Econex

Trade, Competition & Applied Economics

The South African Private Healthcare Sector:

Role and Contribution to the Economy

A study conducted by Econex on behalf of

South African Private Practitioners Forum (SAPPF) and HealthMan (Pty) Ltd

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SAPPF

SOUTH AFRICAN PRIVATE PRACTITIONER FORUM

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List of Abbreviations[1]

ACI	african, coloured and indian
AIDS	acquired immune deficiency syndrome
ALOS	average length of stay
ARM	alternative reimbursement model
ARV	antiretroviral
CAT	computerised tomography
CC	Competition Commission
CMS	Council for Medical Schemes
CSI	corporate social investment
DOTS	directly observed therapy, short course
DRG	diagnosis related group
GDP	gross domestic product
GEMS	Government Employees' Medical Scheme
GHG	General Healthcare Group
GP	general practitioner
HASA	Hospital Association of South Africa
HIV	human immunodeficiency virus
HPCSA	Health Professionals Council of South Africa
HRH	human resources for health
ICU	intensive care unit
IDZ	industrial development zone
IFC	International Finance Corporation
ISTC	independent sector treatment centre
IT	information technology
JSE	Johannesburg Stock Exchange
MHC	Max Healthcare Institute
MMR	maternal mortality rate
MRI	magnetic resonance imaging
NGO	non-governmental organisation
NHI	national health insurance
NHS	National Health Service
NPG	National Pathology Group
NPO	not-for-profit organisation
OECD	Organisation for Economic Cooperation and Development
PABPA	per average beneficiary per annum
PERSAL	Personnel Salaries
PFMA	Public Finance Management Act
PMB	prescribed minimum benefit
PPP	public-private partnership
REF	risk equalisation fund
SA	South Africa
SAM	social accounting matrix
SANC	South African Nursing Council
SAPC	South African Pharmacy Council
SAQA	South African Qualifications Authority
SHI	social health insurance
TB	tuberculosis
UK	United Kingdom
WHO	World Health Organisation

[1] Each abbreviation is additionally defined once in the text, when first used.

EXECUTIVE SUMMARY

Approximately half of national health expenditure in South Africa is currently being spent in the private healthcare sector, indicating that private healthcare is an industry that has gained both political and economic importance over the past few decades. The private health sector plays a pivotal role in assisting the government to fulfil its constitutional mandate of providing quality health services to South African citizens. In this report the role and contribution of the private health sector to the South African economy is explored in more detail, and it is found that this industry truly is a national asset.

After depicting the status quo as it relates to private health expenditure and population coverage, the reason for the perceived unequal distribution of national resources is considered. The rise of the private healthcare sector as we know it today is described – explaining the direct relationship between its impressive growth and the failure of the public health sector to supply to the increasing demand for quality health services by South African citizens. Popular myths regarding the distribution of human and financial resources, as well as other factors affecting private healthcare provision, are also briefly explored. For example, it is estimated that, contrary to what is often perceived, the private healthcare sector currently provides primary healthcare services to an estimated 28% – 38% of the population with 37% of GPs, 59% of specialists and 38% of nurses operational in the sector. Government's view and various failed attempts at regulatory intervention or 'new' policy directions for the private and public health sectors over the previous decade or two are discussed in the context of the flourishing private healthcare industry. This provides some understanding of the status quo, i.e. why and how the private health sector came to look like it does today.

All stakeholders and market players in the private healthcare sector are described, capturing the detail of this multi-dimensional sector. In addition to approximately 3,500 privately run clinics, it is shown that at present there are more than 300 private hospitals and day clinics with a total of more than 34,000 beds in this sector. It is estimated that in 2013 there are 7,529 general practitioners, 6,726 specialists and 77,569 nurses actively working in this sector. There are also many allied health workers operative in the sector, including more than 3,500 dentists and 3,000 pharmacists. Alongside these facilities and healthcare providers, there is a large industry responsible for the funding and administration of private healthcare. This includes 25 open and 67 restricted medical schemes, approximately 30 medical scheme administrators as well as other health insurers. Finally, it is found that the provision of healthcare is dependent on other upstream industries that supply the necessary goods and services to the sector, and downstream industries which assist in distributing resources to the end user. The point is made that the private health sector is a large industry providing employment to many people and facilitating significant economic activity which affects much more than just the patients and role players directly participating in the use and provision of private health services.

The main argument and findings of this report follow in a section dedicated to the role and contribution of the private health sector in the South African economy. It is explained that economic multiplier effects operate via direct, indirect and induced impacts of spending in this sector to have far reaching effects on the economy. We find that private hospital groups, for example, affect the economy through employment, investment, taxation, development and training, and the sustaining of various upstream and downstream industries that assist their functioning. It is shown that, in 2012, the 3 largest hospital groups jointly held stock market capitalisation of R 83.688 billion, created R 1.651 billion in taxation and trained more than 2,000 new nurses. In addition to private hospital groups' financial linkages to the economy, private medical schemes' investment activities also substantially contribute to investment in various sectors of the economy. Over and above the direct size and contribution of the sector within South Africa alone, it is found that the private health sector also creates economic value through the attraction of foreign direct investment, medical tourism and other international linkages. Furthermore, the formally employed population is highly correlated with those who use private health services. The implication is that this sector drives GDP growth, as research indicates the link between good health (as supported by the private healthcare sector) and labour productivity.

Looking forward, it is important that both the government and private sector stakeholders make some important changes to ensure the long-term sustainability of this important industry. Currently, gaps in the regulatory structure, as well as certain behaviour by funders and providers are problematic, resulting in increased costs and prices. We argue that some form of mandatory membership or risk-equalisation fund is necessary to curb the actuarial death spiral while alternative payment systems are required to address the perverse incentives associated with the current fee-for-service model. One of the best economic outcomes would be for the government to improve the quality of service delivery in the public health sector, so offering patients a choice between the two sectors and incentivising price competition from the private health sector. While we are of the opinion that some regulatory intervention is required, we argue that direct government intervention in micro aspects of private health delivery will not be optimal. It is preferable to leave the shaping of a future private health sector to market forces that respond to the suggested regulatory changes.

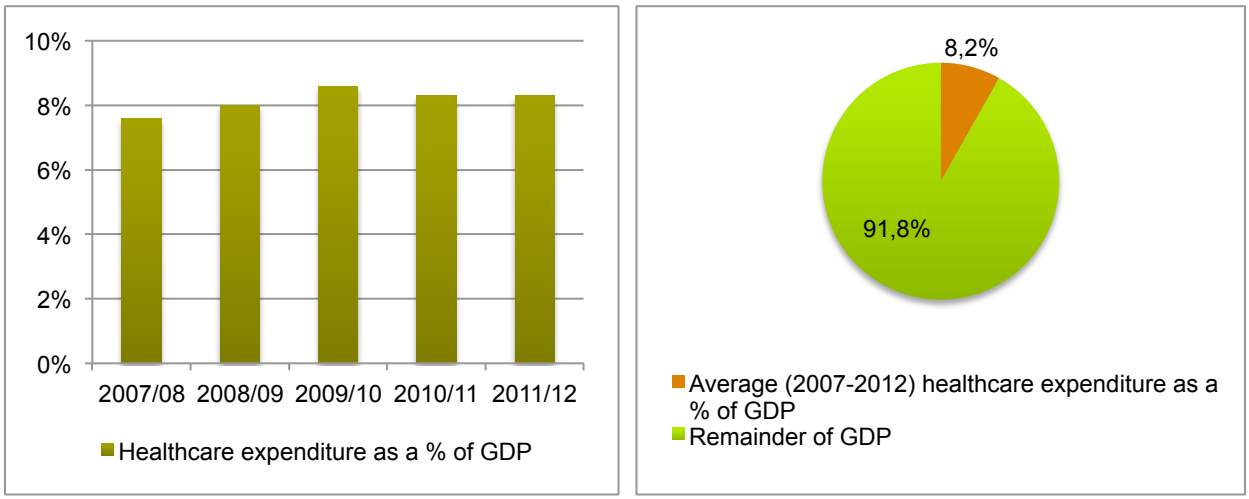
In summary, the findings of this research show that the private healthcare sector, in its current capacity, provides excellent quality healthcare that is highly regarded on an international scale. It further plays an important role in shouldering the burden of the state by providing quality healthcare services to the people of South Africa. In addition, the sector has had, and continues to have, a substantial effect on the economy by creating employment and income, investment opportunities and public funds, training and development programmes, international linkages, healthcare scalability through innovation and productivity gains. Each of these effects contributes positively to the economic growth and development of South Africa and accordingly should not be overlooked in the development of future healthcare plans.

1 The Current State of the Healthcare Sector

This section describes the status quo of the healthcare sector in South Africa. It sets the scene for the rest of the paper by providing summary data on the main income and expenditure components and growth during recent years.

Academic studies[2] have found good health to be a positive and significant determinant of economic growth and development. Such a finding motivates investment in the healthcare sector of a country. In South Africa, an average of 8.2% of gross domestic product (GDP) is spent annually on healthcare, as shown in Figure 1.

Figure 1: Percentage of GDP spent on healthcare in South Africa, 2007/08 – 2011/12

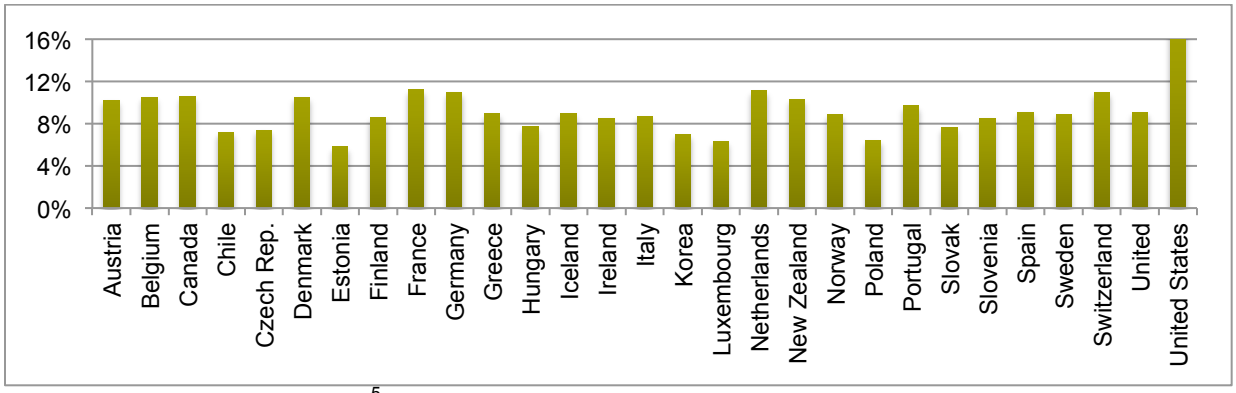


Source: Data from the National Treasury[3]; Econex calculations

The percentage of GDP that is allocated to healthcare is in line with levels observed in OECD countries.[4] Healthcare expenditure by OECD countries (that had available data for 2011) is illustrated in Figure 2.

[2] For example, see: Well, D.N., 2007. Accounting for the Effect of Health on Economic Growth. The Quarterly Journal of Economics, Vol. 122, No. 3, pp. 1265 – 1306.
[3] National Treasury, 2012. Budget Review 2012.
[4] The Organisation for Economic Cooperation and Development (OECD) currently consists of 34 countries, including both advanced and emerging countries.

Figure 2: Percentage of GDP spent on healthcare in OECD countries, 2011



Source: OECD health statistics[5]; Econex calculations

The OECD average from the available data, as above, is 9.2%. If one is to exclude the United States (US), an obvious outlier, the OECD average decreases to 8.9%. This is illustrated in Figure 3.

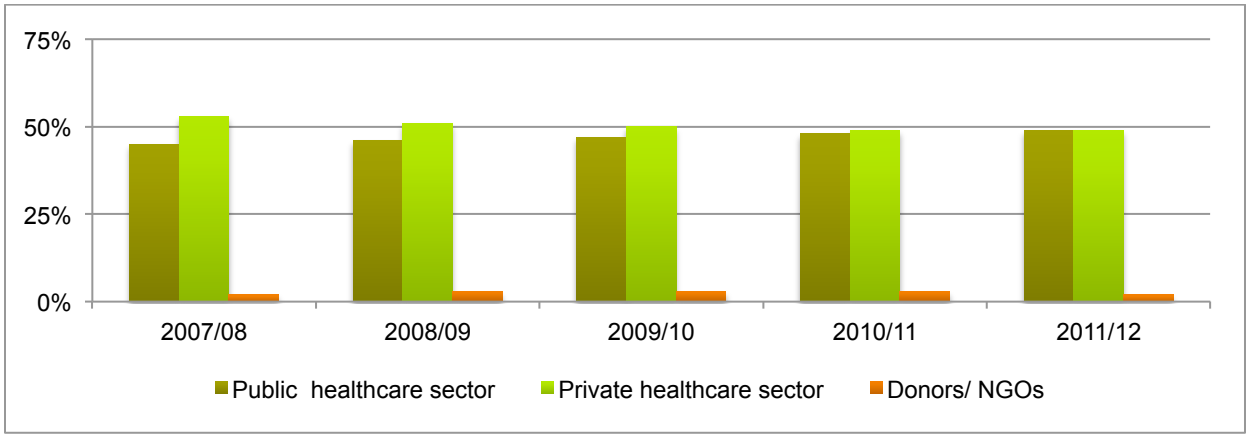
Figure 3: Percentage of GDP spent on healthcare in OECD countries, including and excluding the US respectively, 2011

Source: OECD health statistics[6]; Econex calculations

Most OECD countries' healthcare sectors are comprised of both a public and a private sub-sector[7], as is the case in South Africa. Of the 8.2% of annual GDP that South Africa spends on average on healthcare, approximately half is private sector healthcare expenditure and half is public sector healthcare expenditure. Over the 2007/08 – 2011/12 period, an average of 47%, 50% and 3% of healthcare expenditure was apportioned to the public sector, private sector, and donors/NGOs respectively.[8] This is illustrated in Figure 4.

