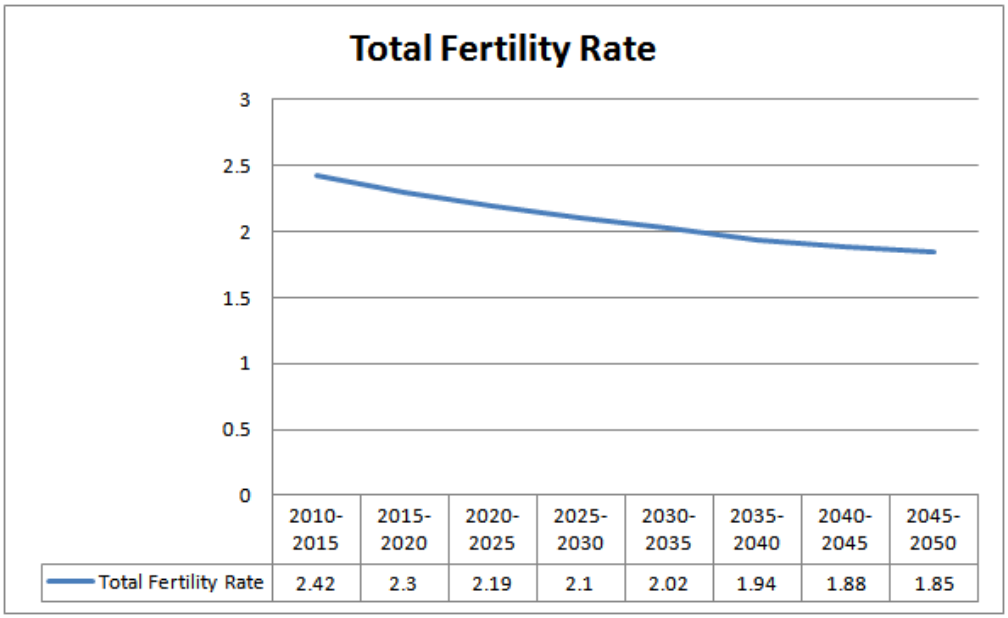

Figure 4.3: Total fertility rate projection to 2050 – South Africa

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

Fertility rate is projected to decline as shown in Figure 4.3, although replacement level of 2.1 children per woman will be maintained until about 2030. This is significant because beyond this point, further population growth (as indicated in the prior graphs in Figures 4.1 and 4.2) becomes attributable to migration trends. This shift will have medium-term implications for the focus areas that will be required in the healthcare system.

4.3.3 South Africa's infant mortality rate to 2050

Infant mortality rate is projected to decline (Figure 4.4). While a continued reduction in infant mortality rate is projected as evident from the graph, there remains an opportunity for even further reductions through increased effectiveness of the healthcare system.

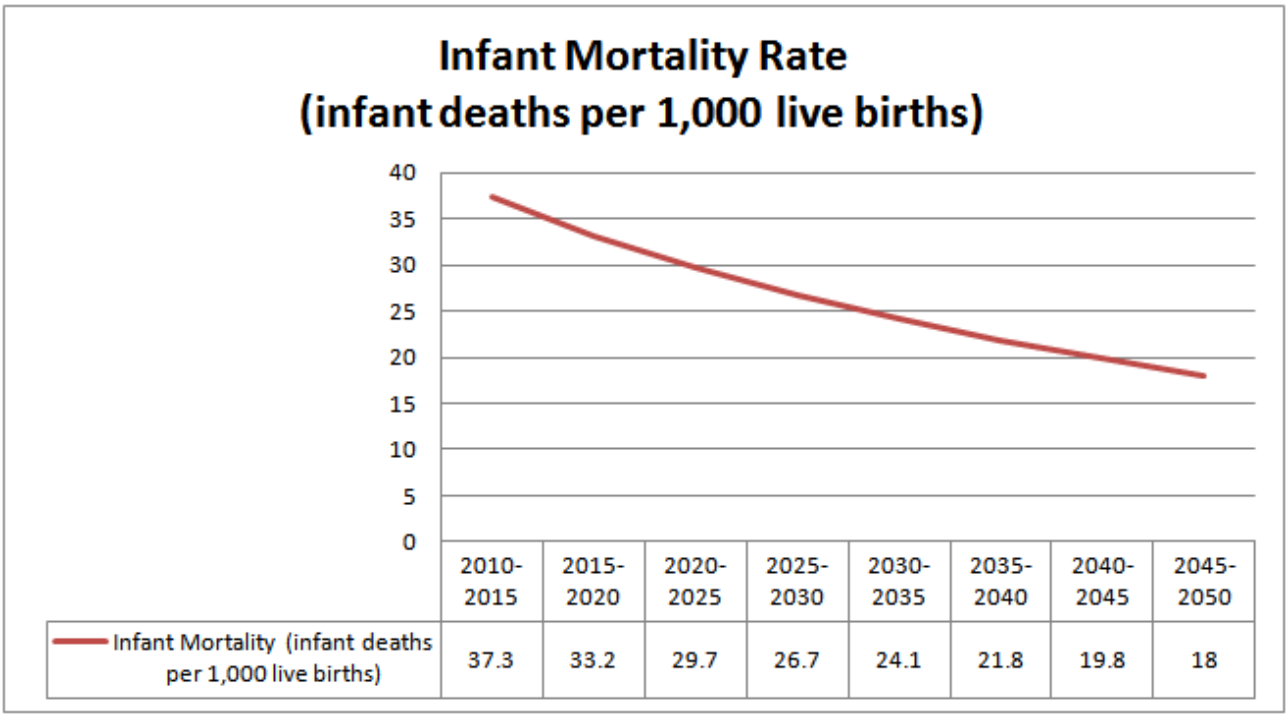

Figure 4.4: Infant mortality rate projection to 2050 – South Africa

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

4.3.4 South Africa's crude birth and death rate to 2050

Figure 4.5 shows a projected convergence of the birth rate and death rate. Crude death rate remains relatively stable, so this convergence arises from a reduction in crude birth rate, which is supported by the total fertility rate projections shown earlier.

The impact of advances in treating the HIV/AIDS epidemic would be to reduce the crude death rate. The UN data model driving these projections, however, assumes nothing explicitly new about the incidence rate of HIV/AIDS infections in South African population in this projection data (UN, 2008b).

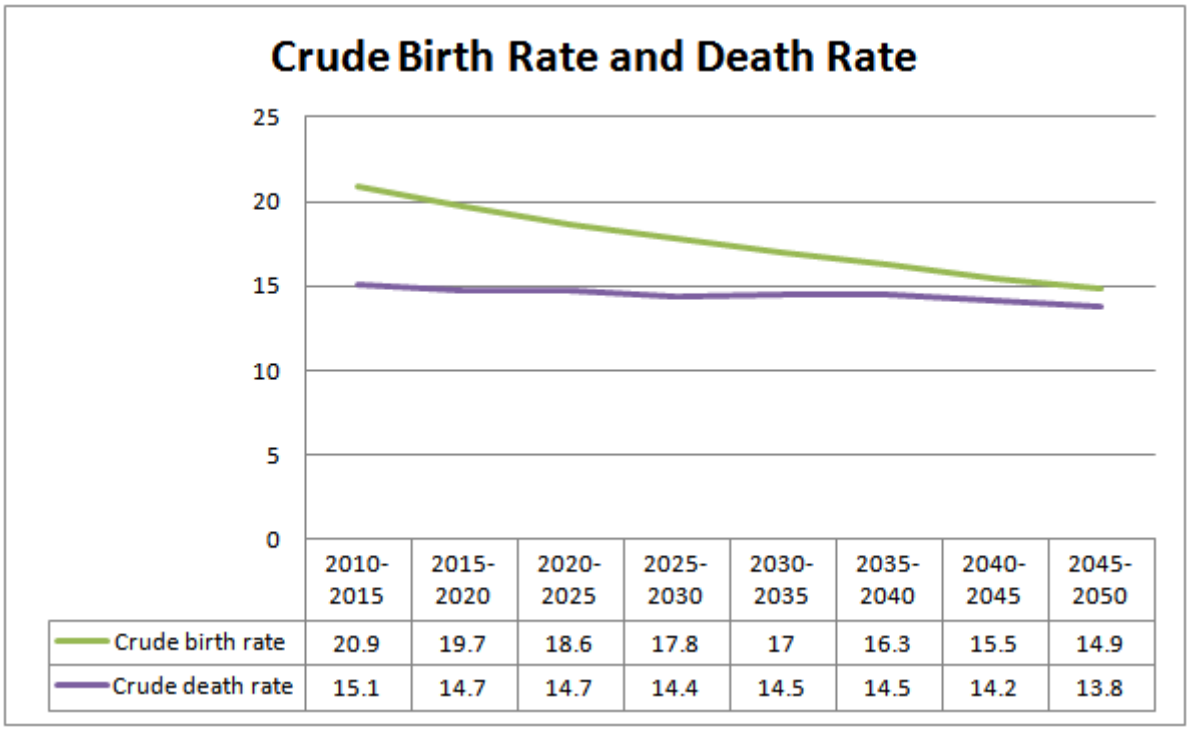

Figure 4.5: Crude birth rate and death rate projections to 2050 – South Africa

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

4.3.5 South Africa's combined life expectancy and age structure to 2050

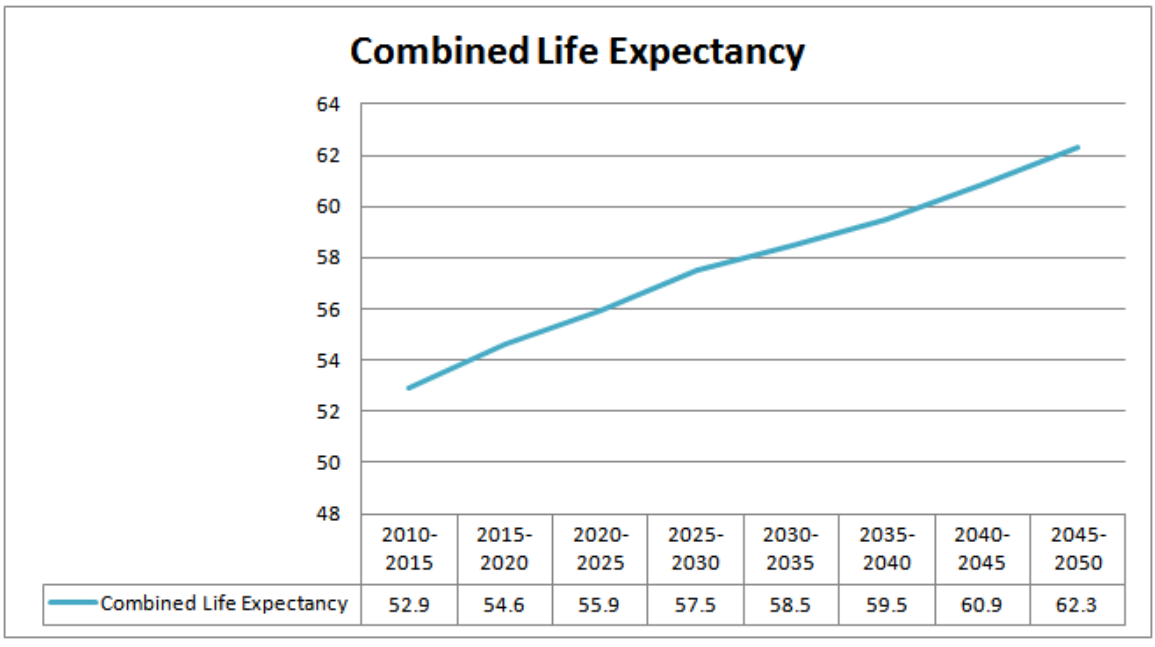

Figure 4.6: Combined life expectancy projection to 2050 – South Africa

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

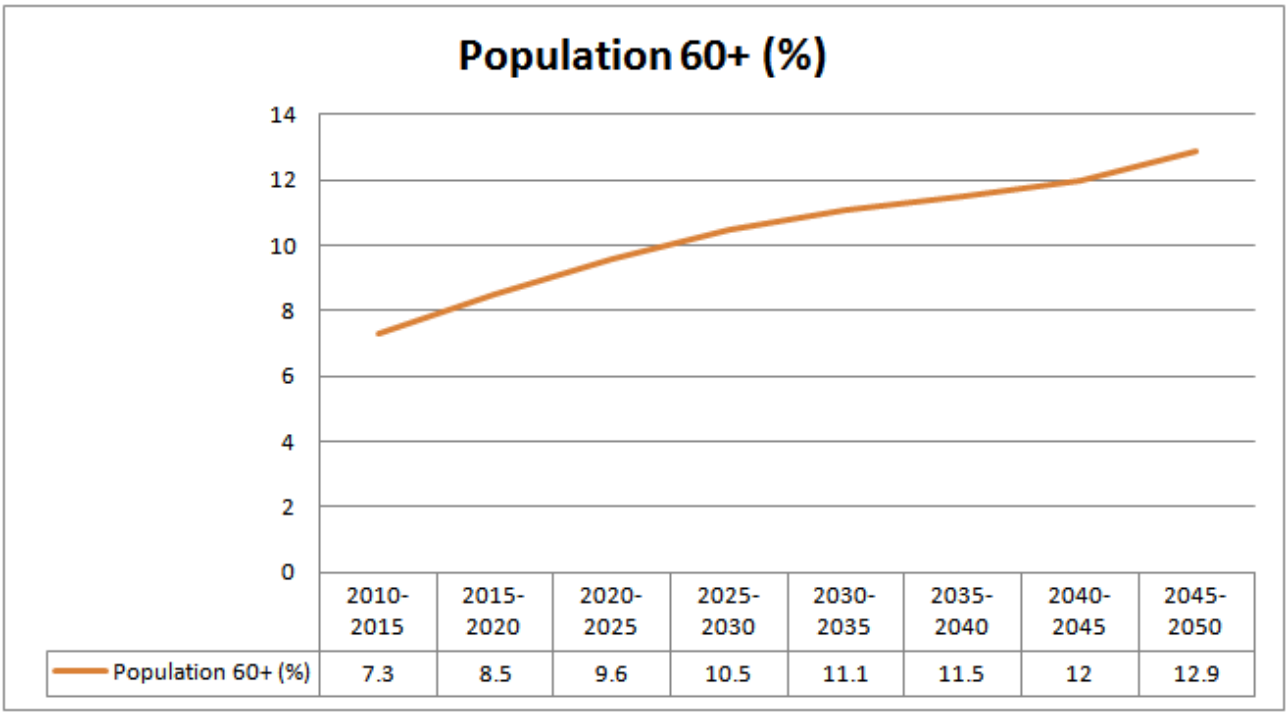

Figure 4.7: Projection for population older than 60 to 2050 – South Africa

Source: UN World Population Prospects: 2008 revision database, medium-variant population projections, 2009

Combined life expectancy (Figure 4.6) is projected to increase, which will bring along with it the burden of having to care for an older population and their associated ailments. This is borne out in the projection of the proportion of the population over 60 years of age (Figure 4.7).

4.3 ECONEX RESEARCH ON NHI AND HEALTH REFORM IN SA

Econex is a private economics consultancy firm that performs economic analysis covering competition economics, international trade, strategic analysis and regulatory work. The principals at Econex are Dr. Nicola Theron, Prof. Rachel Jafta and Cobus Venter. Econex principals have affiliation to the University of Stellenbosch and to the Bureau for Economic Research.

In 2009, Econex was commissioned by Hospital Association of South Africa (HASA) to perform costing and human resource research related to the National Health Insurance (NHI). This yielded a series of 14 research notes under the banners of “NHI” and “Health Reform” (Econex, 2010).

This section focuses on the research notes about the demand for healthcare in South Africa. (Econex, 2009), and the integration of public and private sectors under an NHI (Econex, 2010).

In terms of demand for healthcare, Econex’s research confirmed the notion discussed earlier in the “Handbook of Health Economics” that the demand for healthcare can be viewed as a derived demand in which many factors play a role. Econex further confirmed that demand for insurance is determined by factors including income, household size, level of education, age, etc. Econex

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further cited literature showing that “the demand for healthcare varies with the level of co-payment and that there is higher utilisation of healthcare when there is comprehensive cover” (2009, p.7).

Econex also found that in the case of South Africa specifically, “there are some clear [data] patterns that show that the uninsured and the lower income groups do pay out of pocket for healthcare and that they also purchase medical services from the private sector” (2009, p.7).

16% of the total SA population are covered by a medical aid, while the percentage using private services was almost 28.8%. South Africans registered a preference for seeing a doctor instead of a nurse, or visit a clinic. Econex notes that that preference was “also confirmed by the increase in utilisation which followed the implementation of free healthcare for pregnant women and children under six in 1994” (2009, p.7).

Econex’s view was that providing full insurance coverage to all South Africans, as contemplated by an NHI scheme, would unleash “a large wave of demand” (2009, p.7).

In terms of integrating the private and public sectors, Econex’s research revealed that freedom of choice currently featuring prominently in the private sector would be at worst, curtailed, or at best, redefined, in an NHI setting.

Their data dispelled the notion of excess capacity in the private sector, and projected a large-scale shift away from fee-for-service, which predominates presently, to alternate reimbursement models like capitation. This would bring about a re-focus of medical practice from a curative bent to a more preventative philosophy.

Econex further suggested that access to higher levels of care would be more restrictive for South Africans currently enjoying multiple levels of access based on their preference. Econex’s research suggested that in an NHI setting, access to specialists via referrals would become much more prevalent than is currently the case.

4.4 CHILDREN’S INSTITUTE REPORT ON TRENDS IN CHILD HEALTH

The Children’s Institute is a UNICEF-affiliated organisation based at the University of Cape Town. It produces an annual publication entitled “The South African Child Gauge” which monitors government and civil society’s progress towards realising the rights of children. The 2010 issue focused on child health (Children’s Institute, 2010).

In summary, the report outlined key recommendations “for government, civil society and caregivers of children, including four essential steps towards realising children’s right to health in South Africa:

- “’Address the social determinants of health‘ - Deep-rooted poverty and inequalities continue to have a significant impact on child health; so the first priority is to advocate for greater equity in social and environmental determinants. This includes improving access to food, water, sanitation, housing, health facilities and social assistance.

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- ‘Improve delivery of health care services’ - Good governance, especially at district level, is essential to improve the quality and coverage of care. Children’s health services also need to be prioritised, especially child spacing, nutrition and the Integrated Management of Childhood Illnesses (IMCI).
- ‘Strengthen community-based care’ - Priority needs to be given to diseases of the poor. This requires a shift in focus from doctor-centred curative medicine to a primary health care approach that prioritises community-based and preventative services.
- ‘Build partnerships’ - Ultimately, the health of South Africa’s children is a collective responsibility. While the Department of Health has a key role to play in providing leadership and prioritising services for children, doctors, nurses and community health workers need to realise this vision through the provision of child-friendly services. Partnerships with other government departments and civil society are essential to address the underlying causes of childhood illness and injury. Caregivers and children also have an active role to play in preventing illness and seeking medical care.” (Children’s Institute, 2010, pg. 6).

4.5 GOVERNMENT RESEARCH ON ADDRESSING PUBLIC HEALTH CHALLENGES

At the 2009 Board of Healthcare Funders (BHF) Annual Conference, Andrew Donaldson from the National Treasury delivered a paper highlighting some research and findings in respect of addressing public health challenges (Donaldson, 2009). His central theme was an argument for more cooperative health system change. He argued that non-cooperative change, which characterised the recent history of South Africa’s health system, was at the root of its current problems.

To illustrate his point, Donaldson presented research, which revealed the following “coordination failures” associated with the historical approach:

- “Fiscal illusion” - Donaldson showed there are macro-environmental constraints that a healthcare system remain subject to, and argued that “an expanded, improved health system has to be part of a growing, more productive economy”.
- “Tunnel vision” - Donaldson showed that there were other determinants of health outcomes for the South African population besides expenditure in the SA health sector. Food security, housing and sanitation expenditure, among others, were to be included in the scope definition of expenditure which impacted health outcomes.
- “Income inequality” - Making the point that a ”health system is not an island”, Donaldson showed that inter-linkages exist between the health economy in South Africa and other economies.
- “Complexity of planning & decentralised decision-making” - Donaldson pointed out the increased blurring of lines between “planning” and “market” processes. He argued that the

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history of regulatory interventions prevalent in the health sector, specifically, supports this point.

- "Cost-raising technological progress" - Donaldson makes the point that when it comes to health technology, purchasers pay for healthcare inputs, not necessarily outcomes, and that this is an example of the asymmetries and information gaps pointed out in the "Handbook of Health Economics".
- "Comprehensive care is expensive" - Donaldson echoed some of the arguments emerging from the Econex research in regard to pent-up demand for healthcare in South Africa, and implications of integrating private and public sector health care (level of care constraints, alternate reimbursement models, etc.).
- "Upward demand for health services" - Citing research about the rising cost of anti-retroviral therapy to address the increasingly prevalent HIV/AIDS epidemic, Donaldson used this as a proxy for increases in healthcare costs in South Africa in general.
- "Difficult principal-agent problems" - Donaldson points out some agency problems in both the private and public sectors, and concludes ultimately that "value for money considerations are difficult to quantify and especially difficult to communicate".
- "Personnel planning and pricing must be managed sector-wide" - This part of Donaldson's presentation addressed the staffing and skill issues in the South African health sector.
- "Cooperative solutions need to be carefully planned and sequenced" - In conclusion, Donaldson cites some isolated working instances of cooperative solutions within the SA health industry which prove the feasibility of his argument and that, with careful planning and sequence, can be extended to an industry-wide level and yield much larger scale success.

4.6 COUNCIL FOR MEDICAL SCHEMES ANNUAL REPORT 2009-2010

The Council for Medical Schemes annual report (Council for Medical Schemes, 2010) contains an operational review of the medical scheme operations in South Africa during the period under review.

This review includes an analysis of the following:

- Number of medical schemes, which showed a decline compared with the prior year, confirming a consolidatory trend in this sector of the market.
- Membership of medical schemes registered a 2.5% increase over 2008.
- Age and gender distribution of beneficiaries, where the introduction of GEMS caused a redistrubtion of membership in favour of restricted membership schemes.
- Pensioner ratio, which was slightly up compared to 2008.
- Dependant ratio (i.e. number of beneficiaries per principal member) which remained unchanged at 1.3 in 2009.

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- Coverage by province, which showed that Gauteng remained the province with the highest coverage in 2009, maintaining its coverage proportion at 36.1%.
- Benefits paid in 2009 were up 18% compared with 2008, at R76 billion. Hospital costs were the highest contributor at 37.1%, followed by specialists at 21.9%.
- Utilisation of services, which was generally marginally up on 2008 levels.
- Burden of disease, showing that hypertension was once again the most prevalent of the chronic conditions, albeit to a somewhat reduced level from 2008.
- Contributions, relevant healthcare expenditure and trends, which show that scheme contributions increased in 2009 by 14.5% to R84.9 billion. Contributions per average beneficiary were up by 11% compared to 2008.
- Risk transfer arrangements, showing a continued loss-making outcome for schemes from these arrangements, albeit at a lower level compared with 2008.
- Non-healthcare expenditure, which showed an increase of 11.2% compared with 2008.
- Net healthcare results, which recorded a deficit of R2.6 billion, significantly worse than the R900 million deficit recorded in 2008.
- Accumulated funds and solvency, and solvency trends, which showed an increase in the absolute quantum of accumulated funds, but a 10% decline in the average solvency ratio suggesting reduced viability of smaller fund pools, especially in the arena of restricted membership schemes.
- Investments, which showed a move towards cash-based holdings, as the gap between accumulated funds and benefits payable declines and drives a need for more current assets.
- Claims-paying ability of schemes, which further bore out the trend mentioned above with a reduction in cash coverage from 5.1 months in 2008 to 4.4 months in 2009. However, schemes have been paying claims faster in 2009 than in 2008, with a reduction in payment lead times from 15.9 days to 15.2 days.
- Benefit options, where the data also bore signals of consolidation in the market, with an overall reduction in options available to members from 372 to 354. Notably, options with subscription bases of below 2500 fell from 172 in 2008 to 154 in 2009, although loss-making instances stayed relatively stable (93 in 2009 compared with 98 in 2008). Of the remaining 200 options with subscription bases over 2500, 10 more options incurred losses in 2009 than in 2008, with the absolute percentage of loss-making options in 2009 coming in at 65%.
- Administrator market, which showed continued dominance by five third-party administration players who, between them, control 87% of the market. The report notes that despite opportunities for economies of scale, larger administrators “do not appear to offer any cost advantages over their smaller rivals. Perhaps their size makes them less efficient and less responsive to clients’ needs?” (Council for Medical Schemes, 2010, p. 213)

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4.7 CONCLUDING COMMENTS

Two broad themes emerge from the research data presented in this chapter.

The first is that the broader contextual setting for the SA healthcare system (i.e. the SA economy) is showing some positive shifts which establish an enabling backdrop in which to tackle re-making a healthcare system for South Africa which is more effective than the one currently in place.

The economic environment is projected to display more stability in the medium term than has been the case in the recent past. This means that the SA healthcare industry can embark on its transformation programmes without needing to contend with any anticipated major domestic economic shocks lying ahead which could jeopardise the transformation agenda.