[5] OECD health statistics, 2013. Available at: http://stats.oecd.org/Index.aspx?DatasetCode=SHA
[6] See footnote 5.
[7] The role of the private healthcare sector in these countries varies, from a supplementary, complementary, substitute or duplicate role.
[8] The expenditure figure for the public sector does not include contributions by other local government budgets for capital expenditure and repairs and maintenance on public hospitals.

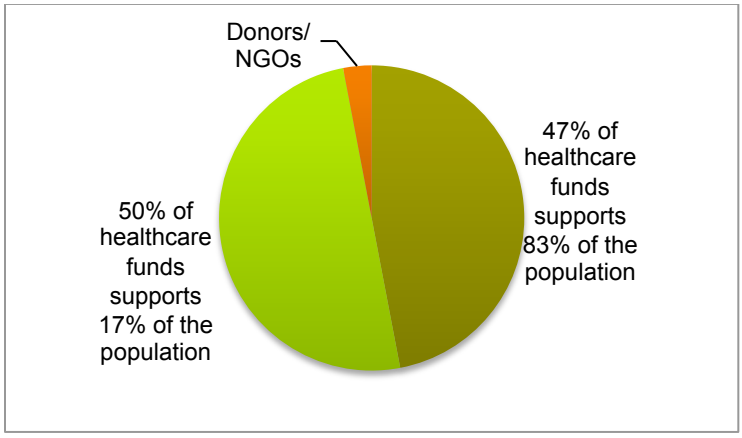
Figure 4: Public/private healthcare expenditure mix in South Africa, 2007/08 – 2011/12



Source: Data from the National Treasury[9]; Econex calculations

Despite a relatively even split of healthcare expenditure by the private and public sectors, private medical scheme members currently account for 17% of the population.[10] At first glance, this implies that approximately half of healthcare funds support 17% of the population, whilst the other half supports 83% of the population.

Figure 5: Commonly perceived distribution of total healthcare funds amongst the population

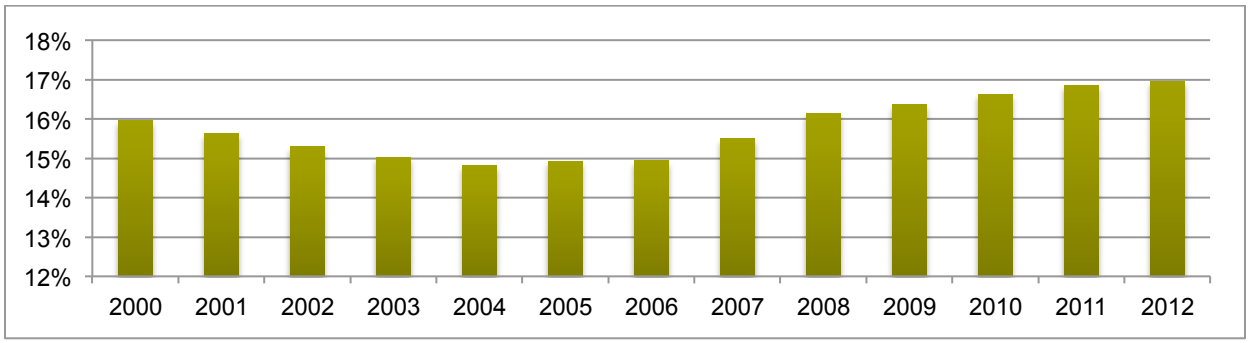


The perceived state of South African healthcare, illustrated in Figure 5, is indicative of a largely unequal distribution of resources. The government has voiced concern in this regard, with public statements such as the following from the National Health Insurance (NHI) Green Paper[11]: *"The amount spent in the private health sector relative to the total number of people covered is not justifiable and defeats the principles of social justice and equity."*

[9] See footnote 3.
[10] CMS, 2013. Annual report 2012/13.
[11] Department of Health, 2011. National Health Insurance in South Africa. Policy paper, August 2011, p. 10.

Between 2000 – 2012, medical scheme membership increased by 24%. However, accounting for population size, as shown Figure 6, membership has remained within the range of 14.8% – 17% of the population.

Figure 6: Medical scheme membership as a percentage of the population, 2000 – 2012



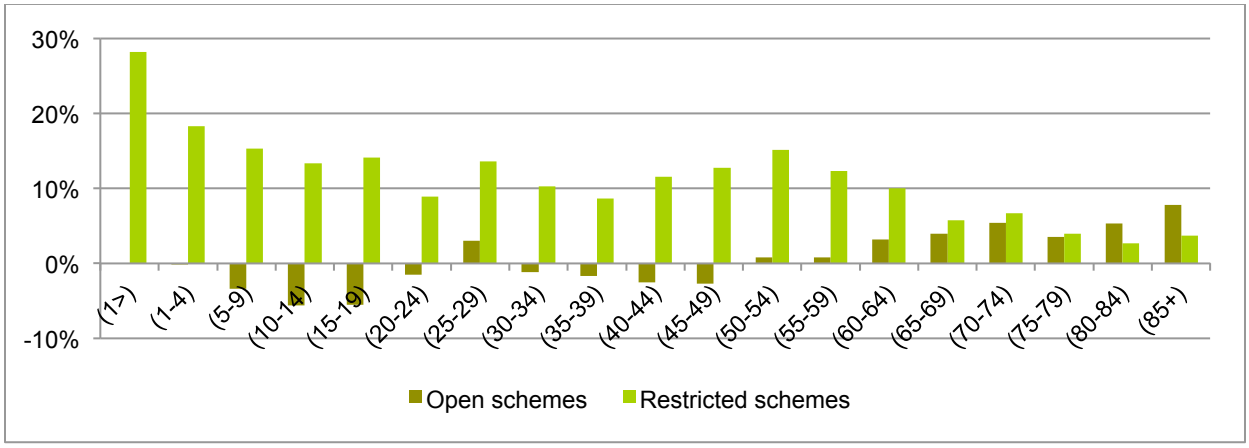
Source: Data from the Council for Medical Schemes (CMS)[12]; World Bank Development Indicators; Econex calculations.

Medical scheme membership may be split by open scheme membership and restricted scheme membership. In 2012/13, 54.8% of members were in open schemes and 45.2% were in restricted schemes. This distribution has changed over time. Compound annual growth rates of open and restricted schemes' membership, per age band, are illustrated in Figure 7. Specifically shown is that, over 2006 – 2011, membership numbers in all age bands in the beneficiary population of restricted schemes increased. In contrast to restricted schemes, open schemes experienced negative growth in many of the age bands that fall within the working age population.[13]

[12] See footnote 10.

[13] The higher growth in membership of restricted medical schemes, as opposed to that of open schemes, can largely be explained by the establishment of the Government Employees' Medical Scheme (GEMS) in 2006. Membership of the GEMS increased to over 1.75 million beneficiaries in 2012, explaining 90.8% of the absolute increase in members of restricted schemes between 2005 and 2012.

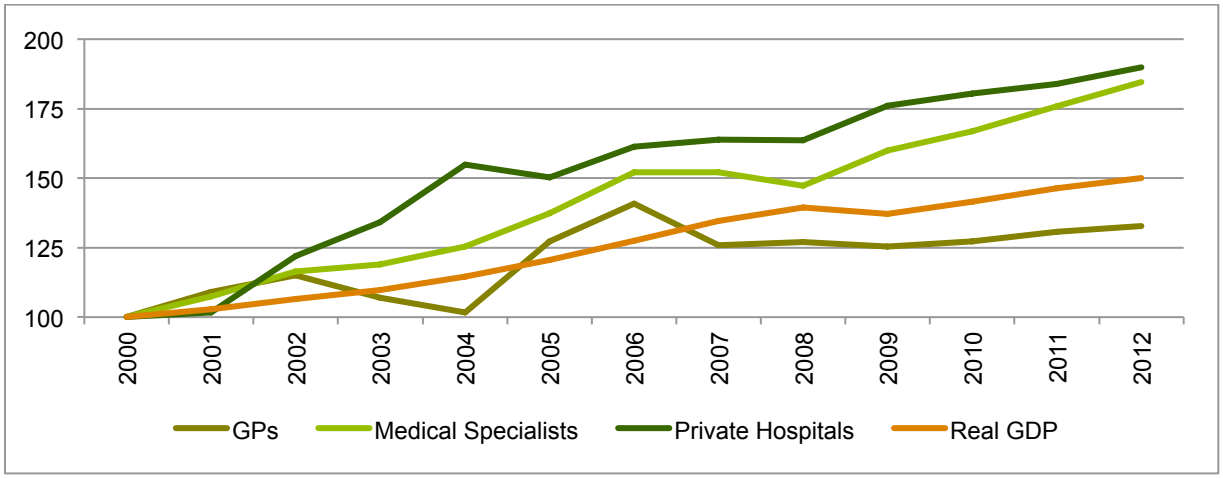
Figure 7: Compound annual growth of open and restricted schemes' membership, per age band, 2006 - 2011[14]



Source: Data from the CMS[15], Econex calculations.

With increased medical scheme membership and increased risk profiles came significant increases in private healthcare expenditure. Figure 8 shows real[16] per average beneficiary per annum (PABPA) expenditure indexed values for general practitioners (GPs), medical specialists and private hospitals. These indexed values are shown alongside real GDP.

Figure 8: Real PABPA expenditure index for medical schemes, 2000 – 2012



Source: Private data; Econex calculations.

The South African government's current perception is that this increase in private healthcare expenditure is within its mandate to resolve and that the unequal distribution of resources should be rectified. Moreover the government's perspective is such that the private sector is contributing to, and largely to be blamed for, the national health crisis and the inequality in healthcare delivery to all. This is due to the

[14] Econex, 2013. Trends in Medical Scheme Demographics: Observations from The Data. Research note 30.
[15] See footnote 10.
[16] "Real" figures are defined as inflation adjusted figures.

perception that funds are being driven away from the public healthcare sector by the private healthcare sector, insofar as the latter consumes too much capital relative to the proportion of the population that it serves – a perception that has been illustrated above. The extremity of the government's viewpoint in this regard has been made clear by reference to the private healthcare sector in statements such as: *"capitalist vultures, which thrive on peoples' illness to make huge profits"* – Blade Nzimande, the General Secretary of the South African Communist Party and the Minister of Higher Education, 2009.[17]

Having outlined the basic landscape of the South African healthcare sector and the way in which it is perceived, it is necessary to question how and why the healthcare sector evolved to this point and whether the perceptions referred to here are well-founded and accurate. This is the focus of section 2 which explains how the private healthcare sector has grown over the past few decades; not only in terms of the resources it consumes and the people it serves, but also in terms of the role it plays in assisting the government to fulfil their constitutional mandate of providing quality healthcare services to South African citizens.

[17] Nzimande, B., 2009. Mobilize for Healthcare and Defeat Capitalist Greed in The Health Sector. Umsebenzi Online, 17 June. Available at: http://www.sacp.org.za/main.php?ID=3074

2 The Rise of the Private Healthcare Sector

In this section we show that the rise of the private healthcare sector was a market response to the large failures in service delivery and declining standards in the public healthcare sector. It is interesting to note that in 1989, expenditure by medical scheme members on provincial hospital care (public sector) accounted for 27% of scheme expenditure.[18] Today, this figure has declined to 0.324%.[19] This dramatic drop in expenditure by medical scheme members can be taken as an indication of the quality decline in the public healthcare sector. It is necessary to consider what factors contributed to this situation and the resulting increased demand for private healthcare services.

2.1 Policy reform in the healthcare sector

Government involvement in South Africa's healthcare sector was initiated by the Public Health Act No. 36 of 1919, which established a national authority responsible for policy development, and which entrusted service delivery to provincial and local authorities. The Public Health Act was amended in 1946 to define the responsibility of the different authorities, allocating general hospital services and the extension of healthcare through community health centres to provincial authorities. The National Health Act of 1977 and the National Health Act of 2003 followed, further clarifying the roles and responsibility of government. Within this context Van den Heever, a professor from the University of Witwatersrand and the chair of Social Security Systems Administration and Management Studies at the University of Witwatersrand, aptly summarises historical government involvement in the healthcare sector: "The history of the South African health system has seen government largely regard healthcare as a private responsibility, apart from communicable diseases (which have major externalities), and apart from responsibility for the poor (through direct provision) or mineworkers (through regulation). For this reason public services were never developed for the general population, with income earning groups required to pay for the use of public hospital services (a minimal fee was also required from non-hospital-based publicly provided primary care services)."[20] Nevertheless, the government has, and still does, provide taxation relief for private healthcare expenditure, the level of which will be discussed at the end of this section.

The private healthcare sector developed as a response to the government's focus on providing public healthcare services only to those members of the population who were unable to pay for healthcare services. By 1960, approximately 80% of the white population was covered by medical schemes (still using mostly public health facilities and providers at the time). The Medical Schemes Act, introduced in 1967, allowed for the first time medical mutual insurers to be recognised as distinct entities. The Act

[18] Centre for Development and Enterprise, 2011. Reforming Healthcare in South Africa: What Role for The Private Sector? CDE Research no. 18.
[19] See footnote 10.
[20] Van den Heever, A., 2012. Review of Competition in the South African Health System. Produced for the Competition Commission (CC) 19 June, p. 26.

allowed a high level of government involvement in the medical scheme industry, and established the CMS and the Registrar of Medical Schemes to fulfil its functions.

The mid-1980s was characterised by deregulation of the medical schemes industry driven by "medical cost escalation, the rise of economic liberalisation ideologies internationally, the emergence of non-employment-linked (or open) medical schemes and the movement of for-profit commercial insurers"[21]. The 1989 Amendment to the Medical Schemes Act formalised this deregulation by removing all restrictions on risk rating or any differentiation on the basis of the risk of claiming, with further deregulation in 1994 through an amendment which allowed contracting and vertical integration between medical schemes and private healthcare providers.[22] These changes provided the scope for the development of 'open' medical schemes, competing with traditional administrators by "undercutting the contribution cost by risk-rating, risk-selection, and selective benefit reductions"[23]. Membership to open schemes grew substantially, and by 1999, 69.8% of medical scheme members were part of open schemes and 30.2% of members were part of restricted schemes.[24]

In a first attempt to address the dualism in South Africa's healthcare sector, the government, in the late 1980s, began discussing the possibility of a system of Social Health Insurance (SHI), whereby healthcare for the poor would be funded by taxpayers, healthcare for low and middle income households would be funded through membership to the SHI, and the private healthcare sector would serve the rich. The policy was initially designed based on the realisation that the formally employed sector was too small to provide healthcare funding for the entire population.[25]

From 2000 onward much of the deregulation initiated for medical schemes in the previous decade was removed. The new regulatory framework included pillars of community rating, mandatory minimum benefits and open enrolment. These changes largely removed competition by medical schemes on the basis of risk rating and risk selection.[26] Nevertheless, the membership base of medical schemes remained strong.

By 2007, considering all households that had medical scheme membership, the average household's contribution to medical schemes fluctuated around 9% of household income. Higher income households spent less than 6%, with the proportion increasing to 14% for lower income members.[27] The high proportion of spending on medical schemes by lower income workers explains the difficulty that medical schemes have had with expanding their membership base to lower income households. It also makes a

[21] Söderlund, N., Schierhout, G. & van den Heever, A., 1998. Private Healthcare in South Africa: Technical Report to Chapter 13 of the 1998 South African Health Review. Health Systems Trust, p. 3.
[22] See footnote 21.
[23] See footnote 20, p. 32.
[24] Rama, P. & McLeod, H., 2001. A Historical Study of Trends in Medical Schemes in South Africa. CARE Monograph No. 1. p.11.
[25] Doherty, J., McIntyre, D. & Gilson, L., 2000. South African Health Review 2000: Briefing Summary – Social Health Insurance.
[26] See footnote 20, p. 39.
[27] McIntyre, D., 2010. Private Sector Involvement in Funding and Providing Health Services in South Africa: Implications for Equity and Access to Healthcare. Equinet Discussion paper 84, July 2010, p. 5.

strong argument for why the SHI was not implemented, as low income households who were not medical scheme members (but who were formally employed) would have had to be drawn into the SHI and might not have been able to shoulder the burden.

As an alternative to the SHI, the government, in 2011, submitted a proposal for a NHI system, which would cover the whole population (as opposed to the SHI which was intended to cover the employed population). This more recent and currently ongoing policy proposal is discussed in detail in section 2.4.

It is necessary at this point to note that despite government's perspective of healthcare largely being a private responsibility, as referred to above, government does provide taxation relief for private healthcare expenditures. One should note the absolute and relative level of this relief. In 2008/09 a comprehensive study estimated that government spent (expenditure on delivery and tax subsidies) R 1,950 PABPA on individuals using public sector care and R 1,600 PABPA on individuals using medical schemes.[28] More recently, taxation credits for medical scheme contributions have been introduced. With effect from the 2013/14 South African taxation year, the credits are set at R242 per month for each of the first two beneficiaries on a medical scheme (including the principal member) and R162 per month for each additional beneficiary.[29]

2.2 The demise of the public healthcare sector and the concomitant rise of private healthcare

South Africa, a middle income country, consistently underperforms in comparison to even lower income countries in many healthcare indicators. The infant mortality rate for 2013 is estimated at 41.7 per 1,000 live births.[30] Alongside this the maternal mortality rate (MMR) was estimated to be 333 per 100,000 live births in 2009. More recent data on the MMR indicate that this has now declined, but confirmation from other sources is still required.[31] For 2013, life expectancy at birth is estimated at 57.7 years for males and 61.4 years for females (in 2011 average life expectancy at birth globally was 70 years, ranging from 60 years in low-income countries to 80 years in high-income countries[32]). Such rates result largely from the high prevalence of HIV. The estimated overall HIV prevalence rate for 2013 is approximately 10% (with slight improvement from 11% in 2008[33]). The total number of people living with HIV is estimated at approximately 5.26 million in 2013. For adults aged 15 – 49 years, an estimated 15.9% of the population

[28] McLeod, H., 2012. Myths about Medical Schemes. National Health Insurance Policy Brief, No. 21, p. 10.
[29] South African Revenue Service (SARS), 2013. Website information on medical scheme contribution credits. Available at: http://www.sars.gov.za/TaxTypes/PIT/Pages/Medical-Credits.aspx
[30] Statistics South Africa, 2013. Mid-Year Population Estimates. 14 May 2013.
[31] Health Systems Trust, 2013. South African Health Review 2012/13, pp. 50 – 51.
[32] World Health Organisation, 2011. Global Health Observatory: Life Expectancy.
Available at: http://www.who.int/gho/mortality_burden_disease/life_tables/situation_trends_text/en/
[33] Statistics South Africa, 2008. Mid-Year Population Estimates. 31 July 2008.

is HIV positive.[34] TB and other communicable and non-communicable diseases are also strong drivers of the high infant and maternal mortality rates as well as the relatively low life expectancy rates.

In the context of such dire health indicators, South African healthcare faces overwhelming challenges. Despite extensive allocation of funding, the public healthcare sector does not appear to have adequately addressed these problems. The total expenditure of government on public healthcare has steadily increased from R 71.4 billion in 2007/08 to R 122.4 billion in 2011/12.[35] Over these years the public sector has commanded approximately 45 – 49% of the total healthcare budget, which has amounted to around 3.4 – 4.1% of GDP annually. Unfortunately this allocation of funds has not translated into the desired improvement in health outcomes.

The demise of the public health sector is well documented and the current Minister of Health is often quoted saying that the lack of quality services in the public sector is one of South Africa's major health reform challenges.[36] Service delivery and the state of health facilities in the public sector have continually deteriorated over the last 2 decades. This appears to be related to mismanagement, as well as a lack of accountability and monitoring.[37] Financial mismanagement and fraudulent activity within the public sector are evidenced by the annual results of the Public Finance Management Act (PFMA) audit. In the most recently published (2011/12) PFMA audit, it was found that 20% of the public health sector's audit reports were financially unqualified (meaning that the auditor concluded that the financial statements gave a true and fair view in accordance with the financial reporting framework used). The departments of public works and education each had audits that were 40% unqualified, whilst the remaining sectors had audits that were 80% unqualified; this puts the public health sector's audit result into perspective. It was further reported that the public health sector incurred irregular expenditure to the amount of R 8.2 billion for the 2011/12 year, which represents an increase of R 2.4 billion compared to the 2010/11 year. The PFMA lists the three key controls of the public health sector as leadership, financial and performance management, and governance. The required intervention level for each of these controls in the sector in 2011/12 was listed as 80%, 80% and 30% respectively.[38]

The demise of the public healthcare sector and the lack of policy reform in the sector as a whole have increased the demand for the quality healthcare that the private healthcare sector provides. By 2008, the healthcare outcomes produced by South Africa's private healthcare sector were such that it was ranked alongside the healthcare sectors of countries such as Australia, Sweden, Belgium, Switzerland and

[34] See footnote 30.
[35] See footnote 3.
[36] Motsoaledi, A., 2013. Health Budget speech, National Assembly, 15 May 2013.
[37] Health Systems Trust, 2013. National Healthcare Baseline Facilities, National Summary Report. September 2012, revised February 2013.
[38] Auditor General of South Africa, 2013. PFMA audit 2011/12, Audit Outcomes for the Health Sector.

Ireland.[39] Today, the large demand for private healthcare is indicated by the fact that medical scheme membership covers 8.7 million South Africans (total beneficiaries).[40]

Such outcomes may be attributed to the contributions of many stakeholders, as will be discussed in section 3. First and foremost, in section 2.3, it is necessary to briefly clarify two broad and common misconceptions about the demand and supply of the private healthcare sector. This will provide some perspective on the usual claims of outright inequality and capitalist promotion by the private healthcare sector (as referred to in section 1).

2.3 Important misconceptions regarding the private healthcare sector

2.3.1 The distribution of resources between the public and private sectors is disproportionate to the portions of the population that they respectively serve

It is a common perception that the amount of resources, both human and capital, in the private healthcare sector, is disproportionate to the percentage of the population that it serves. This perception is influenced by statements made by the Department of Health, included on the first page of the NHI Green Paper: *"A larger part of financial and human resources for health is located in the private health sector serving a minority of the population. Medical schemes are the major purchasers of services in the private sector, which covers 16.2% of the population. The public sector is under-resourced relative to the size of the population that it serves and the burden of disease. The public sector has disproportionately less human resources than the private sector yet it has to manage significantly higher patient numbers."*[41]

The fact that approximately 16% (or 17% in 2012/13) of South Africa's population benefits from the private healthcare sector as beneficiaries of medical schemes is correct. However, this is commonly and erroneously interpreted to mean that the private healthcare sector serves only 16% (or 17%) of the population.

If one also takes into account those who access the private healthcare sector (predominantly accessing practitioners such as GPs and dentists) by means of out-of-pocket spending, it is estimated that (in 2012) the private sector provided primary healthcare services to 28% – 38% of the South African population.[42]

[39] The Monitor Group, 2008. Health Systems Comparison Project, July. Mimeo.
[40] See footnote 10.
[41] See footnote 11.
[42] In the 2012/13 CMS report it was recorded that there were 8.679 million medical scheme beneficiaries in South Africa at the end of 2012. In the 2012 General Household Survey (GHS) it was recorded that the total population was 52.275 million. These two figures together imply that 16.60% of the population is served by the private healthcare sector. This however does not account for those individuals who are not medical scheme beneficiaries but still utilise the private healthcare sector. Up until 2008 the GHS surveyed people who were sick/injured in the month prior to the interview and consulted a healthcare worker, questioning whether they were medical scheme beneficiaries or not and whether they consulted the public or private healthcare sector. By this method, it was found that, in 2008, 25.83% of non-medical scheme beneficiaries utilised the private healthcare sector (it is expected that this is largely for primary healthcare services). This percentage is closely aligned with GHS reports before 2008. For 2012, if one is to multiply 25.83% by those who are not medical scheme beneficiaries and then add this to those who are medical scheme

The National Treasury estimates that out-of-pocket private healthcare expenditure amounted to R 14.7 billion (17% of total spending on private healthcare) in 2007/08 and R 18.2 billion (15% of total spending on private healthcare) in 2011/12.[43]

In addition to those who access private healthcare through medical scheme membership and out-of-pocket expenditure, a portion of people also choose to access private healthcare through medical insurance. Data on how many people use this means of access are limited[44] and so this has not been taken into account. However, if one were able to account for this, it would be expected that the percentage of the population served by the private healthcare sector may actually exceed the estimated 28% – 38%.

This sheer size of the population that demands services from private healthcare providers, even without medical scheme membership, indicates the demand for quality healthcare services, which is perceived not to be provided by the public healthcare sector.

If one considers that the private healthcare sector serves an estimated 28% – 38% of the population, it can no longer be said that approximately half of South Africa's healthcare funds serve 16% – 17% of the population, whilst the other half serves the remaining 83 – 84%, as was indicated in Figure 5.

Another common misconception about the allocation of resources between the public and private healthcare sectors relates to the distribution of human resources between the sectors. Consider again the excerpt above: "*The public sector has disproportionately less human resources than the private sector yet it has to manage significantly higher patient numbers."*

We have already shown that the latter part of this statement – "*significantly higher patient numbers"* – is a misconception. In addition, estimates from a study by Econex on healthcare professionals in 2013, also dispute the first part of the statement. Specifically, estimates from the data show that the majority of GPs (63%) are active in the public sector, whereas more specialists (59%) work in the private sector. This sectoral distribution has remained constant over 2011 – 2013 for specialists, whilst data show that

beneficiaries, the percentage of the population served by the private healthcare sector rises from 16.60% to 38.14%. After the 2008 GHS, the frame of questioning was changed to ask whether the *household's normal place of healthcare consultation* was in the public or private healthcare sector and whether *at least 1 member of the household* was a medical scheme member. By this method, it is implied that, in 2012, 13.20% of non-medical beneficiaries utilised the private healthcare sector (it is again expected that this is largely for primary healthcare services). This percentage is closely aligned with the 2009 – 2011 GHS reports. For 2012, if one is to multiply 13.20% by those who are not medical scheme beneficiaries and then add this to those who are medical scheme beneficiaries, the percentage of the population served by the private healthcare sector rises from 16.60% to 27.61%. According to these two calculations (prepared with the available data) we have no reason not to believe that the percentage of the population served by the private healthcare sector is at least 27.61% (28% rounded) and plausibly up to 38.14% (38% rounded).