The demographic profile projections also indicate stabilising and maturing trends in the SA population, which, while bringing their own set of challenges, at least do not burden the SA healthcare system with having to accommodate the needs of a rapidly expanding population.

The second theme emerges from a comparison of the sectoral views of healthcare delivery in South Africa (public, private and NGO). None of these sectors is claiming to have a “universal solution” to the healthcare issues facing South Africa. Instead, the research data presented for both the public and private sectors show that there exist significant challenges on all sides and that the current configurations and mental models appear to be unsustainable.

This forms a clear call to action for role-players everywhere in the healthcare system to collaborate effectively in the imagining of a healthcare system which much better addresses the healthcare needs of the South African population.

The implication for the envisaged scenario planning exercise is that from a timing perspective, a window of opportunity has clearly opened up for SA healthcare – between an obvious imperative for change and an enabling environment, the timing is ideal for conducting a collective visioning exercise.

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CHAPTER 5
INTRODUCTION TO SCENARIO PLANNING

5.1 INTRODUCTION

This chapter provides scenario workshop participants with an overview of the scenario planning technique, and serves as an orientation into the process in which they are about to participate.

To begin with, a brief overview of scenario planning is presented.

The following works by two authors on scenario planning methodology are reviewed:

- Gill Ringland's chapters on scenario workshop construction from his book "Scenarios in Business"; and
- An extract from Kees van der Heijden's "Scenarios: The Art of Strategic Conversation".

A review of the key scenario planning exercises that have been done for South Africa is then presented. These include the:

- Anglo American scenarios;
- Nedcor/Old Mutual scenarios;
- Montfleur scenarios; and
- Dinokeng scenarios.

Some practical guidelines for constructing scenario planning exercises are then presented.

5.2 OVERVIEW OF SCENARIO PLANNING

Scenario planning as a technique traces its origins back to military planning applications in the US after World War II. It was later successfully adapted for business applications in the 1960s by Herman Kahn of the Hudson Institute. In the late 1960s, Royal Dutch/Shell started showing interest in the technique as it addressed some limitations in the company's corporate planning techniques. Shell's pioneering work with scenario planning was spearheaded by French economist, Pierre Wack (Segal, 2007).

The scenario planning technique as applied by Wack focussed on getting business managers to consider alternate futures besides the default one presented by extrapolation of historical business or economic data (Segal, 2007).

In the case of South Africa specifically, Segal argues that scenario planning exercises have been used to positive effect to facilitate far-reaching societal change. As such, the South African case demonstrates the graduation of the scenario planning technique from one with initially narrow military and business applications to one which made a far more comprehensive contribution to societal development.

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The review of papers that follow illustrates different methodological approaches to conducting scenario planning exercises. However, these reviews relate predominantly to scenario planning within corporate or organisational settings. Therefore, the ensuing discussion of the South African case studies will also discuss the methodological approach associated with each of these. Segal argues that methodological adaptations applied (or, indeed, not) were a key determinant of the degree of success of any particular exercise.

Roux's M.Phil course outline for the "Advanced Futures Studies - Scenario Planning" module (Roux, 2009) points out the following important characteristics of scenarios:

- They are not predictions, but rather possible alternative unfoldings of future events.
- They are deliberately sketchy, focussed more on the interplay between factors than pinning down any one factor comprehensively.
- They are holistic and multi-faceted, seeking to capture as many aspects of a possible future and present this to the participants for contemplation.

He further points out the following three useful applications:

- People exposed to them are able to cope with the uncertainty and make decisions from a point of greater clarity – this is especially true when the scenarios are skilfully crafted.
- They can help navigate situations where the factors influencing the future are such that the degree of uncertainty about the future is high.
- They stimulate strategic thought and enable constructive communication between people and groups, typically whose future realities are somehow connected.

Roux adds two other considerations about scenarios as a futures technique:

- To relentlessly pursue accuracy in describing future scenarios is to have missed the primary objective of the scenario exercise, which is to think in a more structured, and ultimately clearer fashion about what is inherently uncertain.
- Scenario planning is not the preserve of technical experts with large amounts of funding to support their grandiose endeavours – "simple scenarios can also provide different perspectives about issues and opportunities where only problems were visible before". (Roux, 2009, p. 8)

5.3 RINGLAND: SCENARIOS IN BUSINESS

In "Scenarios in Business", scenario planning consultant and trainer Gill Ringland (2002) argues that a well-designed scenario exercises includes the following twelve steps:

i) Identify focal issue or decision.

ii) Discussion about key forces in the local environment.

iii) Discussion about driving forces.

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iv) Ranking each of these by importance and uncertainty.

v) Selecting the scenario “logics”.

vi) Fleshing out the scenarios.

vii) Implications for the strategy.

viii) Selection of leading indicators and signposts.

ix) Feedback of the scenarios to parties consulted.

x) Discussion about the strategic options.

xi) Agree an implementation plan.

xii) Publicise the scenarios.

In expanding on the first step of identifying the focal issue or question, Ringland further suggests seven open-ended questions for discussion. These searching questions are designed to tease out views of the focal issue from the scenario workshop participants:

- critical issues for the future;
- description of a favourable outcome;
- description of an unfavourable outcome;
- where culture will need to change to precipitate the favourable outcome;
- lessons from past successes and failures;
- decisions to be faced; and
- absent all constraints, what else would need to be done to bring about the favourable outcome.

Ringland goes on to suggest some tailoring refinements to these questions based on whether the scenario workshop is being conducted by an organisation contending with: a) political and economic change; b) industry restructuring; c) new products, markets or competitors; or d) portfolio management challenges.

In the context of a scenario planning exercise related to the SA healthcare industry, Ringland’s ideas on refinements in respect of a) and b) are particularly germane. She suggests a focus on capturing areas of fear, uncertainty or doubt, and thereafter creating scenarios that represent different views of how these fears play out. Ringland stresses the importance of checking back early on in the process to ensure that the concerns voiced are comprehensively represented in the scenarios crafted.

Ringland further proposes discussion about problems that face all actors in the industry, that contemplate new sources of competition and that make explicit the success criteria of existing partnerships.

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She then turns her attention to dissemination techniques for the scenarios developed in the workshop. She advocates using the 2x2-matrix construct as a perceptual map, where the matrix axes represent the primary interacting dimensions, within which distinct scenarios are defined.

A variety of other dissemination techniques are also itemised, including slide shows, printed storyline articles, mock newspapers capturing headlines from the scenarios, live action vignettes and short films.

5.4 VAN DER HEIJDEN: SCENARIOS – THE ART OF STRATEGIC CONVERSATION

In his book “The Art of Strategic Conversation” (2006), Kees van der Heijden introduces his ideas about scenario work in organisations from the departure point of viewing the organisation as a “cognitive system” which learns as a way to cope with uncertainty and change.

With reference to the learning loop’s three primary components (perception, institutionalisation and action), he builds on this to argue that scenarios are an important tool to aid learning because of their ability to “affect and broaden [organisational] perception” and to provide a language through which the issues can be engaged within the organisation.

Starting with perception, van der Heijden argues that the stories pervading the organisation form a “memory of the future” which defines the organisations perception in this regard. He then suggests that hooking into the prevalent mental models in the organisation are an important success factor in crafting scenario descriptions which are engaging and with which people in the organisation can identify.

To reinforce this point, van der Heijden references Vygotsky’s (1986, citied in van der Heijden, 2006) notion of “scaffolding” to describe how the scenarios interact with the organisation’s mental model, and enable it to perceive a new reality that is clearly connected perceptually to its current reality.

Moving to institutionalisation, van der Heijden’s proposes that scenario writers infiltrate the strategic conversations of the organisation and embed the ideas contained in the scenarios into those conversations. He argues that holding discussions, at the appropriate strategic decision-making levels within the organisation, about the strategic implications of the scenarios, is a powerful gambit in institutionalising the work arising from the scenario planning.

Van der Heijden concludes his argument with a discussion about the third element of the learning loop, viz. action. He illustrates his point by using the example of Shell’s response in the 1970s to the scenarios related to overturning of deeply embedded assumptions about limits on the oil price - work done by Pierre Wack.

Although Wack’s ideas about the embedded assumptions put his own credibility in Shell under immense pressure, Shell’s manufacturing management, specifically, did find resonance in the scenarios described by his work. They responded by promoting policies in their manufacturing

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operations that were effective in preparing Shell to absorb the shock to the oil industry arising from the oil crisis of 1973.

Van der Heijden then expounds on the “practitioners art” in respect of preparing for and conducting scenario workshops.

As preparation, he advocates conducting a Strengths, Weakness, Opportunities and Threats (SWOT) analysis of the organisation with the scenario planning team and then supplementing this with open-ended individual interviews to capture the richer insight from the respective individuals in the participant team.

Van der Heijden’s work around the individual strategic interviews bears much resemblance to Ringland’s seven questions mentioned earlier. Information garnered during the interviews is then analysed and separated into internal and external issues. From there, external issues are grouped into a typical taxonomy such as the PESTLE analysis, which group issues into Political, Economic, Social, Technological, Legal and Environmental categories.

From the basis of this information and the ensuing grouping, van der Heijden directs the scenario planner to construct an agenda, which includes space to explore the major themes emerging from an analysis of the interviews. He recommends selecting themes which are as mutually exclusive as possible, and suggests limiting these to four or five for the sake of manageability of the discussion.

Lastly, van der Heijden shares some ideas on selecting a planning horizon around which to construct the scenario planning discussion. For instance, where major capital investment is contemplated to be required, a planning horizon around 20 years is meaningful to allow for embedding of this capital investment and to allow its effects to permeate and embed in the organisation.

5.5 THE ANGLO AMERICAN SCENARIOS

This synopsis of the Anglo American scenarios is based on Segal’s “Breaking the Mould” (2007).

In 1985 Anglo American Corporation SA commissioned a scenario planning exercise to contend with uncertainty arising from global economic turbulence related to oil price instability and a slump in commodity prices.

Anglo American contracted Shell’s by-then well-recognised scenario planning experts Pierre Wack and Ted Newland to participate in the exercise. Anglo Amercian’s Clem Sunter was assigned to co-ordinate the exercise. Sunter would go on to become a luminary of scenario planning in his own right.

The Anglo American exercise was primarily a formulation of global scenarios based on an analysis of the underlying drivers of success for winning nations, and grounded in a set of assumptions about developments in the USA, USSR and Japan.

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Within the framework of this work, two scenarios were developed for the future of South Africa. A default, current trajectory scenario that represented a descent into further conflict and economic devastation, and an alternate path to non-racial democracy and increased economic prosperity. These were styled respectively and as the “Low Road” and the “High Road” scenarios.

The outcomes of the exercise were initially presented only internally in Anglo American, but soon it became apparent that there were other centres of political power and influence who needed to be exposed to the idea of South Africans choosing an alternate path from a default one which, clearly, held little appeal.

The idea of dissemination of this work took hold and within 12 months, Sunter had made the presentation of the “High Road/Low Road” scenarios to around 230 audiences, reaching around 30 000 people in the process.

Sunter subsequently published a book in 1987. A video was also produced. Significantly, Sunter presented the scenarios to both Nelson Mandela in 1990 before his release from prison and to the SA Communist Party.

Segal argues that the widespread dissemination of the scenarios, as well as their patent presentation of a choice to the audiences of South African individuals and institutions formed a potent combination which, eventually, “encouraged the government to embark on the political transition”.

He goes on to posit that the Anglo American scenarios illustrated scenario planning’s effectiveness as a tool for tackling “public domain complex problems in which vested interests were at stake” and established a platform for future scenario planning exercises to come.

Segal also points out that the “High Road/Low Road” scenarios were an expert-based exercise. The content of the planning workshop represented the intellectual input of the individuals involved operating in their capacity as professionals. There was relatively little need to accommodate partisan dynamics in the process of these workshops.

5.7 NEDCOR / OLD MUTUAL SCENARIOS

This synopsis of the Nedcor/Old Mutual scenarios is based on Segal’s “Breaking the Mould” (2007).

In 1990, Nedcor (represented by chairman, John Maree) and Old Mutual (represented by chairman, Mike Levitt) jointly commissioned a futures study project. A senior executive at Old Mutual, Bob Tucker, was assigned to lead the exercise.

Tucker, who was politically well connected, assembled 23 expert participants including economists, educators, business people and politicians. He supplemented this group with specialist participants such as Willie Esterhuysen, Pierre Wack and Mamphele Rampele.

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Unlike the Anglo American scenarios, the Old Mutual/Nedcor exercise focussed specifically on South Africa. Fed by a wealth of analysis on economic, political and social dynamics factors, the exercise spawned the following critical insights:

- The definition of a successful transition was expanded to include greater economic equity and an improved social fabric in South Africa.
- Achievement of this outcome would require a reversal of current adverse trends in all these dimensions.