[43] See footnote 3. Prior to 2011 the National Treasury used the Reserve Bank's household consumption expenditure on health (services, pharmaceuticals and durables) and deducted medical scheme expenditure to estimate out-of-pocket expenditure. It was then decided by the National Treasury that this may over estimate expenditure if the pharmaceutical category used is too broad. Accordingly, since 2011 the Treasury now uses the National Household Survey by the Health Economics Unit. The reason for this explanation here is that the recently updated (retrospectively and going forward) figures for out-of-pocket expenditure are approximately half of what they were before. Accordingly, estimates presented in this report may be very modest.

[44] However, for example, in 2012 it was estimated that there were 1 – 1.5 million hospital cash plan policies in effect, however it is not clear to what extent coverage is exclusive of medical scheme coverage. See Finmark Trust & Lighthouse Actuarial Consulting, 2012. Review of the South African Market for Hospital Cash Plan Insurance. September 2012, p. 27.

between 2011 and 2013, the distribution of GPs in the public sector has actually grown by 3% points.[45] Medical scheme estimates also indicate that at least 5 – 10% of specialists work in both the private and public sectors[46], which needs to be taken into account in order to avoid a double counting bias. With regard to nurses, estimates from the data show that 38% and 62% of nurses work in the private and public sectors respectively.[47] It was previously understood from the PERSAL database that very high vacancy rates for public sector GPs and specialists existed. However, in 2012 the Department of Health undertook a "PERSAL clean-up" after which the database revised the vacancy rates for public sector GPs and specialists from 10,860 (in 2010) to 2,290 (in 2013) and from 3,491 (in 2010) to 815 (in 2013) respectively.[48]

Finally, with regard to infrastructure resources, in 2013 the private sector had 314 hospitals and day clinics, with 34,572 beds.[49] The latest comparable figures for the public sector are for 2011 and 2010 respectively, indicating that the public sector in these years had 410 hospitals[50,51] with 86,774 beds[52].

2.3.2 Rising per beneficiary expenditure in the private healthcare sector is driven by profit motives

As Figure 8 shows, medical schemes' real expenditure levels per beneficiary have risen substantially over the period 2000 – 2012. The common misconception is that this is largely due to profit motives in the industry. Although studies seeking to disprove this perception have not been completed, what is known is that there is evidence in favour of other factors as reasons for the rising expenditure per beneficiary. Importantly, there is evidence of rising per beneficiary utilisation rates alongside the rising expenditure per beneficiary. For example, when analysing in-patient admissions and related statistics for chronic diseases at the 3 main hospital groups (Life Healthcare, Mediclinic and Netcare) over the period 2005 – 2010, it was found that there was a 47.2% increase in admissions, a 68.5% increase in patient days sold and a

[45] In order to attain absolute and relative (to the public sector) estimates of the numbers of GPs and specialists working in the private health sector, the following methodology was used. Data were received for all GPs and specialists (per specialty) that billed two of the largest medical scheme administrators in South Africa. The counts for each speciality reported by each of these two sources were then compared and the maximum reported by either one was used. Information was requested from the various specialist associations/ societies to verify such figures. Figures derived in this way were then reduced by 2.5% for GPs and 5% for specialists to account for practitioners working both in the private and public sectors. Such figures for private sector doctors were then compared with figures for public sector doctors from the 2013 PERSAL database. Please note that the assumption of only 5% of specialists working in both sectors is modest; some private sector researchers believe that the percentage of private sector specialists working in both sectors may be up to 30%.
[46] Econex: Updated GP and Specialist Numbers for South Africa. Please note that this is a very modest estimate.
[47] First an estimate is obtained to compute total nurses actively working in South Africa. This is achieved by looking at how many are registered with SANC, less those who are assumed to not be practising (based on previous research). The number of new nurses trained less an assumed attrition rate of 40% who do not register after qualifying, is then added to the first figure. This provides one with an estimate of total nurses. To arrive at an estimate for the public/private split we then subtract the public sector nurses (recorded by PERSAL) from the total and arrive at the private sector portion. This private sector portion includes those formally employed by the hospitals, as well as those employed by agencies and working in areas other than hospitals (pharmacies, NGOs, private practices, etc).
[48] Department of Health, 2013. Human Resource Strategy for the Health Sector, 2012/13 – 2016/17.
[49] HASA database. All private hospitals, February 2013.
[50] It is not reported as to how many of these are day clinics.
[51] Health Systems Trust, 2011. Health Statistics: Number of Health Facilities. Available at: http://indicators.hst.org.za/healthstats/108/data
[52] Health Systems Trust, 2010. Health Statistics: Number of Beds. Available at: http://indicators.hst.org.za/healthstats/112/data

14.5% increase in average length of stay (ALOS).[53] Such increases in utilisation rates may be partially explained by various factors, including: [54]

- Broadened definitions of prescribed minimum benefits (PMBs) (a regulatory matter that has arisen with the introduction of PMBs, to be discussed in section 5).
- The increased burden of disease – particularly human immunodeficiency virus (HIV)/ acquired immune deficiency syndrome (AIDS), tuberculosis (TB), heart disease, diabetes and cancer.
- Adverse selection in open schemes (low risk individuals feel that medical schemes are too expensive relative to their risk level and so those that are insured are generally higher risk).
- The changing age profile (data[55] show that the average age and risk profile of patients has increased over time).

Point 2 above addresses the fact that, beyond the prevalence of HIV and AIDS, referred to in section 2.2, multiple other conditions and diseases are prevalent and the severity of these diseases causes heightened demand for quality healthcare services, which are provided by the private healthcare sector. 2012 medical schemes' data show that the prevalence (defined by counting every beneficiary who has any of the specific chronic conditions) of hypertension, hyperlipidaemia and diabetes mellitus type 2 grew by 3.7%, 3.8% and 8% respectively between 2011 and 2012.[56]

In addition to disease prevalence, adverse selection in medical schemes and a general worsening risk profile of medial schemes may also drive utilisation rates. Due to the fact that private healthcare is not mandatory for all, some degree of anti-selection does inevitably exist, whereby younger and healthier people choose not to be part of a medical scheme, particularly open medical schemes. These people may not be willing to pay the higher premium arising from the inclusion of the older and sicker population in the risk pool. As a result, fewer people are left in the risk pool to fund the medical scheme, which pushes up the medical scheme contribution rate even further. These higher premiums provide even more of a disincentive for younger and healthier people to be part of a medical scheme, and so the cycle continues, consistently worsening the risk profile of medical schemes. Such a trend is known as the 'actuarial death spiral' or the 'premium death spiral', and results in the ultimate erosion of the risk pool with heightened utilisation rates by high risk members. As was illustrated in Figure 7, there is evidence supporting this trend in the South African private healthcare sector. In 2012 open schemes incurred a net healthcare deficit of R 61 million and restricted schemes a net healthcare surplus of R 87 million.[57] These figures may partially be explained by the respective risk profiles in open and restricted schemes.

[53] Econex: Medical Scheme Expenditure on Private Hospitals.
[54] HASA Hospital Review, 2008.
[55] See footnote 53.
[56] See footnote 10.
[57] See footnote 10.

Thus far this section has explained the development of the private healthcare sector and has provided more comprehensive facts regarding private healthcare resources. The fact that the data show that utilisation rates (and consequently expenditure) have increased significantly, supports the expectation that the private healthcare sector is currently experiencing heightened demand pressures. Such demand pressures have developed due to the need by a growing number of individuals for the high quality healthcare services that the private sector offers.

2.4 The government's view of the problem and solutions

Utilisation rates may be one explanation for the rising expenditure (per beneficiary), but there is speculation by government over other potential reasons for the increased costs of private healthcare. This is alongside the government's concern over the private sector diverting resources away from the public sector. Accordingly, in January 2014 the Competition Commission (CC) will commence a market inquiry into South Africa's private healthcare sector. The inquiry is motivated by the speculation of a market failure in the private healthcare sector, especially given the considerable market power of private hospitals, specialists, medical schemes and scheme administrators.

Alongside the CC's inquiry, the government has been exploring the possibility of a universal coverage scheme and has recently taken steps to move towards a NHI plan. This is intended to align South Africa with most developed countries, where healthcare is regarded as a 'public good'[58] that should be provided by the state under a national insurance plan. The mismanagement and lack of accountability and monitoring in the public sector to date has, as discussed in section 2.2, caused inefficiency of resources. The Minister of Health has the power to change this by relegislating the architecture of health departments at all levels so that they become apolitical and are run by skilled professionals and managers who are accountable and hence make the most efficient use of resources allocated.[59] The provision of good, competitive quality healthcare services by the public sector under the NHI may form a strong cost-containment strategy for the private sector, as this would incentivise optimal economic behaviour by private sector providers – a point which we get back to at a later stage.

Despite the optimal market mechanisms that could be created through the dual existence of competitive private and public healthcare sectors, proponents of the newly proposed NHI thus far do not hold the coexistence of these sectors in high regard. The NHI's proposed (but not yet finalised) method of funding is to implement a progressive tax with the largest impact on the most affluent portion of South Africa's population. This may mean less disposable income to spend on private healthcare, thereby disincentivising individuals' purchase of private healthcare services. The NHI may thus create a difficult

[58] A public good is formally defined as a good that is non-excludable (it cannot effectively be excluded from use) and non-rivalrous (one individual's use of it does not reduce availability to others). Although this term is commonly used to describe public health systems, by precise definition it is inaccurate; goods and services that are necessary to provide healthcare under a public health system may still be excludable and rival.
[59] Van den Heever, A., 2013. Minister Needs a New Script. Financial Mail, October 18 – 23, pp. 38 – 38.

environment for the existence of the private sector due to a further eradication of the risk pool through propagation of the 'actuarial death spiral.'

Looking forward, it is anticipated that the private sector will be scrutinised and that regulatory landscape changes will indeed be made to the sector. However, this should ideally be done in a way that recognises the role that the private healthcare sector has proven to play in shouldering the burden of providing quality healtcare services that are accessible to all. Such perspectives on the way ahead will be discussed more thoroughly in section 5.

It is clear from this section that there is much more to the perceived inequalities between the public and private health sectors (as outlined in section 1) – many of these common beliefs and opinions are unfounded or incorrect. A large part of the impressive growth in the private health sector over the past few decades, is related to the government's failure in providing adequate care to the people of South Africa. The following two sections of this report focus primarily on the private healthcare sector. Section 3 gives an indication of the size of the industry by providing information on the different stakeholder groups, i.e. health facilities and professionals, funders and other insurers, as well as up- and downstream support industries. In section 4 we analyse how the private health sector, through these various stakeholder groups, affects the economy as a whole, showing that its economic contribution cannot be ignored.

3 The Current State of the Private Healthcare Sector

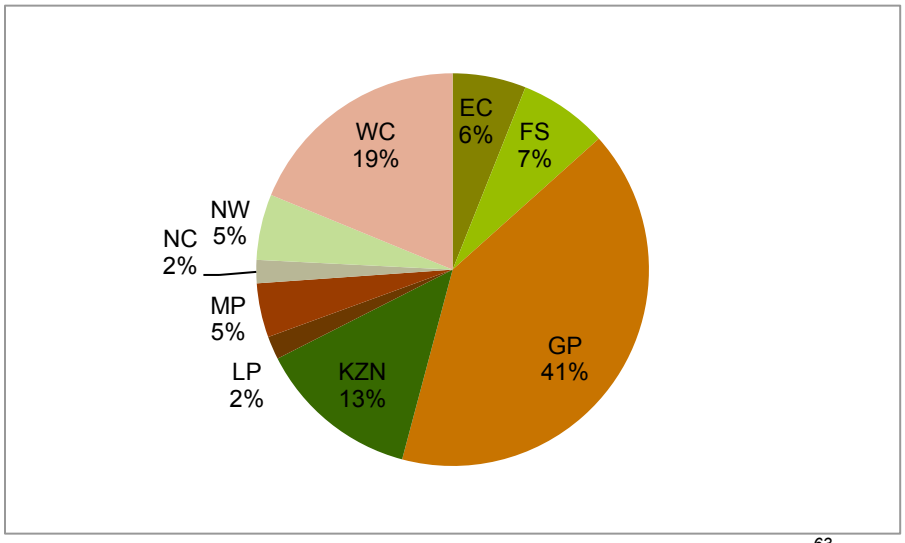
The developments over the past few decades, as described in the previous section, have resulted in a large, well-established private healthcare sector in South Africa. There are many stakeholders contributing to the provision of world-class services by this sector. Accordingly, in this section a high level overview of the existing operational landscape is provided before focusing on the economic role and contribution of the sector in the following chapter.