The key conclusion, or preferred scenario, arising from the Nedcor/Old Mutual exercise was the "change of gears" scenario. This entailed shifts on the economic front towards more outward-looking, manufacturing-driven economic policy and on the governance and decision-making front towards more inclusive, consultative modes of operation.

The Nedcor/Old Mutual team connected themselves notionally to the Anglo American work by suggesting that the "change of gears" was required to get South Africa onto the "High Road".

As in the Anglo American exercise, a significant investment was made in disseminating the outcomes and ideas generated during the exercise. The aggregate audience approached 45 000, representing a significantly wider reach than the Anglo American exercise. Approximately 60% of the cost of the Nedcor/Old Mutual scenario exercise went into the dissemination costs.

In Segal's 2007) view, the value of this exercise lay, ultimately, in the rigour of its analysis. He does however point to a failing of this exercise: the weight of the message being visited on the audience was so significant as to be overwhelming, more especially since the dissemination method did not create sufficient space for engagement or challenge of that message. The Nedcor/Old Mutual team favoured a view that amounted to advocacy of the insights generated during the exercise.

Segal believes that the instructive delivery style and the negative language component of the team's advocacy approach acted as limiting factors in the effectiveness of Nedcor/Old Mutual's dissemination phase.

As in the Anglo American instance, the Nedcor/Old Mutual team was comprised of experts, and largely unencumbered by a need to reconcile divergent perspectives or persuasions.

5.8 THE MONTFLEUR SCENARIOS

This synopsis of the Montfleur scenarios is based on Segal's "Breaking the Mould" (2007).

In 1991, a civil society-driven scenario planning exercise was initiated. From this perspective of its origins, the exercise represented a stark departure from the hitherto corporate-driven exercises, which had gained prominence at that time.

The so-called Montfleur exercise (named for the location the team assembled in) was initiated and conceived by Pieter Le Roux, a development economist at University of Western Cape. He

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consulted extensively with Shell's new head of scenario planning, Adam Kahane, on an appropriate methodology for executing the scenario planning exercise. Le Roux had envisaged a scenario exercise from the perspective of "the [political] left".

Kahane subsequently facilitated the working team sessions to great effect, despite his disconnect from the content and specifics of South African society.

The final team of 22 was populated predominantly by left-wing academics, business people and notably, politicians in the ANC, many of whom would go on to occupy senior political positions in the democratically-elected government installed in 1994. Le Roux also managed to convince some "awkward sods" to join the team, thereby introducing a broader spectrum of views to the process.

Kahane facilitated with a distinctive style, which participants characterise as gentle, subtle and listening. Absent preconceptions arising from familiarity with the South African context, Kahane chose to focus on ensuring adherence to the facilitative process – he drove hard to make sure everyone participated and represented their views. There was comparatively little empirical research or economic analysis driving the process, unlike in the previous two exercises covered. However, the spectrum of views represented in the 22 participants did introduce a new dimension into the process, one of accommodating divergent and conflicting views about the critical issues and favourable, preferable outcomes for a future South Africa.

Located as it was in the middle of the transition negotiations, the team produced four scenarios oriented around the negotiations underway.

"The Ostrich" was the name of the scenario in which apartheid government remained in power and failed to make meaningful concessions to the opposition, resulting in a return to armed conflict.

"Lame Duck" was the scenario in which a transitional government did emerge, but was completely hamstrung by untenable compromises required to achieve it. In this scenario, business confidence disappeared and the government ended up out of favour with all constituencies in South African society.

"Icarus" was the name of the scenario selected to symbolise the dangers of economic populism, which, while satisfying at the outset, was ultimately unsustainable and destined to spell disaster for South African in the longer term.

"Flight of the Flamingos" was the name of the final, and preferred scenario, whereby all sectors of South African society struggled to get "airborne" but once in flight moved purposefully towards a desirable destination.

Segal's view is that five success factors were present in Montfleur: 1) appropriate timing, running concurrent with transition negotiations; 2) a venue which was conducive to teaming and driving openness to the views of others; 3) Kahane's strict adherence to process; 4) simplicity of the scenarios, pregnant with symbolism; and 5) inspired selection of the team, which included people

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from across the political spectrum, but who were also open-minded and willing to engage alternate views.

Montfleur did not generate as widespread a communication or advocacy campaign, but, according to Segal, did plant sufficient seeds in the right minds to have a profound effect on what unfolded following the first democratic elections. Segal argues that the notions contained in “Flight of the Flamingos” are recognisable in the policy decisions emerging early on from the democratically-elected ANC government. This was especially true in the arena of economic policy and, as such, it is hard to avoid spotting a correlation with the involvement in Montfleur of ANC members like Saki Macozoma, Trevor Manual and Tito Mboweni.

5.9 THE DINOKENG SCENARIOS

In 2008, Old Mutual and Nedbank returned to the scenario scene once again as sponsors of the Dinokeng scenario exercise. Convened by a panel of prominent South Africans, the Dinokeng team was charged with looking back at the experiences of South Africa’s young democracy 15 years on, and to consider, with the benefit of this hindsight, some alternate futures for the country as it continues along its path of nation-building toward the year 2020 (Dinokeng Scenarios Website, 2009a).

The convenor panel comprised Dr. Mamphela Ramphele, who chaired the convenor group (Dinokeng Scenarios Website, 2009b) and who was involved with Nedcor/Old Mutual’s previous scenario exercise (Segal, 2007), Archbishop Njongonkulu Ndungane, Bob Head who represented Old Mutual, Graça Machel, wife of President Nelson Mandela, Dr. Vincent Maphai, who was involved in the Montfleur exercise (Segal, 2007), and Rick Menell, who was been active in the mining industry. Adam Kahane again made an appearance, as part of the Scenario Team Secretariat. The overall team comprised 35 participants who took part in a three-phase scenario planning process (Dinokeng Scenarios Website, 2009c).

The first phase was the assembly of the participants over a 10-month period to discuss their perspectives on current economic, social and political realities in South Africa. The second phase entailed compiling scenarios and key messages arising from these conversations. The third phase was a comprehensive media campaign to disseminate messages arising from the Dinokeng process and which capitalised on the availability of new dissemination channels like the World Wide Web (Dinokeng Scenarios Website, 2009d).

Three scenarios emerged from Dinokeng as depicted in Figure 5.1. These scenarios charted South Africa’s possible paths to 2020 (Dinokeng Scenarios Website, 2009e):

“Walk Apart”, in which divergent paths that represent various sectors of South African society become entrenched. It is characterised by growing dissatisfaction among citizenry up to the point where protest and unrest become a feature of society. “Decay and disintegration sets in”.

"Walk Behind", in which the State assumes a role of leader and manager and marks a return to authoritarian styles of government, which had characterised South Africa's pre-democracy past. Economic prosperity is difficult to engineer or foster under this scenario.

"Walk Together", is the preferred scenario, in which an active citizenry engages with a government which listens and responds. It is a difficult scenario however, in that it requires "robust contestation over many issues and it requires strong leadership from all sectors, especially citizens".

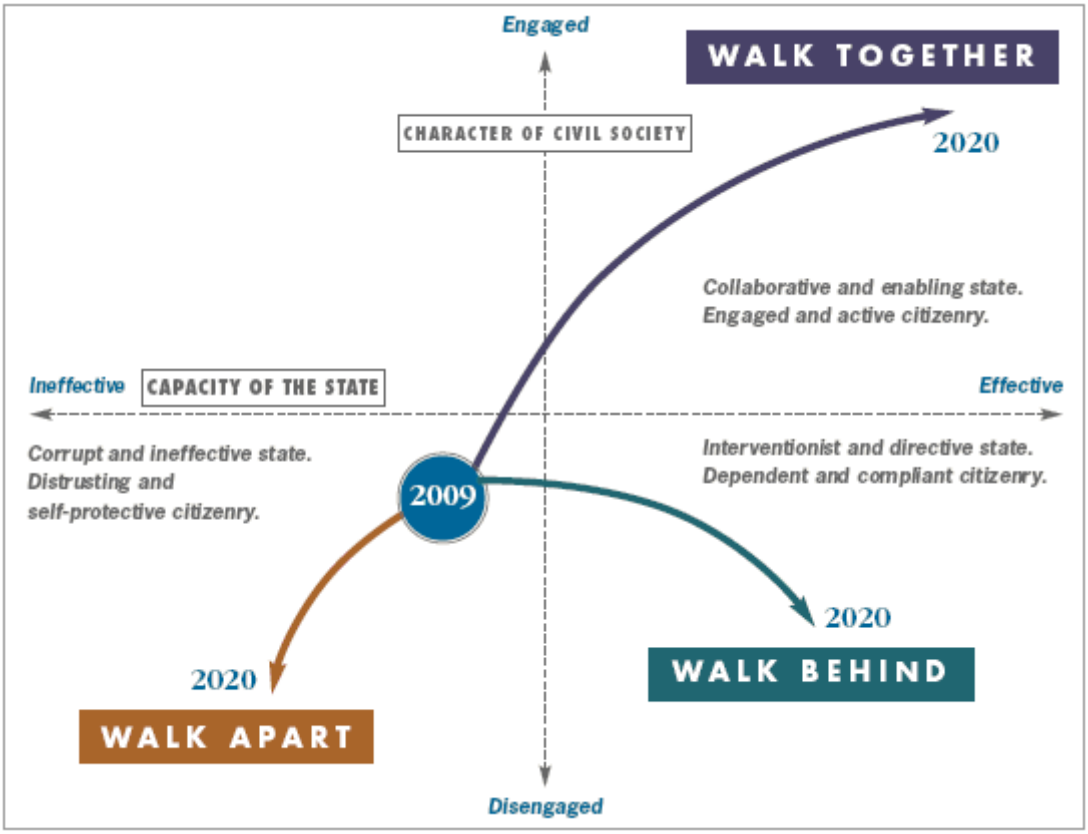

Figure 5.1: Dinokeng scenarios

Source: Dinokeng Scenarios Website, 2009f

5.9 PRACTICAL GUIDELINES FROM SA EXPERIENCES

Segal (2007) identifies the following ten considerations or guidelines for undertaking public-domain scenarios:

- Clarity of purpose - why is this project being undertaken and what are its intended outcomes?
- Timing - does the target audience acknowledge that there is a problem to be addressed and is the situation such that they will apply their mind outside of conventional ways of viewing the situation?
- What will give the project legitimacy?
- What qualities are required of the facilitor?

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- Who should drive and design the organisation of the project?
- How should the project be administered?
- What should be the size and composition of the team?
- What scenario planning methodology should be adopted?
- What should be the duration of the exercise?
- How should the scenarios generated during the exercise be disseminated?

These guidelines are broadly applicable to the proposed SA healthcare scenario planning exercise and will influence the design of the workshop process, which will be discussed in later chapters.

5.10 CONCLUDING COMMENTS

Scenario planning has developed into a powerful technique for stimulating change on a large scale, be it social, political or organisational. As such, it offers the potential to help actors in the SA healthcare industry to meaningfully engage about the challenges facing the industry as a whole. Scenario planning is an ideal tool for crafting a way forward for healthcare that best serves the majority of South Africans.

While various scenario planning methodologies have been described in this chapter, it is important to note that every scenario planning exercise is unique. The SA healthcare industry scenario planning exercise will therefore require some adaptation of the methodological approaches described above.

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CHAPTER 6
INTRODUCTION TO SYSTEMS THINKING

6.1 INTRODUCTION

This chapter provides scenario workshop participants with an introduction to systems thinking, which will be a useful approach to apply in addressing the challenges facing the SA healthcare industry.

To begin with, a brief overview of systems thinking is presented.

A review of works by the following pre-eminent authors on systems thinking is presented, to illustrate the range of ideas associated with systems thinking:

- Russell Ackoff;
- Kenneth Boulding; and
- Jamshid Gharajedaghi.

The chapter closes with a discussion on the implications for SA healthcare of applying systems thinking.

6.2 OVERVIEW

In her book “Thinking in Systems: A Primer”, Donella Meadows (2008) defines a system as a “set of things – people, cells, molecules, or whatever – interconnected in such a way that they produce their own set of pattern of behaviour over time”.

A systems thinking approach, incorporates a range of principles (Skyttner, 2005) as follows:

- Inter-dependence of components and their associated attributes;
- Emergent properties of the system, not discernible from an analytical inspection of the component parts;
- Goal-seeking i.e. the system is established to achieve an explicit outcome;
- Presence of inputs and outputs;
- Entropy, which is a degree of disorder;
- Regulation, which incorporates feedback mechanisms which produce alterations in the system’s configuration or operation in its pursuit of its goal;
- Hierarchy, which relates to the notion that a system is comprised of several sub-systems, and each of which is a sub-system within itself;
- Equifinality, or different ways of achieving the same outcome, also called convergence; and
- Multifinality, or achieving the same outcome through a variety of inputs, also called divergence.