3.1 Providers of private health services

3.1.1 Hospitals and clinics

At the beginning of 2013 there were 314 day clinics and private hospitals in South Africa of which more than 40% were in Gauteng.[60] Figure 9 shows the distribution of these facilities across the 9 provinces. This distribution is also aligned with the distribution of hospital and clinic beds per province: 15,424 of the total 34,572 private beds[61] are located in Gauteng. According to the data shown in Table 1, Netcare (8,926 beds), Life Healthcare (7,944 beds) and Mediclinic (7,299 beds) are the 3 largest hospital groups. Together, these 3 listed hospital groups comprise 70% of the market.

Figure 9: Private day clinics and hospitals in South Africa, per province, 2013[62]



Source: Data from the Hospital Association of South Africa (HASA)[63]

[60] See footnote 49.
[61] Included in this total are 3,446 beds that belong to private facilities other than private hospitals, such as day clinics, rehabilitation facilities, psychiatric hospitals, frail care institutions, etc. (a total of 101 such facilities).
[62] EC = Eastern Cape, FS = Free State, GP = Gauteng, KZN = KwaZulu-Natal, LP = Limpopo, MP = Mpumalanga, NC = Northern Cape, NW = North West, WC = Western Cape.
[63] See footnote 49.

Table 1: Number of private hospital beds in South Africa, by holdings group and province, 2013[64]

Holdings group	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Grand Total
Anglogold Ashanti Health						134				**134**
Anglogold Ashanti Health Service			194					275		**469**
Clinix Health Group			1,239					93		**1,332**
Gold Fields		131	52							**183**
Harmony Gold Mining		695	87							**782**
Independent[65]	157	388	2,482	1,256	64	209	92	669	553	**5,870**
Joint Medical Holdings				479						**479**
Lenmed Health			264	238						**502**
Life Healthcare	1310	282	3,496	1,343		409		349	755	**7,944**
Life Path Health									141	**141**
Lonmin Platinum								56		**56**
Mediclinic		712	2,102	421	355	629	327	207	2,546	**7,299**
Melomed									455	**455**
Netcare Limited	460	294	5,508	1,730				163	771	**8,926**
Grand Total	**1,927**	**2,502**	**15,424**	**5,467**	**419**	**1,381**	**419**	**1,812**	**5,221**	**34,572**

Source: Data from HASA[66]

Not included in the data presented above are the many private clinics within pharmacies, at factories or large companies, as well as travel, baby and other types of privately owned clinics. MEDpages data indicate a total of 3,241 additional clinics that could potentially be operative in the private sector. This excludes any groups such as Carecross, Medicross and those owned by the large hospital groups. Table 2 gives a breakdown of this data as categorised by MEDpages. The dataset is difficult to interpret (or reconcile with the HASA data), as there is no indication of public or private ownership for most categories. We therefore assume that all these clinics can be added to the figures from the HASA database as there are separate categories in the MEDpages data for outpatient and public clinics.[67] This implies that there are a total of more than 3,500 private health facilities in South Africa, not counting the not-for-profit

[64] See footnote 62.
[65] The group of independents includes many specialist centres of excellence.
[66] See footnote 49. Note that the data were obtained prior to the release of some of the larger hospital groups' 2012 annual reports and so may be partially outdated, but in its totality represents the latest complete dataset available. To indicate the rapid growth of the market and hence the need for constantly updated data, note that in their latest annual reports Netcare (SA), Mediclinic (Southern Africa) and Life Healthcare (SA) reported 9,262, 7,378 and 8,227 beds respectively.
[67] We also did not include the following 'clinic' categories: antiretroviral (ARV), bone mineral density, complementary, day surgery, trauma and sub-acute facilities.

(NPO)[68] and non-governmental (NGO) organisations that also play an important role. These clinics are an important resource for the uninsured population.

Table 2: Select types of (private) clinics in South Africa, 2013

Type	Number of clinics
Baby	511
Dental	50
Factory	1,394
Pharmacy	604
Private	450
Travel	232
Total	3,241

Source: Data from MEDpages[69]

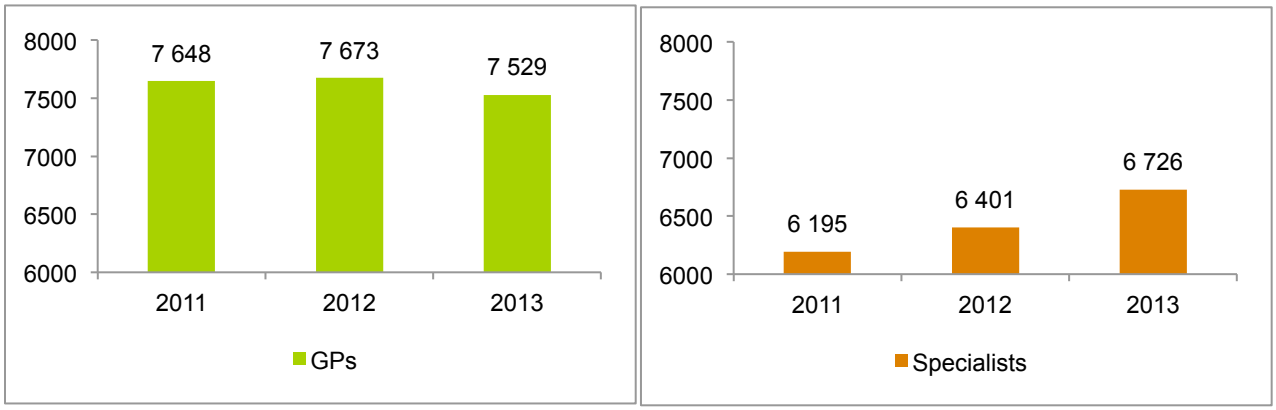
3.1.2 Doctors and nurses

With respect to healthcare professionals working in the private healthcare sector in South Africa, various databases report different figures. However, we are confident that the data presented here reflect the best available estimates.

Figure 10 shows the estimated number of doctors working in South Africa's private healthcare sector over the period 2011 – 2013, split by GPs and specialists[70]. From this it may be seen that the total number of GPs in the private sector has decreased slightly (by 1.6%) over these 3 years, whilst the total number of specialists in the private sector has increased moderately (by 8.6%) over the period. Currently (2013) there are 7,529 GPs and 6,726 specialists operating in the private sector.

[68] Previous research showed that in 1999 there were more than 6,000 NPOs in the health sector. See Econex Health Reform Note 9. Available at: www.econex.co.za.
[69] MEDpages, 2013. Private clinics in South Africa.
[70] Estimated numbers of private sector specialists are provided in Appendix 1: Estimated Numbers of Private Sector Specialists, 2013

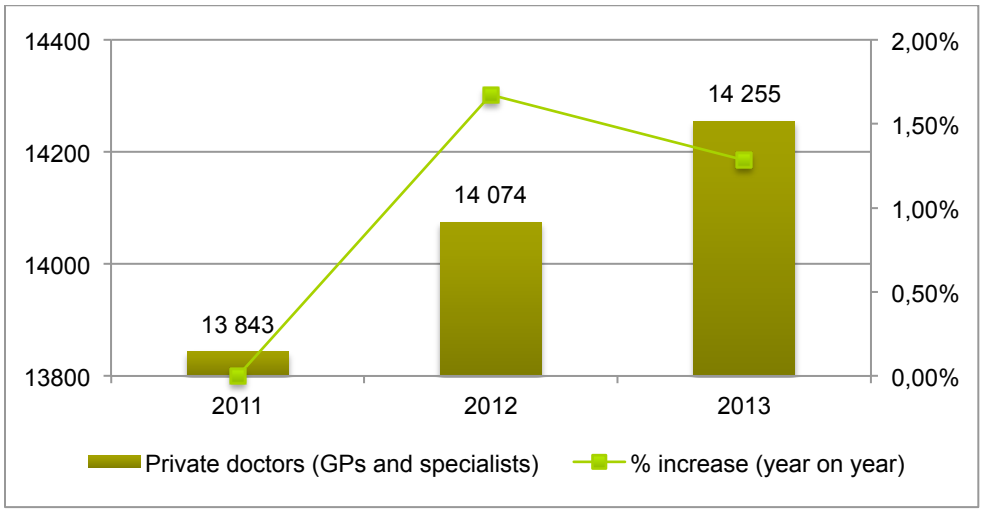
Figure 10: Number of GPs and specialists in the private healthcare sector, 2011 – 2013[71]



Source: Data from administrators' billing lists and private societies; Econex calculations

Figure 11 totals the count for GPs and specialists shown in Figure 10. From this it may be seen that the total number of doctors has increased fairly (by 3%) over the period 2011 – 2013. Currently (2013) there are 14,255 doctors operating in the private sector.

Figure 11: Number of doctors in the private healthcare sector, 2011 – 2013

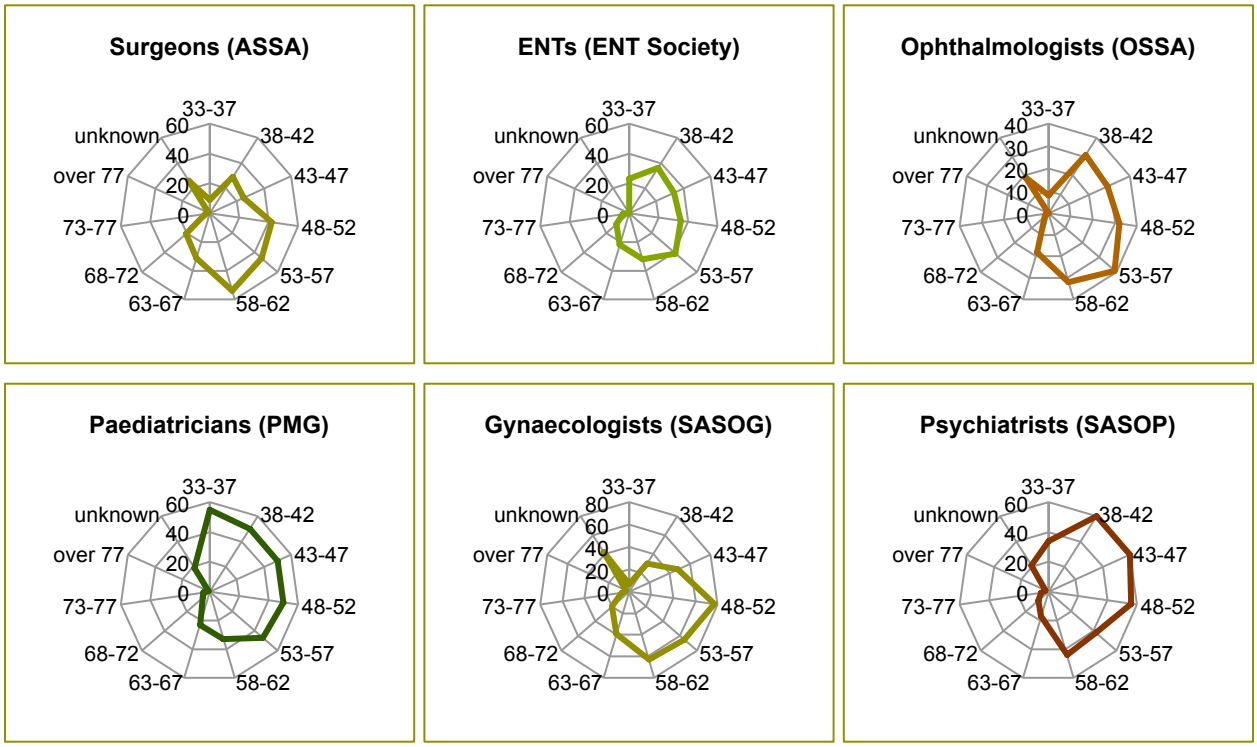


Source: Data from administrators' billing lists and private societies; Econex calculations

The age distribution by category of specialists is provided in Figure 12. This indicates that supply planning for certain specialists, such as surgeons and gynaecologists, is needed as the majority of these specialists fall in older age categories.

[71] See footnote 45.

Figure 12: Distribution of select medical specialists in South Africa, by age category, 2012[72]

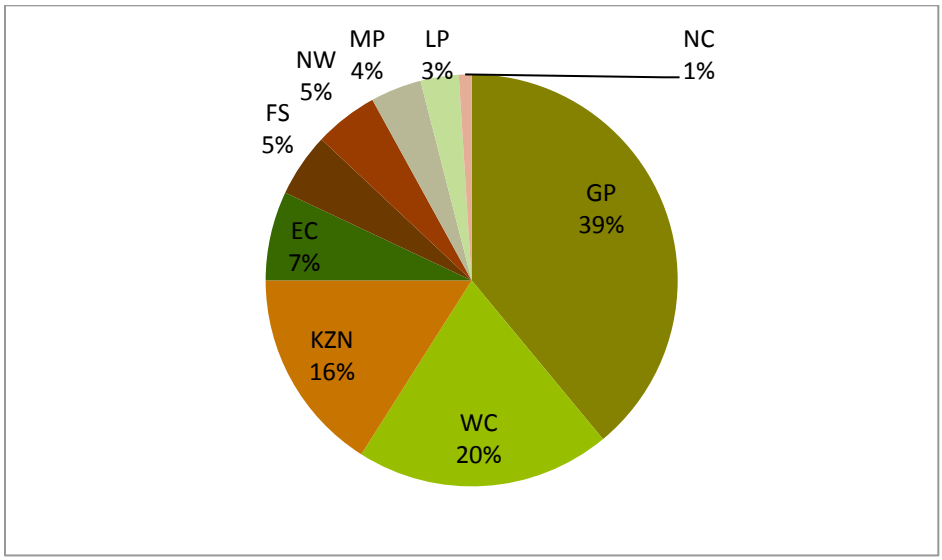


Source: Healthman data derived from various specialist societies, 2013

The distribution of private sector doctors across the provinces closely resembles that of the private hospitals (and medical scheme beneficiaries, as we will show below). While there are not very accurate data in this regard, one can use data from MEDpages as an indication. Accordingly, 39% work in Gauteng, 20% in the Western Cape and 16% in KwaZulu-Natal. Note that the data are representative of all doctors (medical practitioners) in South Africa and not just those working in the private sector. One would expect the private sector distribution to be even more concentrated in Gauteng, the Western Cape and KwaZulu-Natal.