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Where it did not exist before, awareness of these principles generates new insights about the challenges facing the SA healthcare industry. It can therefore be useful to approach these challenges from the perspective that they arise from the systemic configuration of the industry.

For example, a review of this systemic configuration, from the perspective of improving the outcomes (or goals) of the system as a whole, as opposed to of any individual component, can shed new light on alternatives that would have remained hitherto invisible.

It is hoped that the ideas contained in the review of the works that follow will be provocative to the scenario planning team participants. These ideas should stimulate the scenario planning team's minds (or collective mind) as they contemplate the barriers that obstruct realisation of the team's preferred scenario.

6.3 RUSSELL ACKOFF

The late Russell Ackoff was a pioneer in the fields of operations research, systems thinking and management science. He authored or co-authored over 30 books and published many articles during his illustrious career.

As an accomplished author and teacher, Ackoff was very well practiced in explaining the ideas and principles of systems thinking. Two of these lectures are available via the internet on YouTube.

During the first of these lectures, Ackoff highlights, succinctly, some central ideas associated with systems thinking (Ackoff, 2002). He starts out by explaining the concept of analytical thinking. Analysis, in Ackoff's definition, involves the disaggregation of an object into its constituent parts, and then studying each of the parts, and aggregating those insights back into an overall understanding of how the object works. He goes on to say that analysis is the foundation of modern knowledge, and points to the construct of modern schools and universities which separate knowledge into a variety of specialised faculties or subjects, each focussed on a specific branch of knowledge.

Ackoff then makes the point that since the 1950s, it became necessary to know more than just how things worked, but also why they worked that way. He posits that no amount of analytical knowledge could shed light on the reasons that systems worked the way they did, only how they worked. Accordingly, to develop understanding, a new kind of thinking was required – synthetic thinking.

Ackoff explains that synthesis works in almost the opposite direction to analysis i.e. synthesis starts by looking at what larger system any particular object being studied is a part of, and then understanding the function of the containing system e.g. how the interaction of the components produce the objective of the system. Once the containing system is understood, that understanding is disaggregated with a view to focusing on the specific component under study.

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Ackoff stresses that a system's function is not the sum of the independent functioning of its parts, but arises as the product of the interaction of its components.

Making an analogy to the process of architecture, Ackoff concludes his lecture with a point about counter-intuitivity. He states that one of the counter-intuitive challenges arising from systems thinking is that in order to optimise the system, sub-optimisation of its components is often required. In business or organisational contexts, the incentives are often so skewed in favour of individual component optimisation, that the effect on the overall organisation is drastic, resulting in outcomes (or unintended goals) which are far away from the original intent of the organisation (system).

Ackoff's keynote lecture at the 2004 International Conference on Systems Thinking and Management (ICSTM) shows systems thinking in practice (Ackoff, 2004).

Ackoff touches on a number of implications of systems thinking to some of the geo-political and organisational issues facing America at that time.

Ackoff leads in to his discussion by discussing the difference between the stated intent of an organisation (or system) and its actual intent (based on its configuration). He cites the disconnect between the oft-state business objective, for example, of maximising shareholder returns, and the lavish expenses such as company jets and country club memberships for its senior executives (who are not shareholders). Ackoff argues that, in that scenario, the system is configured for some other, less explicitly stated objective.

Building on his own experiences as an educator, Ackoff argues that a systems thinking approach would reconfigure the education system quite drastically to deliver people into the public policy arena who are much better capacitated to apply new thinking, which avoids repetition of classical policy failures.

He suggests an approach which requiring students to take on more teaching functions, as this, in his view, was a much more effective way to impart learning. He advocates his point about most learning happening through doing and teaching by citing recent information showing that the three American architects acknowledged as being the most celebrated worldwide, never completed a course in architecture. He cites another example that of the four living statisticians who contributed most to the field of statistics, none of them studied statistics as part of their schooling. These ideas also found expression in a book Ackoff co-authored with Daniel Greenberg entitled, "Turning learning right side up: putting education back on track" (2008).

Ackoff also bemoans the reluctance to acknowledge mistakes, both in government and in business; despite systems thinking suggesting that mistakes are an important element in learning (and avoiding repetition of problematic behaviour and decision-making). He further explains that mistakes are either acts of commission or acts of omission, and that the two are not equal in significance. In business, for example, financial accounts explicitly and punitively report on acts of

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commission (failed acquisitions, failed projects). However, these same accounts do not record failures of omission, like Kodak's decision not to pursue acquisition of Xerox when it had the opportunity, and which would have produced a hugely positive financial result for Kodak.

Ackoff's biggest warning in this regard is that a systemic configuration, which punishes mistakes too harshly, and deters acts of commission, tend to drive actors in these businesses or government towards a strategy of inaction.

Ackoff concludes his speech at ICSTM with some insights about why America's post 9/11 war campaigns have proven fruitless in respect of introducing democracy to Afghanistan and Iraq.

6.4 KENNETH BOULDING

In "The World as a Total System", Kenneth Boulding (1985) suggests that the broadest definition of a system is "anything that is not chaos". Building from this premise, Boulding argues that the world around us is filled with systems, and that the world as we know it, including other planets, and galaxies, represent a super-system.

Boulding views these systems within systems as separable into two categories, based on complexity. The first category is what Boulding calls static or descriptive structures – they describe these systems at a moment in time. Boulding describes the second category as "explanatory systems". These go beyond a mere description of a system in space and time, but also begin to explain the patterns and systemic behaviour we can observe.

Boulding then proposes a hierarchy of ten discrete types of systems, defined by their increasing degrees of complexity, which are apparent in the world around us.

Mechanical systems, which are generally very simple, and obey very basic mechanical laws. However, just because these systems are simple, it does not imply that they are necessarily small. Boulding's observation is that, for example, celestial systems, which are enormous in scale, are guided by constant and relatively simple parameters and change subject to constant rates of change of rates of change (i.e. third degree variability).

Cybernetic systems is the next level in the hierarchy. These systems are subject to the influence of some simple systemic control mechanisms e.g. thermostats in a heating system, or from biology, the various mechanisms for maintaining homeostasis in living organisms. Cybernetic systems involve information, and typically contain three distinct components viz. receptor (for detecting and gathering information about the equilibrium state), transmitter (which comes into effect when the receptor detects a variance from equilibrium and transmits the state information), and effectors (which produces a stimulus based on the transmitter information to return the system to equilibrium state).

Boulding also identifies Positive Feedback systems, as a special case of Cybernetic systems, in which the effector component behaves in a way that accelerates the conditions which keep the

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system out of equilibrium. Positive Feedback systems tend to exhibit two phases; the first which rapidly moves the system to its systemic limits, at which point a systemic phase change occurs and the system moves into a different mode, unregulated by the cybernetic dynamics. A forest fire is a good example of this.

The next level in the hierarchy is Creodic systems, which are defined by a “necessary path” of evolution for these systems. Boulding cites a number of examples including the development of an egg, or societal development, which illustrate the dynamics of a system moving through some pre-determined sequence of developmental steps.

Reproductive systems represent a next level of complexity in the hierarchy of observable systems. The ability of systems to reproduce, whether they are biological or social, is an important distinguishing trait compared with lower complexity systems. These systems are characterised by the existence of some template, from which copies of the original system instance can be produced, subject to sufficient input materials. Boulding applies this understanding to even mundane systems such as knowledge transmission, by describing the impact that printing systems had on the ability to store and transmit knowledge (previously only capable through oral accounts and other labour intensive means of reproduction).

Reproductive systems lead to populations, which in turn give rise to Demographic systems. In these systems, the individual population members may be subject to some variability in their behaviour. However, in aggregate, the population exhibits some characteristic behaviour e.g. post-war baby boom, or reduction in infant mortality rates at the tropics following the introduction of malaria control medication.

When populations sharing a common space interact in such a way as to affect each other’s birth and death rates, we have what Boulding calls an Ecological system. This definition gives rise to three modes of interaction, viz. mutual competition, mutual co-operation and predation.

As ecological systems change due to mutations (or variations to the system dynamics), they undergo evolution, and become Evolutionary systems.

Boulding argues that evolutionary systems eventually gave rise to Human systems. He argues that although humans share a lot of common genetic and biological componentry with other mammals, our ability to conduct hugely complex neurological functioning represents a step change.

Finally, Boulding describes Social systems as those arising out the interaction of humans and their artefacts. Culture, language, art and social order are all associated products of these systems.

In conclusion, Boulding hints at the notion that our perception of systems is constrained by our rational abilities as humans, and that there may well be higher orders of systems in this hierarchy – transcendental systems. To assume that complexity in systems ended with the human race would be short-sighted, in the same way as an ant may conceivably “believe” that his ant colony is the

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most complex social construct, while remaining unaware of the existence of human society with all its complex artefacts.

6.5 JAMSHID GHARAJEDAGHI

An alternative view of Skyttner's systems principles described earlier is presented by Jamshid Gharajedaghi, in Chapter 2 of his book "Systems Thinking: Managing Chaos and Complexity" (1999).

Gharajedaghi suggests five principles, which together "define the essential characteristics and assumptions about the behaviour of an organisation viewed as a purposeful, multi-minded system".

Openness describes the principle that a system can only be understood in and by reference to its context.

Purposefulness recognises that systems are goal seeking. In the context of organisations or human systems, the truest account of such a system's purpose is the outcome it achieves and not the stated intent of the system. This point echoes the point made by Russell Ackoff in his 2004 keynote address discussed earlier.

Gharajedaghi then introduces Multi-dimensionality as one of the most potent properties of systems, because of the ability of systems to bring together unfeasible parts to make a feasible whole.

Emergent properties of systems is the fourth principle, which also reflects Ackoff's view discussed earlier about the difference between analytical and synthetic thinking. Emergent properties cannot be understood through an analysis of the components of the system. Gharajedaghi makes an example of an all-star sports team, which is not necessarily going to be the most successful team in all encounters. A lesser team that works together better than the all-star team is quite capable of beating that team. The "successfulness" property is not a function of the quality of the individual players, but the ability of the players to interact effectively. Furthermore, this property is only accessible and existent when the system (or team, in this example) is assembled.

Lastly, Gharajedaghi points to Counter-intuitiveness of systems. This principle arises out of the notion that the complexity of systems, especially social systems, is often so high as to confound analytical modelling to predict the behaviour of a system when subjected to some stimulus or intervention. He cites several examples where intervention or lack of intervention by organisations or government because of intuitive thinking has produced the diametrically opposite result of what was intended e.g. drug war in the U.S. or expanding welfare too widely in a community.

Embedded in Gharajedaghi's explanation of counter-intuitiveness are the ideas of multi-finality and equi-finality discussed by Skyttner. He closes the chapter by pointing to ideas about chaos theory that provide a better model to predict the behaviour of a complex systems e.g. that cause and effect have circular relationships in complex systems, and that once triggered, an effect can continue in the system even when the triggering cause is removed.

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6.6 IMPLICATIONS OF SYSTEMS THINKING FOR SA HEALTHCARE

Through consideration of the ideas espoused by Ackoff, Boulding, Gharajedaghi and the like, a number of important ideas emerge, which could guide workshop participants along a novel path of thinking regarding the future of SA's healthcare system.

Two specific ideas, however, which permeate the work of all these authors, cannot be ignored.

The first important idea or perspective introduced by systems thinking is that the healthcare system is a whole system, silo'd into the various sectors outlined in an earlier chapter. These sectors have fallen into a mode of trying to optimise their particular silo, often at the expense of the overall system. Indeed, the components have been configured (wittingly or unwittingly) in such a way as to drive the very behaviours exhibited currently by the healthcare system – this is another important insight derived from systems thinking.

The second important idea is that the healthcare system exists as a system within a larger system. We can think of that larger system as South African society. Allied to this is the idea that the healthcare system exists alongside other systems within that super-system, and that desirable properties for the super-system can emerge from effective interaction of the component sub-systems. This notion is contained in the earlier argument presented for why a well-functioning healthcare system matters. The scenario team should therefore also contemplate its work from the perspective of capturing an opportunity to have impact wider than in just the healthcare industry.

These two ideas illustrate the potential offered by systems thinking to allow actors in the SA healthcare industry to break out of the adversarial and limiting mental models, which have given rise to the current state of affairs.

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CHAPTER 7
INTRODUCTION TO CAUSAL LAYERED ANALYSIS

7.1 INTRODUCTION

This chapter provides scenario workshop participants with an introduction to Causal Layered Analysis (CLA). This approach to problem analysis will be useful in addressing the challenges facing the SA healthcare industry.

A brief overview of the technique opens the chapter.

A review of CLA-related literature by Sohail Inayatullah is then presented, which covers the philosophical underpinnings and methodological application of the technique.

The chapter closes with the illustrative application of CLA to one of the problems facing SA healthcare, viz. the departure, in numbers, of doctors from the healthcare system.