[72] Healthman, 2013. Data derived from various specialist societies. Research presented by Strachan, B. at the 2013 HASA Conference.

Figure 13: Distribution of medical practitioners in South Africa, by province, 2012



Source: Data from MEDpages[73]

Data on the number of nurses working in the private sector are also not readily available. One has to make a number of assumptions and data adjustments based on South African Nursing Council (SANC) and Personnel Salaries (PERSAL) data for government employees to arrive only at a much-debated estimate. Our most recent work in this regard indicates that 77,569 nurses work in the private sector; equal to approximately 38% of all nurses actively working in South Africa.[74] In addition to the assumptions made, the reason for this being a contentious estimate relates to the fact that many nurses are employed through agencies and work part-time in both sectors. Also, the nurses permanently employed by the 3 large hospital groups only account for roughly a third of those in the private sector according to our data and calculations. This seems logical though, as many nurses work for NPOs/NGOs and in the thousands of private sector clinics as described above.[75]

3.1.3 Allied health professionals

To complete the picture of private healthcare providers, the allied health professionals have to be added as well. With the lack of quality data on human resources for health (HRH) in South Africa, it is not possible to determine exactly how many pharmacists, physiotherapists, occupational therapists, dieticians, etc. work in the private sector alone. We can get some indication from the MEDpages database, but this is not a complete dataset; and, as pointed out before, most listings do not indicate whether that person or facility operates in the public or private sector.

[73] MEDpages, 2009/10. Geo-Demographic Analysis: Private Healthcare Providers in South Africa.
[74] See footnote 47.
[75] See Econex Health Reform Note 9 for a more detailed description of our methodology, agency staff and nurses working in various private sector facilities. Available at: www.econex.co.za.

For instance, it is reported that there are almost 6,000 pharmacists and nearly 800 pharmacist assistants working in South Africa at the moment (2013), i.e. in the public and private sectors. The data further show that there are about 3,000 retail pharmacies, and 230 pharmacies in private hospitals. The latest available data from the South African Pharmacy Council (SAPC) however record more than 13,000 pharmacists registered in South Africa, and more than 12,000 assistants at all 4 levels of qualification.[76] It is possible that these data are plagued with the same shortcomings as the Health Professionals Council of South Africa (HPCSA) data, i.e. included in the data are pharmacists and pharmacist assistants no longer working in the country or not working as pharmacists per se, but maintaining their South African registrations. Contrary to the registrations data, the SAPC data on pharmacies themselves are similar to that of MEDpages: a little over 250 pharmacies at private hospitals and just over 3,000 'community' (retail) pharmacies. A report[77] by the SAPC on pharmacy human resources states that 63% of all registered pharmacists worked in the private sector in 2010. This ratio has been declining since 2004 and 2005 when 73% and 75% respectively, of registered pharmacists worked in the private sector. The most recent 2013 data indicate that at least 2,964 pharmacists are currently operative in the private sector.[78]

Brief consideration of the data that are available from administrators on the number of dentists, dental assistants and other related occupations indicate that there are at least 3,463 dentists actively working in the private healthcare sector.[79] The HPCSA records show a total of 5,650 registered dentists in 2012, but we know that this includes those working in the public and private sector, as well as those who may not be working as dentists in South Africa anymore (but who still keep up their annual registrations). PERSAL data on the other hand state that there were 993 dentists working in the public sector in 2012. In order to estimate the number of dentists working in the private sector, we firstly adjust the HPCSA data by subtracting 20% from their records for those dentists no longer actively working in South Africa.[80] Secondly, we remove the 993 dentists in the PERSAL records, to come to a conservative estimate of 3,527 dentists working in the private healthcare sector. This figure corresponds closely with MEDpages data in this regard (3,526 dentists), which we believe are mostly dentists in private practice.[81]

One could potentially follow this type of methodology for most of the allied professions, i.e. triangulate the number of people actively working in South Africa's private healthcare sector from the different types of data that are available (HPCSA, MEDpages, PERSAL and the various associations). However, this would

[76] Available at: www.pharmcouncil.co.za.
[77] SAPC, 2011. Pharmacy Human Resources. Available at: http://www.pharmcouncil.co.za/G_Publications.asp.
[78] 2013 private billing data by administrators for pharmacists and pharmacotherapists.
[79] 2013 private billing data by administrators for: dentists, orthodontists, prosthodontists, dental technicians and dental therapists.
[80] This "error margin" is in line with previous work we have done on the number of doctors actively working in South Africa. There is an approximate 20% difference between our estimates of the numbers of GPs and specialists working in South Africa and the figure recorded by the HPCSA. It is possible that fewer dentists emigrate or pursue different career opportunities, which means that our estimate for the number of dentists actively working in the private healthcare sector is fairly conservative and it could potentially be more (not all dentists are members of the South African Dental Association and there is no publicly available data on their website).
[81] MEDpages data are said to include health professionals working in both the public and private sector, but their data are mostly obtained from private sector companies (like large pharmaceutical groups) with which they have data sharing agreements. Their data would not include all health professionals working in South Africa (information based on a telephonic conversation with a MEDpages representative, 2 August 2013).

be an unnecessarily cumbersome process to arrive only at indicative estimates. What should be clear though from the few professions considered above is that a fairly large portion of South Africa's healthcare professionals provides services in the private health sector. This is an important sector for thousands of people who earn a living in this market and serve South Africa's population with high quality health services not available in the public sector.

3.1.4 Other personnel at hospitals

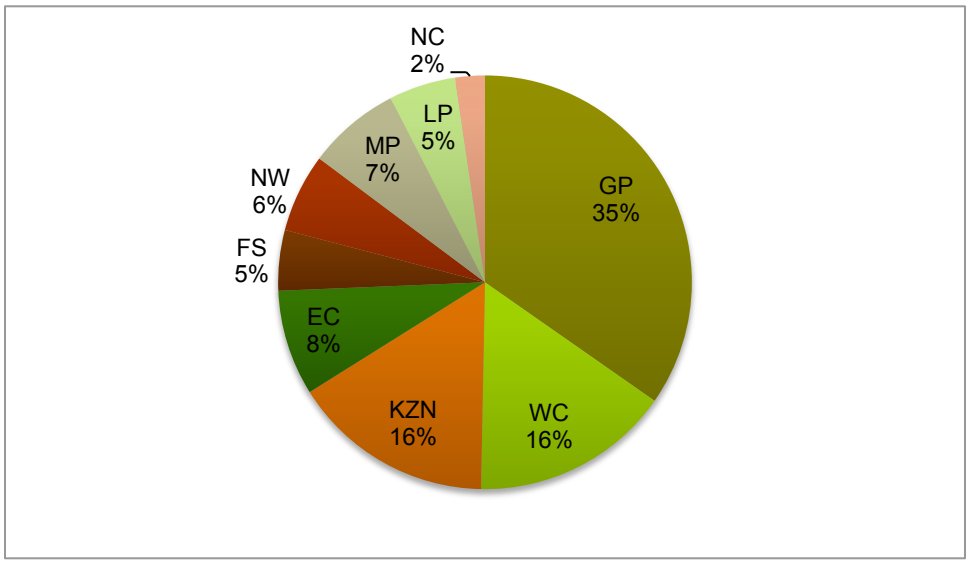
Like any other business, private medical establishments are organised institutions. They follow complex processes and need efficient manpower to manage these processes. Accordingly, the private healthcare sector also includes a large portion of hospital managers and hospital administrators. These individuals, usually being highly skilled professionals, are concerned with the organisation, coordination, planning, staffing, evaluating and controlling of health services for their hospital. Their primary objective is to provide quality healthcare and to do this in a cost-effective manner. Everyday tasks include decisions regarding staff, technology, information technology (IT) and other logistical issues. Much success in the private healthcare sector may be attributed to such individuals, who have proven how institutions can be managed proficiently, economically and successfully.

3.2 Private healthcare funders and administrators

3.2.1 Medical schemes

Based on the CMS 2012/13 annual report, there were 25 open schemes and 67 restricted schemes at the end of 2012. Together, all medical scheme beneficiaries totaled 8,679,473 people, comprised of 3,815,431 members and 4,864,042 dependants. This implies that approximately 17% of the South African population were beneficiaries of medical schemes in 2012. Similar to the distribution of private health facilities and providers, medical scheme members are concentrated in the economic hubs of the country as Figure 14 shows.

Figure 14: Distribution of medical scheme beneficiaries, by province, 2012[82]



Source: Data from the CMS[83]; Econex calculations; distribution as at 31 December 2012

3.2.2 Administrators, managed care companies, brokers and consultants

Some medical schemes are self-administered, but most schemes outsource their administration services to large companies that specialise in providing these services. This includes the day-to-day processing of claims, handling call center queries and complaints, dealing with membership and payment issues, etc. There are around 30 administrators in South Africa, with 3 large companies who provide services to more than 3 quarters of medical scheme beneficiaries: Discovery Health, Medscheme and MMI (Metropolitan and Momentum). Table 3 gives an indication of the ratio between schemes and their administrators:

Table 3: Administrator market, 2012[84]

Administrator	Number of schemes	Number of beneficiaries (average)
Discovery Health	13	2,662,578
Medscheme	18	2,769,086
Metropolitan	13	2,672,956
Momentum	9	386,391
Self-administered	15	879,865
Other	26	986,826
Total number registered	**94**	**10,357,702**

Source: Data from the CMS[85], 2012/13

[82] See footnote 62.
[83] See footnote 10.
[84] Note that in 2012, both Metropolitan and Medscheme provided administration and managed care services to the GEMS. Our calculations are based on the CMS Annual Report for 2012/13 which adds the 1.75 million GEMS beneficiaries to both administrators.

Administrators usually provide managed care services as well, but a number of managed care companies also exist offering specific and unique types of services that measure and monitor services provided to medical scheme beneficiaries, with the aim of controlling costs and managing healthcare solutions.

In addition to administrators and managed care companies, brokers and various consultants also provide services to medical schemes and their beneficiaries. All of these companies employ highly qualified personnel contributing to the wealth and well-being of South Africa's private health sector. Some of these companies are also listed on the Johannesburg Stock Exchange (JSE) like the large hospital groups, offering strong investment opportunities to South African and international investors alike. Their contribution to the macroeconomy and the private health sector specifically cannot be understated and will be explored further in the next chapter.

3.2.3 Other health insurers

Without going into too much detail regarding the demarcation between medical schemes and other health insurance products, suffice to note that there is a (growing) market for pure insurance products in the private health sector in addition to the cover provided by medical schemes. These products, however, are prohibited from competing with medical schemes in that those products may not provide financial protection directly related to the value of specific medical expenses. Hence, health insurance products have taken the form of 'hospital cash plans', dreaded disease and disability cover, as well as 'gap' cover.

Hospital cash plans pay a pre-determined amount to the policyholder when he/she is hospitalised, based on the length of stay, irrespective of the reason for hospitalisation or any medical bills. The policyholder is free to use this money for anything the person chooses. Dreaded disease and disability cover products provide cover in the event of specific illnesses (usually a pre-determined list) or sudden disability due to motor vehicle accidents, for instance. While some policies provide lump sum benefits, most are structured in a way that ensures the policyholder of a certain percentage of his/her salary every month (in the event that he/she can no longer work and earn a salary) or a pre-determined monthly amount. In 2012 it was estimated that there were between 1 and 1.5 million hospital cash plan policies in effect, with total lives covered estimated to be 27% of those covered under medical schemes.[86]

Gap cover products are an interesting feature of the South African private health insurance market. Since the majority of medical schemes only reimburse medical expenses at a set rate and because healthcare providers are allowed to 'balance bill'/ 'extra charge' members of medical schemes for the services they provide, patients often have to pay a large part of their own medical bills in the case of providers charging more than the pre-determined 'scheme rate'. Balance billing is common practice in South Africa and this

[85] See footnote 10.
[86] Finmark Trust & Lighthouse Actuarial Consulting, 2012. Review of the South African Market for Hospital Cash Plan Insurance. September 2012, p. 27.

created a market for 'gap' cover products which are insurance products that cover the rest of a person's medical bill (also capped at a certain percentage of the scheme rate). One cannot buy a gap cover policy without being a member of a medical scheme and it is therefore not a substitute for private medical cover, but does improve financial protection for health-related expenses. This is a growing market in South Africa. In 2012 it was estimated that there were up to 250,000 gap cover policies in effect.[87]

3.3 Upstream service providers

The provision of healthcare services by the private hospital sector is only possible because various other industries supply the necessary goods and services, ranging from pharmaceuticals and medical supplies, to food and beverages, cleaning products, water, electricity, security, laundry, telecommunication services, computers, surgical instruments and medical equipment. In a social accounting matrix (SAM) framework, these industries are considered *intermediate output* sectors – supplying the goods and services necessary to produce the final product or service. Industries that experience the greatest benefit from this expenditure include:[88]

- pharmaceuticals, fuel, chemicals, rubber and plastic;
- real estate, rental and business services;
- government, community services and other services;
- communications;
- retail, wholesale, hotels and catering;
- paper, printing and publishing; and
- electricity, gas and water.