7.2 OVERVIEW

CLA is a futures studies technique which seeks to understand the underlying causes of social issues and to generate alternative approaches to addressing these issues that benefit from this deepened understanding.

Ramos (2002) credits Sohail Inayatullah with the development of CLA.

Inayatullah first introduced CLA in 1998 in a paper about applied post-structuralism (Inayatullah, 1998). He acknowledges the ideas of Johan Galtung (sociologist), Michel Focault (post-structuralist author), Prabhat Sarkar (Indian philosopher) and Richard Slaughter (futurist) in explaining its origins (Inayatullah, 2002).

Broadly, CLA identifies four, successively deeper layers of understanding of issues, viz. the litany layer, the social causes layer, the worldview or discourse layer, and the myth/metaphor layer. (Figure 7.1).

Inspection of an issue through these various levels exposes drivers of the issue which are not readily apparent from a cursory or surface analysis. This, in turn, leads to solutions or approaches to the issue which transcend the conventional approaches.

In the context of scenario planning, the scenario team would still construct alternate future scenarios for the issue under investigation, but the deepened understanding arising from CLA enables the scenarios to be driven by fundamentally different underlying dynamics compared with those driving the current situation.

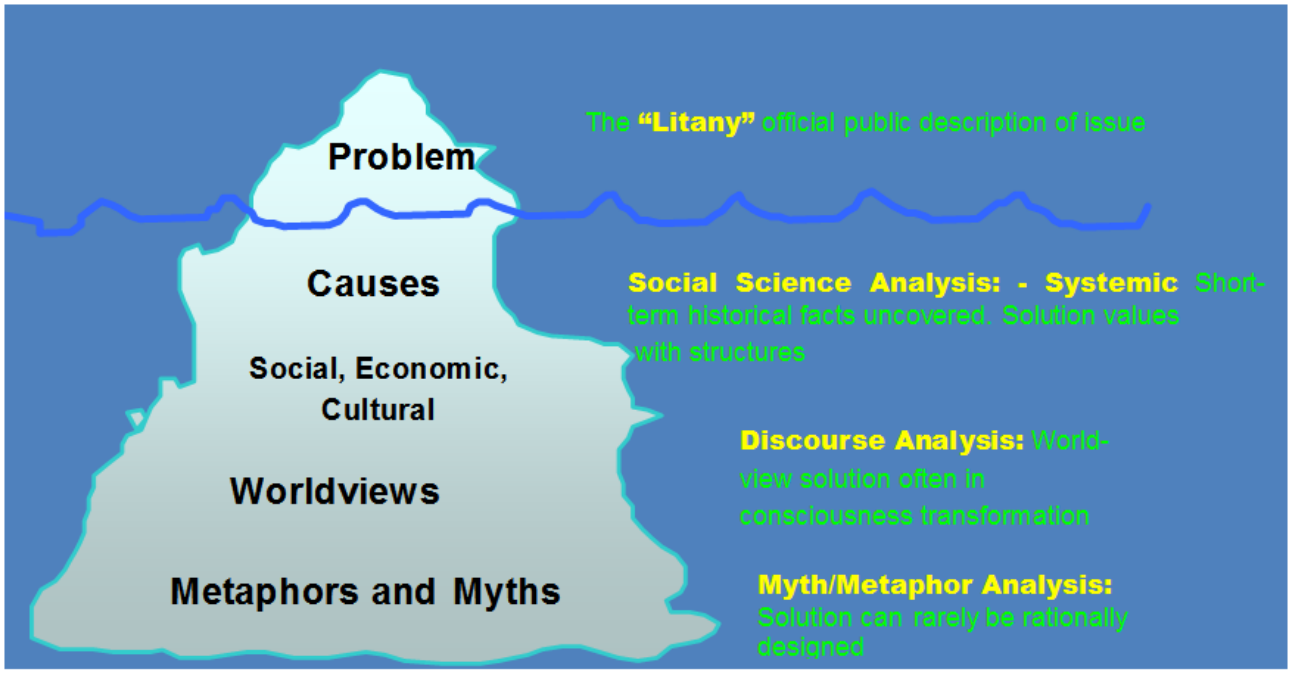

Figure 7.1: Iceberg model illustrating the four levels of analysis applied in CLA

Source: Inayatullah, 2004, p.4

Inayatullah (1998) puts forward the following benefits arising from the application of CLA:

- "Expands the range and richness of scenarios;
- When used in a workshop setting, it leads to the inclusion of different ways of knowing among participants;
- Appeals to and can be used by a wider range of individuals as it incorporates non-textual and poetic/artistic expression in the futures process;
- Layers participant's positions (conflicting and harmonious ones);
- Moves the debate/discussion beyond the superficial and obvious to the deeper and marginal;
- Allows for a range of transformative actions;
- Leads to policy actions that can be informed by alternative layers of analysis; and
- Reinstates the vertical in social analysis, that is, from postmodern relativism to global ethics."

7.3 POST-STRUCTURALISM AND CAUSAL LAYERED ANALYSIS

Inayatullah introduced the CLA technique in 1998 in the context of a philosophy called post-structuralism (Inayatullah, 1998). In this paper, he lays a methodological foundation in applied post-structural thinking which lead him to the development of the CLA technique.

He cites an argument from his earlier work that divides futures studies work into three overlapping research dimensions: empirical (contextualising the data), interpretative (giving it meaning) and critical (locating it in historical structures of power or knowledge). He then places CLA firmly within the critical futures dimension.

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By applying a post-structural critical approach, the focus shifts from prediction (empirical) or comparative (interpretative) to “making units of analysis problematic. The task is not so much to better define the future but rather, at some level, to ‘undefine’ the future “.

Post-structural analysis is most interested in understanding the “cost” associated with a situation or a problem rather than its causes i.e. what other trends or paradigms were prejudiced in the process of giving rise to the current situation.

Inayatullah explains that using other ways of knowing, particularly categories of knowledge from other civilizations, is one of the most useful ways to create a distance from the present reality i.e. to locate oneself in a place where the dynamics driving the present reality look more flexible. This allows the spaces of reality to loosen and for new possibilities, ideas and structures to emerge.

Inayatullah also explains the concept of “civilisational futures research”. He points to the limitations imposed on thinking by the lens of the dominant civilisation (in our case, “The West”). He concludes that our currently reality is largely informed by an underlying cultural reality, which, in turn, is an expression of a particular (and not necessarily definitive) world view.

Turning to the application of post-structuralism, Inayatullah proposes a “methodology toolbox”, which involves the following concepts:

- Deconstruction is the first concept. It involves a process of taking apart an issue or an idea and asking what is visible and what is invisible. A number of related questions are applicable here, including: “Who gains at economic, social and other levels? Who is silenced? What are the politics of truth? And in terms of futures studies: which future is privileged?”.
- Geneology is the next concept. It relates to the history of the ideas driving the situation or issues (as opposed to the history of the issue itself). Here, the relevant questions become: “Which discourses have been victorious in constituting the present?”, “How have they travelled through history?”.
- Distance is the concept which, according to Inayatullah, forms a crucial link between post-structuralism and futures studies. The idea behind distance is to separate from the present and regard it as something “remarkable” and to understand what drives this remarkability. This is done with a view to glimpsing how an alternate reality would come about under different drivers. The key questions here are include: “Which scenarios make the present remarkable? Make it unfamiliar? Strange? Denaturalize it?” and “Are these scenarios in historical space (the futures that could have been) or in present or future space?”.
- Alternative pasts and futures is a necessary fourth concept arising from the perspective of post-structuralism. Post-structuralism, while agreeing with future studies that a “singular, static future” is problematic, extends the problem of the idea of singularity to the past. It argues that the past as we know it, is but a single account of history. Furthermore it typically represents the view of the victors of the battles that characterise it. So post-structuralism

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asks: “Which interpretation of past is valorized?”, “What histories make the present problematic?”, “Which vision of the future is used to maintain the present?” and “Which visions undo the unity of the present?”.

- Re-ordering knowledge is the final concept which brings new dimensions to knowledge. The ideas mentioned earlier about civilisational research are applicable here. This concept raises the following questions: “How does the ordering of knowledge differ across civilization, gender and episteme?”, “What or Who is othered?”, and “How does it denaturalize current orderings, making them peculiar instead of universal?”.

7.4 CAUSAL LAYERED ANALYSIS METHODOLOGY

CLA is based on the assumption that the way in which one frames a problem changes the policy solution and the actors responsible for creating transformation (Inayatullah, 1998).

CLA also assumes four levels of reality as follows (Inayatullah, 1998 and 2002):

- The **litany level** is the most visible and readily apparent. Here quantitative information, trends and problems are presented, often in exaggerated form, and often with a political purpose. The popular news media is a key organ of this level. Information at this level is easy to spot, because it presents as unrelated bits and appears discontinuous. Litany level information tends to generate feelings of helplessness (“I don’t know what to do about it”), apathy (“I can’t do anything about it”), or projected action (“Government should do something about it”).
- The **social, economic and technological level** applies some measure of interpretation to the quantitative data presented at the litany level, seeking to understand underlying social, economic, political, cultural or historical factors at play in producing the situation. Inayatullah suggests that much of what emanates from policy institutes or as opinion pieces in popular media exists at this level.
- The **worldview or discourse level** which is concerned with the deeper structure giving rise to the situation at hand. Analysis at this level seeks to find cultural, linguistic or social structures which persist beyond the individual actors involved in a particular situation. Inayatullah argues that fundamentalists and nationalists represent a class of observer from whom this level of understanding is hidden – as in the case of scientists and economists who do not see themselves as part of any culture, or, as in the case of nationalists or fundamentalists who take their culture to be universal.
- The **myth/metaphor level**. Inayatullah explains that this level is typically hidden to all individual observers, because it addresses the unconscious and often emotive dimensions of the situation. It is the realm of deep stories and collective archetypes which invisibly propel behaviour and response.

Inayatullah cites a number of CLA case studies, including:

- The future of the United Nations, which shifted the understanding of the organisation's future from being better able to deal with political trouble spots in the 1990s like Somalia and Bosnia to questioning whether re-constructing the organisation on a basis other than that of "other-ness" could position it for greater effectiveness.
- UNESCO/World Future Studies Federation's analysis of traffic issues in the city of Bangkok, where the litany level identified congestion and pollution issues in the city. The social level identified a lack of investment in road infrastructure. The worldview level critiqued Thailand's approach to development which had inherited, as a preferred model, the "big city" planning approach from the colonial masters, without recognising that that was a construct to perpetuate disempowerment of people where they lived. The myth/metaphor level exposed problematic inherent notions (for Thailand) that "bigger is better" and that "West is Best". This led to solutions based on celebrating Thai identity and ingenuity that ultimately had little to do with directly tackling traffic issues in the city.

Inayatullah argues that CLA's biggest utility as a methodology is that it forces out many perspectives which integrate the fact-based litany data and contextualises it in terms of its history. This history is, in turn, contextualised in the discourse discussion, and is ultimately understood as an expression of the myth/metaphor.

He concludes with some points about CLA's limitations. CLA does not produce forecasts of the future per se, and he suggests using the technique in conjunction with other techniques like visioning or scenario planning.

It also presents an inherent danger of drawing practitioners into an analysis paralysis, given its focus on stripping away layers of the problem. Sufficient time should be allocated to design of action and policy.

Finally, for newcomers to futures studies, Inayatullah warns that CLA may feel like it dampens inner creativity, by constraining design of the future to understanding of the present. In this respect, CLA departs somewhat from the post-structural tradition of critical thinking, because it is oriented towards action learning. CLA's objective is to generate, through dialogue, multiple ways and levels of knowing and understanding.

7.5 CLA APPLIED TO LOSS OF CLINICAL PROFESSIONALS FROM SA HEALTHCARE

A key issue facing SA healthcare is the loss of clinically trained professionals to other countries. This is a problem at the litany level, and is demonstrated by the headlines cited in Chapter 1 about doctors leaving South Africa for greener pastures in other countries (Erasmus, 2008).

At the social level, this problem is attributable to a number of issues within the healthcare system, including insufficient pay, poor hospital and clinic facilities, long working hours, unmanageable

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workload, etc. Research data may also exist which establishes trends and categorises reasons behind the departure of doctors based on interviews with those leaving.

At the worldview/discourse level, an observer may suggest that the investment it takes to become a doctor must be matched at some point by the rewards of being one. And that in the South African context, the rewards are no longer as compelling as they used to be. This notion starts to question the motives and motivation for people entering the medical profession in the first place. And that a more insidious problem exists, related to the declining motivation for school-leavers to enter medical training programmes.

Another line of enquiry at this level is to question the reliance and preference for interaction with doctors for medical treatment in the first place, especially when there are other skilled clinical staff who could address the bulk of primary healthcare issues e.g. nurses, paramedics, etc.