The purpose of this review of upstream providers to the private healthcare sector is not to present a detailed explanation of these providers. However, it may be relevant to briefly explain the pharmaceutical industry, the largest upstream provider. Adcock Ingram, Aspen Pharmacare Holdings, and Litha Healthcare Group are the 3 pharmaceutical groups listed on the JSE. The existence of these large local groups promotes local procurement of pharmaceuticals by the local hospitals and healthcare practitioners, causing expenditure and investment flows to remain within the South African economy. This is important given the heavy historical dependence on, and current competition with, imported pharmaceuticals. 2011 figures[89] show that Aspen and Adcock Ingram together held 26.7% of local market share. The next largest market participants include Sanofi, Pfizer and Novartis – all of which are foreign groups and together made up 21.1% of market share. After this, another major and rising local participant is Cipla Medpro. Beyond these major manufacturers that act as upstream providers to hospitals, it is also

[87] See footnote 86.
[88] Econex, 2012. The Contribution of HASA Member Hospitals to The South African Economy. Research Note 25, January 2012.
[89] National Association of Pharmaceutical Manufacturers, South African Overview, May 2012.

worth mentioning the many pharmaceutical wholesalers and retailers that act as intermediaries in the downstream supply process. The wholesale market includes groups such as Transfarm, New United Pharmaceutical Distributors, International Healthcare Distributors, Alpha Pharm Distributors, Clidet 549, Natal Wholesale Chemists and Adcock Ingram Healthcare. Market share is well distributed in this market.[90] These groups then pass the pharmaceuticals on to retailers who sell to the end client. Retailers have substantially increased since the 2003 legislation that allowed corporatisation of pharmacies. The market now predominantly includes Clicks, Shoprite Checkers with MediRite, and Dischem, which together account for approximately a third of the market.[91]

Beyond the above-mentioned upstream industries, of which pharmaceuticals is a predominant one, the provision of healthcare services requires the use of different capital goods, such as technologically advanced medical equipment and machinery, transport equipment, as well as hospital buildings and offices. Industries of technology, transport and construction are thus also major upstream participants that are afforded opportunities for growth due to their development being interlinked with the development of the private healthcare sector.[92]

Given the information provided in this section, it is clear that the private health sector is a large industry with great economic importance. Furthermore, the extent to which the private healthcare sector interacts and affects other industries in the economy, as described above, is substantial. Each group of participants in the sector – hospitals, doctors and nurses, allied health professionals, other hospital personnel, medical schemes, administrators, managed care companies, brokers, consultants and other health insurers – are connected to other upstream (and downstream) industries in the economy. The next section explores the economic contribution of the private health sector and questions whether the effects of these linkages to the economy are at all significant and positive.

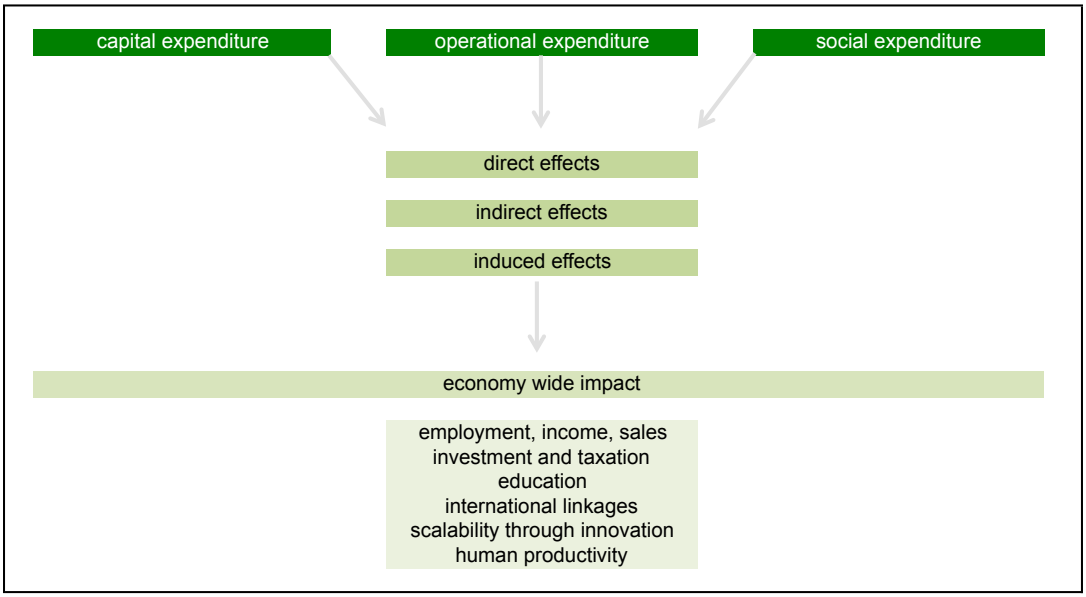
[90] Tribunal Ruling: Shoprite Checkers and Transfarm Case No. 68/LM/Oct09, p. 4.
[91] Who Owns Whom Report, 2011. Research Report on Wholesale and Retail of Pharmaceuticals, pp. 4 – 9.
[92] See footnote 88.

4 The Function and Importance of the Private Healthcare Sector

Given the magnitude of the private healthcare sector described in the previous section, it is often claimed that this sector has a profoundly positive effect on the economy. The aim of this section is to question whether there is evidence in favour of this claim by looking at various potential linkages that the sector has to the greater economy.

Estimates by the National Treasury indicate that health expenditure in the South African private healthcare sector for 2012/13 was in the range of R 130 – R 142 billion. This figure includes benefits paid by medical schemes[93], out-of-pocket expenditure, medical insurance and employer private contributions. It indicates substantial fund flows within the sector, which are used to finance capital, operational and social expenditures by the sector. These expenditures feed through to the rest of the economy via direct, indirect and induced channels to have far-reaching effects. The process of such exogenous variables (different types of expenditure by the private healthcare sector) having carry-through effects to endogenous variables within the economic system is described as "multiplier effects". This is illustrated in Figure 15.

Figure 15: The private healthcare sector's multiplier effects on the economy



Source: Econex

[93] A detailed analysis of medical scheme benefits paid is provided in Appendix 2: Analysis of Medical Scheme Benefits Paid, 2012

In what follows, some of the most important direct, indirect and induced channels through which the private healthcare sector impacts the economy will be discussed. Specifically, we question the contribution that this sector makes to the economy by:

- Employment and related variables (such as income and sales)
- Investment and taxation
- Education
- International linkages
- Scalability through innovation
- Human productivity

Investigating these and other ways in which the private healthcare sector has been, and is affecting the economy, may assist policy makers in understanding the importance for the sector's incorporation into future healthcare plans. With the landmark move toward the South African NHI, one can appreciate that the success of the sector (from both a healthcare and an economic perspective), allows South Africa to build and develop capacity going forward.

4.1 Employment and related variables

A functioning private healthcare sector has the ability to improve employment levels and through this also improve income, sales and investment levels. The overarching effect of this is a significant economic contribution to the country that generates skills and monetary liquidity culminating into GDP growth. In this section it is questioned how much the private healthcare sector really contributes to employment levels, after which the relevant employment multiplier effects of the sector are considered.

4.1.1 The sector's employment contribution and multiplier effects

As has been shown in section 3, the employment contribution that the private healthcare sector makes to the economy is indeed substantial. To quantify just a few of the categories of employment in this sector, it was shown that there are approximately 7,529 GPs, 6,726 specialists, 77,569 nurses, 2,964 pharmacists and 3,527 dentists operative in the sector. Beyond this there are also thousands of other allied health workers as well as administrators and managers for hospitals, medical schemes, and other health insurance providers. Moreover, the employment supported by the sector due to upstream and downstream value chain linkages in the economy is extensive.

As an example of the overall importance of the private healthcare sector for employment, one may consider the findings of a study conducted by Econex regarding the HASA member hospitals.[94] Herein it was found that the HASA members, with a workforce of about 64,000 employees in 2010, make a substantial contribution to the South African economy. However, this is only a direct effect, found when considering those that are directly employed (recall that in accordance with the HPCSA ethical rules, private hospitals in South Africa are prohibited from employing health professionals registered with them). When taking into account the indirect and induced effects (found when considering all economic multiplier effects on the economy), it was found that the HASA members supported an astonishing 218,000 jobs (1.8% of total employment) throughout the economy in 2010, generating labour income in excess of R 23 billion during 2010. In this calculation it was estimated that for every job offered by the HASA members, 2.4 additional jobs are sustained in the rest of the economy, of which 78% are for previously disadvantaged individuals. All of this is achieved due to the fact that the private healthcare sector stimulates economic activity throughout the healthcare value chain, encompassing also a wide range of producers and suppliers (upstream linkages) and retailers, distributors and other healthcare service providers (downstream linkages).

Another important finding of the study was that, in recessionary times, employment in the private healthcare sector tends to stand more strongly than that of the overall economy. This highlights an important contribution that the private healthcare sector makes to the economy, especially in a country with unemployment as high as South Africa. Specifically, one may note that while total employment contracted by 5.8% between 2008 and 2010, the number of permanent employees in HASA member hospitals increased by 4.4%.

One should keep in mind that the above discussion includes only the HASA member hospitals, which accounted for approximately 70% of all private hospital beds in South Africa at the time of the study (2010). Accordingly, these data therefore do not cover the private healthcare sector employment in its totality, but indicate the positive contribution of the sector.

4.1.2 Private/public partnerships to increase employment

Not only is it important to understand what portion of employment is supported by the private healthcare sector, it is also necessary to know how interconnected this sector is with the public health sector, to build a platform for public sector employment. The larger private hospital groups have contributed substantially and actively in assisting the overall development of the healthcare sector in this regard. Life Healthcare now has a 100% stake in Life Esidimeni (having 12 healthcare facilities and 4,165 beds), a public-private partnership (PPP) with government which was established more than 50 years ago (in 2001 Life

[94] See footnote 88. Please note that this study was based on a theoretical model to estimate the effect that HASA member hospitals have on the total economy.

Healthcare bought a 55% stake and in 2008 they acquired the remaining 45%).[95] Netcare currently operates 4 PPP hospitals, has had 14 PPPs to date, and most recently in 2012 also partnered with the Government of Lesotho in a further venture.[96] Mediclinic has a 3-tiered corporate social investment (CSI) programme, which assists the public health sector and most notably employment at all 3 levels, firstly, by partnering with the government to provide the community with much needed surgical support in various disciplines where the Department of Health may have a need; secondly, by enhancing the role of accredited community organisations by providing monetary and product support; and thirdly, by offering a platform for Mediclinic employees to make a difference by volunteering their time, expertise and knowledge to community organisations.[97]

The private sector has occasionally voiced concern over the lack of cooperation from the public sector to set up initiatives, leading to "lost opportunities". One such experience was voiced in the context of the cutting of sessional opportunities for private sector specialists to work in public facilities from about 2006. Stakeholders within the private sector felt that this was due to ideological hostility and budget cuts. Another such experience was voiced with regard to the slow rate of project flow (largely due to negotiation, management and administration) for PPPs, as well as mutual failure to come up with solutions to urgent problems affecting both sectors.[98] Such issues are improving as sessional opportunities are being restored; PPPs are being extended to include infrastructure, management and clinical services; and both sectors are working together in PPPs to train professionals. The public sector does have many people with excellent skills to drive this, but there is a need for these skills to be effectively and efficiently transferred and utilised to reach optimal employment levels in the sector as a whole, a process that the private sector has assisted with and can continue to do so.

4.1.3 Listed hospital group social statistics

Select supporting statistics for social involvement by the major hospital groups are outlined in Table 4. This indicates on-the-ground effective and efficient realisation of employment endeavours as quantified in sections 4.1.1 and 4.1.2. All of these programmes contribute to the development of healthcare service provision and overall economic growth in South Africa.

[95] Life Healthcare, 2012. Annual Report 2012, p. 26.
[96] Netcare, 2012. Annual Report 2012.
[97] Mediclinic, 2012. Annual Report 2012, p. 41.
[98] See footnote 18.