A further line of enquiry would probe whether the exodus of doctors forms part of a broader social problem facing South Africa i.e. that skilled professionals in a variety of disciplines (not just healthcare) are leaving the country. This is symptomatic of a growing lack of confidence in the future prospects of the country to provide a prosperous home, and could also signal a lack of patience with social ills plaguing South African society like crime and corruption.

At the myth/metaphor level of understanding, the doctor is typically cast as the hero, or the saviour. The icon of the medical professional is usually the attractive male, dressed in a sparkling white coat (often flapping like a cape) as he approaches his ailing patient. This hero is capacitated with the knowledge and abilities to tackle man's greatest and unconquered fear – his own mortality.

It is easy to see how such powerful imagery would provoke a disproportionately alarmed reaction in society to the news of an exodus of doctors. Extraordinary focus would be placed on doctors leaving the country and depleting the medical system and sensational news headlines like the one by Erasmus would certainly grab the public's attention and sell newspapers.

An alternate myth of the doctor, is as part of a team, which includes nurses and other paramedic staff, and, importantly, the person/patient themselves. This gives rise to a different icon, in which the focus (and corresponding attention, and investment) falls less on one particular role and to the development of the team.

Another myth/metaphor dimension is of the doctor being the source of health, and of good health arising as the result of curative or surgical interventions. Observers would need to deconstruct the universality of this notion (it can be argued that "doctor" is a Western concept, but "medicine man", "healer" and "sangoma" are respectively analogous concepts from Chinese, South American and African traditions. They do however tie physical and spiritual health together in ways only now entering Western medicine).

Other beliefs about maintaining wellness (which permeate holistic healing traditions, for example) also present an alternative point of departure for understanding the problem of doctors leaving.

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Starting from these alternate myths, a plan of action to address the loss of doctors would focus only partially on measures to stem the flight, but include elements of reducing the healthcare system's dependence on expensive, highly-trained, but likely sub-optimally deployed doctors.

7.6 CONCLUDING COMMENTS

Inayatullah's most intriguing notion from his 1998 paper is the idea that while techniques like scenario planning address the "horizontal spatiality" of alternate futures, CLA is more concerned with the "vertical dimensions" of futures studies.

CLA therefore will be an important technique to ensure rigour in the analysis of drivers of the current reality in SA healthcare. There is no evidence that the prior South African scenario planning exercises discussed in Chapter 5 employed this technique explicitly.

The envisaged scenario planning exercise for SA healthcare will therefore make a good test case to see whether worldview and mythic assumptions embedded in South African society can be brought to the fore. And ultimately, whether they can be re-imagined in the interests of a more effective healthcare system for South Africans.

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CHAPTER 8
SCENARIO PROCESS FOR SA HEALTHCARE

8.1 INTRODUCTION

This chapter outlines the process that will be followed during the proposed scenario planning exercise for SA healthcare.

The chapter is divided into three sections according to:

- Preparatory activities that will be done before the workshops;
- Activities during the scenario planning workshops; and
- Follow-up activities after the scenario planning stage is complete.

The process steps proposed in this chapter draw on the methodologies espoused by scenario planning practitioners mentioned in Chapter 5. In addition, process ideas drawn from the various scenario planning exercises reviewed in Chapter 5 also influence the design of this exercise for SA healthcare.

8.2 PREPARATORY PHASE

The initial phase of this scenario planning exercise has several objectives.

The first objective is the mobilisation of the scenario planning effort. Under this banner, the lead facilitator will be identified and tasked with assembling a facilitation team. They will then construct a project plan among themselves that addresses logistics and activities for the subsequent phases.

A second objective is for the facilitation team to recruit and engage targeted participants and guest speakers for the scenario planning exercise.

Finally, during this preparatory phase, the facilitation team will also be working towards obtaining some input information for the second workshopping phase of the scenario planning exercise. The facilitation team will conduct a series of one-on-one strategic interviews with the target participants about issues affecting the SA healthcare environment.

8.3 SCENARIO PLANNING WORKSHOPS

The second phase of the scenario planning exercise centres around a series of workshops during which the participants come together to execute the process along the lines of that described by Ringland in her work (Ringland, 2002).

At this point in the process also, the guest speakers who have been selected will interact with the participants. The idea is for these guests to inspire the participants, either through their wisdom or through the passion they feel for their chosen field (or ideally both).

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This second workshopping phase has several sub-phases designed to move the participants progressively through a process where they start as a collection of individuals not used to working with one another, through to the point where they are able to work productively as a team focussed on a shared goal.

A key facilitation objective therefore is to get all participants comfortable with one another to start a process of collaborative planning. This is important because even though participants may be known to each other in their professional capacities, a truly collaborative mode of operation will be difficult to achieve because they will likely be more accustomed to being pitted against one another in their day-to-day roles. Since this collaborative mode of operation is critical to the success of the scenario planning exercise, participants will need to spend sufficient time together and be actively moved (by means of facilitation) out of their default interaction styles and into the required collaborative team dynamic.

The first of these distinct sub-phases, therefore, is an introductory phase. It is designed to be non-threatening and engaging. Therefore, this phase will be structured as a playback of the information gathered from the various participants during the individual strategic interviews.

The purpose of this initial workshop is to start a conversation among the participants (or sub-groupings) around the various perspectives on the issues they have identified. No new information needs to be generated during the workshop, but since the focus is on exchange of perspectives, new insight and collective and common understanding is an important outcome at this point.

The preparatory phase and this introductory phase cover steps 1 to 4 in Ringland's 12-step process.

The guest speakers in this phase will be visionaries talking in open-ended way about the attendant possibilities for SA healthcare and the positive impact that could arise from an exercise like scenario planning. Their task will also be to inspire the participants towards leaving behind their entrenched sectoral or value chain-bound positions and adopting a more integrated view of the SA healthcare environment.

At the conclusion of this first workshop, participants will be handed the environmental scan document (Chapter 3), the SA healthcare forecast material (Chapter 4) and the primer document on scenario planning (Chapter 5) for reviewing in the interregnum.

The facilitation team will also arrange for the participant team to go on a tour of public sector facilities during this period. The tour will be led by members of the participant team who represent entities within the public sector.

This workshop will last approximately three full days and the participants will have time to socialise and discuss the content exposed to them in unstructured settings.

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After one month, the participants will be assembled again for a facilitated scenario creation workshop, which builds on the view of issues driving the SA healthcare environment discussed in the previous workshop.

The objective of this workshop will be to actually generate the scenarios and it corresponds to steps 5 and 6 in Ringland's 12-step process.

The facilitation objective in this workshop is to enforce adherence to the scenario-creation process.

There will be no guest speakers in the scenario creation phase.

At the conclusion of this workshop, participants will be handed the systems thinking and causal layered analysis primer documents (Chapters 6 and 7) for reviewing in the interregnum.

The facilitation team will also arrange for the participant team to go on a tour of private sector facilities during this period. The tour will be led by members of the participant team who represent entities within the private sector.

This workshop will last approximately three days, and participants will again be given time to socialise and interact in unstructured settings.

One month later, the participants will be assembled for a final workshop. This time, the objective of the workshop will be for the participants to understand implications of the scenarios identified and to craft action plans towards realising the preferred scenario.

The key facilitation objective is to tease out from the participants a set of action plans which they feel comfortable to commit to in their capacities as leaders in their respective domains. These commitments are then also commitments to the group. This is significant because by this third workshop, the group should have morphed from a collection of adversaries into a group of people who have shared a collaborative experience and, ideally, established strong relationships.

The groundwork for a future review of progress being made towards realising the preferred scenario will also be laid as an outcome of this sub-phase.

This workshop covers steps 7 and 11 in Ringland's 12-step process.

The guest speakers in this phase will be experts in the disciplines of systems thinking and causal layered analysis. Participants will already have had some view of these concepts based on the primer documents handed to them in the previous phase.

The facilitation team will also arrange for the participant team to go on a tour of NGO operations during this period, ideally at the start of the workshop. The tour will be led by members of the participant team who represent NGO entities within the healthcare industry.

This engagement will last approximately four days.

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8.4 POST-WORKSHOP FOLLOW-UP

There will be two distinct phases to the post-workshop follow-up component of the scenario planning exercise for SA healthcare. The first will entail activities immediately following the workshop, and the second relates to follow-up activities to gauge the extent to which the deliberations of the scenario team have begun to have an impact on SA healthcare.

Ringland's 12-step process advocates two feedback steps during scenario planning (steps 9 and 12), but only the latter is applicable here because all the parties consulted will ideally have ended up participating in the scenario planning workshops as participants. The key feedback cycle therefore, becomes the one in which participants take the outcomes of the workshop into their respective domains and organisations. This would need to happen immediately after the workshops.

The second phase of post-workshop follow up occurs twelve months after completion of the workshops. This second phase is designed to review the continued validity of the scenario team's assessment of the industry, to track progress against the action plans created in the original workshops, and to inspect the impact of these activities.

Specifically, the key issues driving the scenarios will be revisited, to assess whether they remain the key issues, and to understand the extent to which these issues have evolved since they were initially identified.

The action plans tabled at the conclusion of the workshops will also be revisited to evaluate whether participants have been able to carry out the commitments made to the team.

As per Ringland's step 8 discussion about leading indicators and signposts, such items identified in the third workshop will also be reviewed to highlight any shifts which have occurred and which may be attributable to interventions by the scenario team.

These review steps establish a basis on which to reunite the participants. A reunion workshop serves as an ideal format to allow the relationships formed during the two-month collaborative period to be re-kindled, and to re-energise the group towards continued collaborative activity conducive to the preferred scenario.

8.5 CONCLUDING COMMENTS

This chapter proposes a structure to the scenario planning exercise that builds on historical precedent and academic literature. However, the brief to the lead facilitator will also include an over-riding directive to balance the process dictates with the needs of the participant group, in the interests of achieving an optimal collaborative space. Such negotiation with participants will most probably occur during the preparatory stage.

Given the envisaged constitution of the participant group, the propensity for conflict is high. It is therefore critical that the facilitation approach adopted is one that not only neutralises these

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adversarial dynamics, but also retains the engagement of all participants and creates space for each one's voice.

In addition to dealing with the partisan differential, the facilitation team will also have to be skilled in navigating the considerable potential for inter-personal conflict that arises when a group of leaders, each with strong personalities, are required to work in a collaborative fashion (and which probably requires a degree of surrender of their entrenched positions).

Viewed from a different perspective, the facilitation team can, having recognised the leadership-DNA in all the participants, recruit this and work with it by creating opportunities for all participants to act in a leadership capacity at various points in the process (in the facility tours, for example).

During this chapter, the participants, facilitation team and guest speakers have been referred to in generic terms. However, the next chapter will identify candidates for these roles much more explicitly and in line with the target team dynamics described above.

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CHAPTER 9
SCENARIO TEAMS

9.1 INTRODUCTION

This chapter discusses the composition of the various teams that will be operative during the scenario planning process.

The chapter is divided into three sections, each focussed on the various kinds of teams that will be assembled during the exercise:

- Participant team;
- Facilitation team; and
- Workshop guests.

Each section will specify the criteria used to constitute each of these groups as well as identifying possible candidates.

9.2 PARTICIPANT TEAM

A key consideration arising from the review of the scenario exercises which have been done in South Africa to date, is the extent to which participants represent a body of “technical experts” on the one hand or a group of “interested individuals” on the other. This is illustrated in the composition of the Anglo American and Old Mutual/Nedcor scenario planning exercises, which were instances of the former, and the composition of the Montfleur and Dinokeng scenarios, which were instances of the latter.

In constructing this scenario exercise for SA healthcare, a mix of these is probably ideal. However, in view of the considerable problem of achieving alignment and integration across a spectrum of views, a bias in favour of the “interested individuals” composition will be established for this exercise.

A further consideration is that individuals selected for the participant team must occupy leadership roles in their respective domains. This is important because the collective energy generated during the course of the workshops will need to be directed in productive ways. If this energy is built up in the captains of the healthcare industry, then it is likely to be directed into the decision-making and barrier-busting behaviour that will be required to bring about a desirable transformation in SA healthcare. Failure to establish a participant team who is able to act or influence appropriately across the spectrum of SA healthcare’s domains will result in a frustrated participant team, who will be unable to translate the exciting vision emerging from the scenarios into a tangible reality.

Since integration and cross-industry alignment is such an important aspect of this exercise, a key success factor in constituting a participant team is the inclusion of representatives from all sectors

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identified in the analysis discussed earlier. This includes the sectoral view which spans private, public and NGO entities, as well as the value-chain view, which spans funder, consumer and provider entities. Included also is the additional dimension added to the value-chain analysis viz. enabler entities such as IT companies who service customers in the healthcare industry and medical scheme administrators. From these two perspectives, a matrix of representation can be constructed, in which to locate target participants for the scenario planning exercise and ensure comprehensive coverage (Table 9.1).

Table 9.1: Representation mapping for workshop participants

	Public Sector	**Private Sector**	**NGO**
Consumer	Council for Medical Schemes		National Consumer Forum
Funder	Finance Ministry	Board of Healthcare Funders; Medical Schemes	Treatment Action Campaign
Healthcare Provider	Health Ministry	Professional Organisations; Private Sector Umbrella bodies	NEHAWU
Enabler	SITA	Medical Scheme Administrators; Managed Care Organisations; Health IT companies	Health Economists

Source: Original work by author of this research report.

Public sector representation would therefore include:

- Department of Health - Health Minister;
- National Treasury - Finance Minister;
- Council for Medical Schemes - Registrar ; and
- SITA - CEO.

Private sector representation would include:

- Board of Healthcare Funders - Managing Director;
- Principal Officers of medical schemes - ideally a mixture of open and restricted-membership schemes and large and small member-base schemes;
- Professional organisations representating a cross-section of clinical disciplines e.g. Health Professions Council of SA - President, Allied Health Professions Council of SA - Chairperson, Hospitals Association of SA - CEO, South African Medical Association - Chairman and SA Pharmacy Council – President;
- CEO's of medical scheme administrators and managed care organisations - ideally a mix of single scheme and multi-scheme administrators of varying sizes; and
- Health IT companies - CEOs.

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NGOs would be represented by the following entities:

- National Consumer Forum - Chairman;
- Treatment Action Campaign - General Secretary;
- National Education, Health and Allied Workers Union - President; and
- Health economists.

9.3 FACILITATION TEAM

As discussed earlier, a key dynamic playing out among the participants of this scenario planning exercise is the coming together of conflicting perspectives on the healthcare industry. This mirrors, to some extent, the participant team dynamics that were present in the Montfleur scenario exercise.

For this reason, the ideal lead facilitator would need to exhibit similar skill in the facilitation approach applied at Montfleur (described in Chapter 5). The Montfleur participants cited the interaction style of their facilitator, specifically, as a key success factor during the scenario planning workshops (Segal, 2007).

The lead facilitator would need a fair degree of administrative and logistical support to complete the full scenario workshop. Following the model used in the Dinokeng scenario planning exercise, the lead facilitator could also choose to assemble a facilitation team for the exercise (Dinokeng Website, 2009c).

Because the participant team dynamic is likely already to be fairly charged, it is important that the members of the facilitation team operate as neutral players and are perceived as such. This consideration would therefore preclude any other actors in the SA healthcare environment from serving on the facilitation team.

9.4 WORKSHOP GUESTS

The scenario planning exercise will also include the attendance of a number of luminary guests whose presence should serve to inspire the participants.

In constructing the list of guests, a key consideration is the extent of accomplishment by each one in their respective field of expertise.

The special guest list therefore follows the themes of the first and third workshop as described in Chapter 8.

The flavour of the first workshop is open-ended and visionary, and participants will need to be called towards pursuing a vision of a better functioning healthcare delivery system in South Africa. As participants in a scenario planning workshop, they will need to understand, acutely, the responsibility for shaping the future of SA healthcare that faces them as a collective.

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Accomplished futurists and scenario planning practitioners represent the ilk required in the first workshop to inspire and challenge the participants.

The third workshop is focussed more on problem-dissolving and unconventional thinking. Participants will have been exposed to systems thinking and causal layered analysis as alternative ways to analyse the dynamics governing the SA healthcare environment.

Accordingly, leading thinkers in these fields would be appropriate as guest speakers.

9.5 CONCLUDING COMMENTS

The proposed participant and guest speaker lists include some very high profile individuals, whose schedules are typically challenging at best and who may hold a number of pre-conceived ideas about the value of participation in such an exercise.

The facilitation team is therefore going to have to do well to convince the target participants that their involvement in this scenario planning exercise is critical to the future success of the healthcare delivery system as a whole and to couch the offer of participation in these terms.

Furthermore, the logistics and timing of workshops and interviews is going to have to respect the various cycles the participants are subject to in their day jobs (budgeting, EXCOs, etc.), but as momentum builds in the process, it should become easier to find support for the timelines suggested.

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CHAPTER 10
CONCLUSION

10.1 INTRODUCTION

This chapter summarises the findings of the research exercise into preparing inputs for a scenario planning exercise for the SA healthcare environment.

This report's findings are presented in three broad categories as follows:

- Findings regarding the current state of the SA healthcare environment;
- Insights emerging from a review of futures studies techniques; and
- Considerations for constructing the scenario planning workshops.

Recommendations arising from these findings are then made, along with suggestions for priorities moving forward.

Lastly, additional research opportunities have been suggested to build on the work presented in this report.

10.2 CURRENT STATE OF SA HEALTHCARE ENVIRONMENT

The review of the SA healthcare environment suggested that improved effectiveness of the SA healthcare environment will have positive effects for the SA economy and for wider South African society.

The various components of the SA healthcare system were identified from two perspectives – this analysis informed the participation plan for the scenario planning workshops.

It has been shown that various interventions in the healthcare environment have raised the effectiveness of healthcare delivery in SA and have contributed to the configuration of the SA healthcare environment that exists today.

Significant challenges facing SA healthcare have been discussed and the limitations of sector-bound responses have been highlighted, pointing to an opportunity to take a more comprehensive approach to these challenges.

The environmental scan of the SA healthcare environment confirmed a high degree of activity in the various sectors of the industry over even a relatively short period of one month. This activity was focussed on a few high profile topics like HIV/AIDS, the proposed National Health Insurance scheme and pricing within the industry.

The scan also hinted at willingness by various parties across the spectrum of SA healthcare to explore more collaborative modes of operation and inventive thinking that make a universal and inclusive healthcare system feasible in South Africa.

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The culture of fraudulent behaviour and high propensity for litigation within SA healthcare were highlighted as real barriers to transformation of the current healthcare system.

The review of economic research data and other research information related to the SA healthcare sector surfaced two broad themes.

The first theme identified that the South African economy was projected to enter a period of relative economic stability compared to the recent past, and that the demographic projections for South Africa's population indicated stabilising and maturing trends.

The second theme reinforced the notion raised in the environmental scanning results that effective collaboration across sectoral boundaries could be the key determinant of the future success of the SA healthcare delivery system.

The research data highlighted a number of indicators suggesting diminishing effectiveness and non-sustainability of SA's current model of healthcare delivery.

Furthermore, these indicators stubbornly resisted reversal, despite exhaustive but ultimately failed attempts to address challenges in various components of the industry in a silo'd fashion.

The frustration arising from these silo interventions creates an unprecedented window of opportunity for SA healthcare to embark on a more integrated journey of transformation.

10.3 INSIGHTS EMERGING FROM REVIEW OF FUTURES STUDIES TECHNIQUES

The review of the scenario planning technique showed its historical effectiveness in achieving political and social change in South Africa.

The circumstances prevailing at those points in South Africa's political past mirror, to some extent, circumstances currently prevailing in the SA healthcare environment. The notion of applying scenario planning to SA healthcare therefore arises as a logical conclusion, more especially given the window of opportunity for collaborative and transformative change highlighted earlier.

While various scenario planning methodologies and success stories have been described, an important over-arching idea was that every scenario planning exercise is unique. Even though resonance with the Montfleur exercise was a recurring theme, the SA healthcare industry scenario planning exercise will require some adaptation of methodologies and case studies.

The discussion on systems thinking surfaced two important ideas.

The first important idea was that the healthcare system is a whole system, silo'd into the various sectors as discussed. These sectors have fallen into a mode of trying to optimise their particular silo, often at the expense of the overall system. Indeed, the interaction of the components has been configured (wittingly or unwittingly) to drive the very (problematic) behaviours exhibited by the healthcare system.

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The second important idea was that the healthcare system exists as a system within a larger system, and it has been argued that South African society is this larger system.

Allied to this was the idea that healthcare system exists alongside other systems within a super-system, and that desirable properties for the super-system can emerge from effective interaction of the component sub-systems.

The nuance here is that the scenario team should also try to understand and regard its work during this scenario planning exercise from the larger perspective of the potential for making a positive impact on South African society.

These considerations should not only facilitate a release from entrenched sectoral positions related to healthcare during the team's deliberations, but also engender a constant awareness of the interplay between sub-optimisation of components and the optimisation of the overall system.

The discussion on CLA highlighted additional dimensions to the prevailing discourse about SA's healthcare environment. This was reinforced by the idea in Inayatullah's work that while techniques like scenario planning address the "horizontal spatiality" of alternate futures, CLA is more concerned with the "vertical dimensions" of futures studies.

Absent evidence of application of CLA in prior scenario planning work conducted in SA, the conclusion drawn was that use of the CLA technique could result in unprecedented levels of rigour in the analysis of drivers of the current reality in SA healthcare.

It was noted that the scenario planning exercise for SA healthcare would be a good test case to see whether worldview and mythic assumptions about healthcare embedded in South African society can be unearthed by the workshop participants and the extent to which these can be re-imagined.

10.4 CONSIDERATIONS FOR CONSTRUCTING WORKSHOPS

The discussion about the structure of the scenario planning exercise described a three-stage process centred on a set of workshops with the participant group.

A key element of the brief to the lead facilitator would be the need to balance the process dictates with the needs of the participant group, in the interests of achieving an optimal collaborative space.

Given the envisaged constitution of the participant group, the propensity for conflict was deemed to be high, indicating a facilitation approach that not only neutralises these adversarial dynamics, but also retains the engagement of all participants.

The need for the facilitation team to be skilled in navigating the considerable potential for inter-personal conflict was also highlighted.

The suggested target participant and guest speaker lists include some very high profile individuals, whose schedules are typically challenging at best and who may hold a number of preconceived

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ideas about the value of participation in such an exercise. It was noted that the facilitation team would therefore have to do well to convince the target participants that their involvement in this scenario planning exercise was critical to the future success of the healthcare delivery system as a whole.

10.5 RECOMMENDATIONS

The primary recommendation arising from this research exercise is for the mobilisation of the scenario planning project for SA healthcare contemplated in this report.

This research report has established that considerable social value-add can be achieved by conducting the exercise along the design guidelines suggested in Chapter 8.While the scenario planning process itself will not produce the transformation required in SA healthcare, it can kick-start the process of transformation (as has been argued in Chapter 5 about other scenario planning exercises such as Montfleur).

A secondary recommendation is the consideration of similarly constructed scenario planning exercises for other sectors in South Africa such as education and labour.

10.6 PRIORITIES GOING FORWARD

A critical priority driving the feasibility of the scenario planning exercise proposed in this report is the establishment of financial sponsorship. The various activities proposed will attract a significant amount of cost, and it will be important not only to secure funding for these activities, but to do so in a way that safeguards neutrality and independence of the exercise in the process.

In line with the sequence of events proposed in Chapter 8, the primary execution priority in respect of this scenario planning exercise is the assembly of the facilitation team.

There is scope for the facilitation team to bolster the material produced in this research report with additional research (e.g. additional environmental scans, updated or expanded economic research reviews and identification of additional representatives in the various stakeholder categories), and so this forms a second priority.

Once those actions have been concluded, engagement with target participants can begin in earnest.

10.7 FURTHER RESEARCH

Some ideas on expanding the scope of the research presented here have been suggested above, and responsibility for this can be assigned to the facilitation team.

However the most obvious opportunity for future research arises from casting forward to the point in the future where this proposed scenario planning exercise has been successfully conducted.

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Here, the research opportunity is to document, as a case study, the actual process that was eventually followed and the outcomes arising.

In addition, it would be useful to track the subsequent development of the SA healthcare environment in the wake of the scenario planning exercise.

A key research objective in this regard would be to establish whether the developments which unfolded can be traced back to ideas surfaced during the deliberations of the scenario team, thereby confirming the effectiveness of scenario planning in generating change in the SA healthcare environment.

10.8 CONCLUDING COMMENTS

Scenario planning, with the group proposed and buttressed by the futures studies techniques discussed, is a first step to imagining an alternative future for SA healthcare which is different from the one toward which it is heading by default.

More importantly, as a collaborative planning technique, it also starts to shift the mode of interaction of the various sectors that make up the SA healthcare environment. Instead of the de facto conflict-based adversarial modes of interaction designed to maximise individual interests (e.g. law suits and competitive dynamics), the scenario planning exercise creates a fresh space for co-operation and holistic thinking designed to optimise collective interests.

Importantly too, the relationships formed in this safe space have been shown to survive well beyond the duration of the scenario planning workshop, thereby adding a new dimension to the systemic operation of SA’s healthcare environment.

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APPENDIX A:

ENVIRONMENTAL SCAN FOR SA HEALTHCARE – NOVEMBER 2010