Table 4: Listed hospital groups' social statistics, 2012

	Number of nurses enrolled in training	Black employees (%)	Patient satisfaction (%)	B-BBEE level
Netcare	3,294 currently enrolled 1,432 graduated between 2011 – 2012	47.0	99.2 (all locations)	3
Life Healthcare	1,250 currently enrolled 928 graduated in 2012	66.4	98.4	4
Mediclinic	720 graduated in 2012 (enrolled figure not available)	62.7	76.0[99] (SA and Namibia)	3

Source: Data from respective annual reports (Netcare, Life Healthcare, Mediclinic), 2012

4.1.4 Reversing the "brain drain"

Not only does the private healthcare sector play an important role for current employment, it also provides a crucial personnel and skills retention function to optimise both present and future employment (this latter point is further explored in section 4.6). As a result of the current crisis in the public sector, many practitioners opt to rather enter private practice. Had this option not been available to them, these practitioners may have exited the South African economy in search of more favourable employment conditions, consequently denying their services to fellow citizens. Moreover, such emigration would cause a drain on South African public funds (taxpayer's money) as these are used to subsidise doctors' training.

The attractiveness of emigrating may be driven by multiple variables, such as the ability to earn a higher income overseas. Another important variable is the fact that if there is inadequate healthcare provided for professional persons in the medical field as well as other fields, this too may result in an outflow of human capital and a resulting downward spiral of productivity, economic growth and job creation. This risk is particularly profound in the case of skilled individuals who are willing and able to move abroad. As such, it is crucial that such persons must have access to the private healthcare sector which offers a good working environment, particularly as the public healthcare sector does not at this point provide an equally perceived alternative.

The appeal to emigrate, as discussed above, has been relieved to a certain degree by the opportunity for practice in and treatment by the private sector, but nevertheless studies show that the migration has slightly increased over time. In a 2003/04 study it was found that there were 600 South African doctors registered to practise in New Zealand while 10% of Canada's hospital-based physicians and 6% of the

[99] The patient satisfaction rates are based on the ANQ (the Swiss National Association for Quality Development) satisfaction survey and are not directly comparable with those of the other hospital groups.

total health workforce in Britain was South African.[100] A 2006 study found that 21% of doctors trained in South Africa work abroad.[101] Another study in 2008 reported that over 25% of South Africa's registered doctors had left the country as there was a higher demand for their skills overseas[102] (MEDpages 2009/2010 data show that of those registered on the MEDpages database, this percentage was at 11%[103]). A similar study was also done with regard to pharmacists, where it was found that 30% of pharmacy graduates leave South Africa, presumably to practise in other countries.[104] More recently, in a report to the House of Lords dated 9 October 2013, it was stated that 765 South African specialists are consulting in UK state-run hospitals.

With the right conditions offered by the private healthcare sector, such individuals may be attracted back to South Africa and newer entrants into the field may be encouraged to remain at home. This will enhance local capacity and provide training, supervision and technical skills. Moreover, given the shortage of practitioners, foreign workers may also be encouraged to work for a period in South Africa, as has been encouraged by the private healthcare sector: Netcare and Mediclinic now recruit international nurses, whilst private programmes have been launched for foreign medical students to come to South Africa through institutional partnerships for exchanges or internships. It is necessary at this point to note that the means of attraction for employment in the sector needs to be carefully managed, particularly for nurses, as there is now heightened debate around "moonlighting" by nurses in an attempt to fulfil employment needs and supplement their income.

In summary, while the public health sector struggles to retain the health professionals that it trains, the private health sector assists in addressing the problem by offering a credible alternative and hence promoting the local retention of some of South Africa's most valuable human resources.

4.2 Investment and taxation

The private healthcare sector provides a promising opportunity for investment and plays a vital role in attracting investment to the economy. The sector has substantially contributed to the economy by making profits, avoiding losses and earning an adequate return on capital invested, as we show below.

This section will initially focus on reviewing the available financial information of 3 of the main participants in private healthcare: hospitals, medical schemes and pharmaceuticals. From this, one may consider the

[100] Health Systems Trust, 2004. South African Health Review 2003 – 2004. Durban Health Systems Trust, p. 300.
[101] Shellack, N., Meyer, J.C. & Gous, A.G.S., 2011. Health and Economic Context. South African Medical Journal, August 2011, Volume 101, No. 8.
[102] Who Owns Whom Report, 2009. Research Report on Medical and Dental Practice Activities. pp. 6 – 7.
[103] MEDpages and Analytics Business Intelligence, 2010. 2009/2010 Geo-Demographical Analysis: Private Healthcare Providers in South Africa. January 2010.
[104] Fomundam H., 2007. The Challenges of Pharmaceutical Care in Africa – The Case of South Africa HIV and AIDS (presentation). Pretoria, Medunsa Pharmacovigilance Centre.

multiplier effects of such investment performance for the economy. This latter consideration requires many assumptions to be quantifiable, but the effects are justifiably expected to be positive and significant.

1.1.1 Hospital groups

Table 5 reviews the financial performance of select hospital groups in 2012, specifically the 3 largest stock exchange listed groups. All 3 groups have international operations: Mediclinic has operations in South Africa, Namibia, Switzerland and the United Arab Emirates; Netcare has operations in South Africa and the United Kingdom; and Life Healthcare has operations in South Africa, Botswana and India. The information below is provided at group rather than country level due to the fact that each of the 3 groups has their primary (and sole) listing on the Johannesburg Stock Exchange (JSE) and hence substantially affects local investment.[105] Highly relevant indicators for this effect include taxation, wealth creation, and market capitalisation figures.

Table 5: Listed hospital groups' financial information, 2012 (R million)

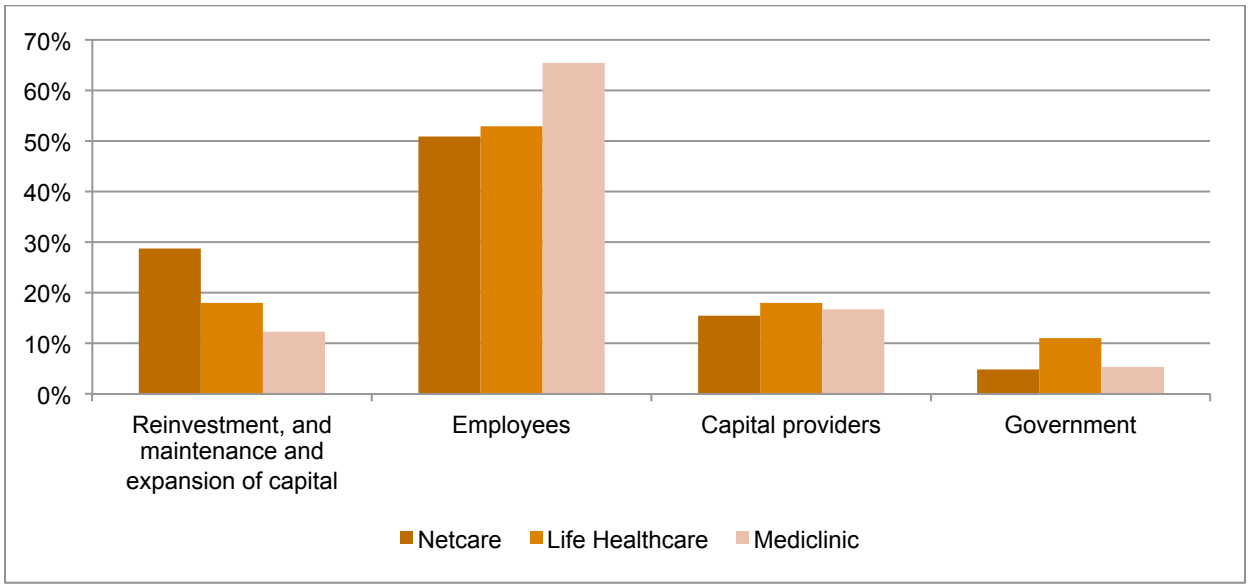
	Revenue	Profit before taxation	Taxation	Total assets	Wealth created	Market capitalisation
Netcare [106]	25,174	2,004	289	44,222	17,671	26,098
Life Healthcare	10,973	2,412	669	9,256	6,736	33,090
Mediclinic	21,986	2,177	693	50,195	13,876	24,500

Source: Data from respective annual reports (Netcare, Life Healthcare, Mediclinic), 2012

Figure 16 lists the same 3 hospital groups' distribution of wealth created in 2012 (as included in Table 5 above), giving indication to some of the multiplier effects on the economy:

[105] Respective annual reports 2012.
[106] The results for the year have been impacted by certain material, non-cash adjustments relating to the General Healthcare Group (GHG) portfolio and hence what is reported is normalised.

Figure 16: Listed hospital groups' distribution of wealth, 2012



Source: Data from respective annual reports (Netcare, Life Healthcare, Mediclinic), 2012

Partially included in and also beyond the above distribution of wealth, these large hospital groups stimulate economic activity throughout a complex value chain, with extensive upstream and downstream linkages in the economy. Per illustration, consider that, during 2010, HASA members spent more than R 14 billion on goods and services that they needed in order to provide healthcare services, including pharmaceuticals and other medical supplies, food for patients, cleaning products, water and electricity, as well as repairs and maintenance. Purchasing of goods and services by private hospitals creates additional revenue in the hands of suppliers which in turn is spent in the economy, inducing further investment and tax revenue.[107]

4.2.1 Medical schemes

The amount of lives covered by, and the resulting size of the medical scheme industry in South Africa, cannot be underestimated. In 2012 a total of 8,679,473 lives were covered by registered medical schemes. In the same year these schemes had total assets of R 55.4 billion, net contribution income of R 106.7 billion, a net healthcare result of R 26 million and net surplus after consolidation of results of R 3.7 billion. Table 6 reviews the available 2012 market information for the larger medical schemes.

[107] See footnote 88.

Table 6: Medical schemes' financial information, 2012

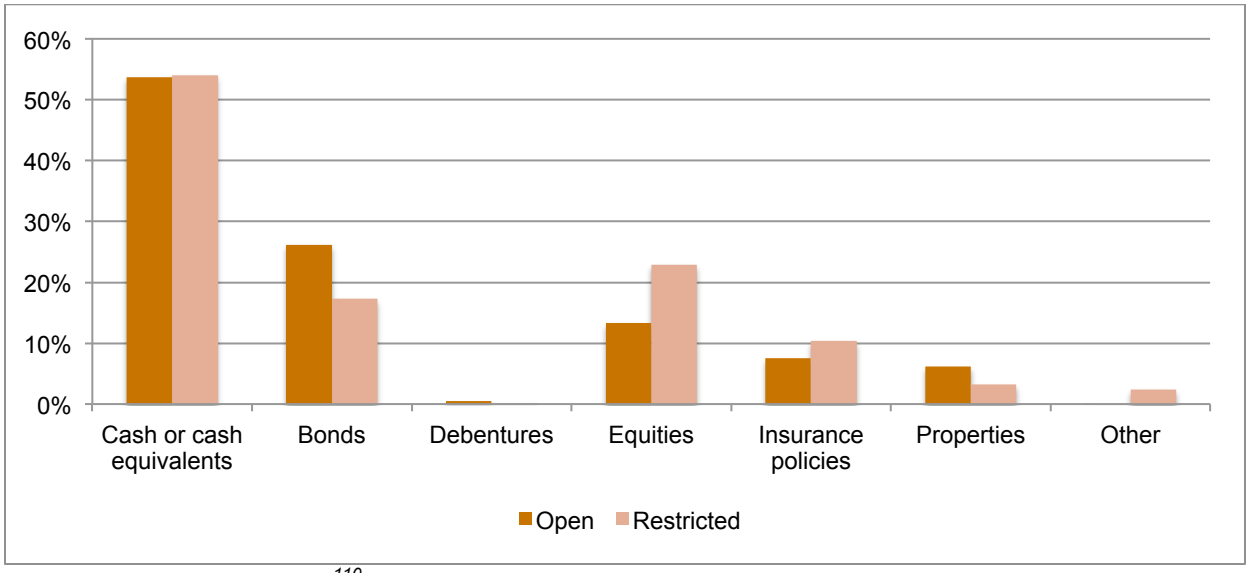
	Beneficiaries 31.12.2012	Net contributions R'000	Net healthcare result R'000	Net surplus/deficit after consolidation results R'000	Solvency ratio %	Total assets R'000
Discovery Health Medical Scheme	2,469,023	28,225,776	187,179	788,790	23.4	12,075,808
Government Employees Medical Scheme	1,812,061	20,918,512	-144,661	187,017	7.9	3,738,468
Bonitas Medical Fund	601,861	7,555,025	-184,477	64,831	35.5	3,667,089
South African Police Services Medical Scheme	494,411	6,045,976	182,978	493,507	48.6	3,676,733
Medihelp	216,215	3,400,736	-164,123	-80,291	32.4	1,624,357
Momentum Health	200,062	2,195,146	133,763	173,945	28.6	1,015,757
Bankmed	199,011	2,671,194	-79,097	31,451	48.5	2,402,755
Medshield Medical Scheme	187,965	2,590,750	44,518	198,991	45.3	1,764,864
Bestmed Medical Scheme	152,499	2,351,196	-21,049	30,433	28.5	1,397,580
Fedhealth Medical Scheme	148,816	2,382,461	91,295	151,995	40.9	1,476,750
Sizwe Medical Fund	148,544	2,141,046	-57,433	8,744	25.4	788,689
Liberty Medical Scheme	124,056	1,672,699	-86,040	-9,384	26.2	835,456
Transmed Medical Fund	111,035	1,418,123	84,168	99,071	16.3	408,296

Source: Data from the CMS[108], 2012/13.

[108] See footnote 10.

Figure 17 shows the distribution of investments of all South African private medical schemes at the end of 2012. It indicates the distributed portfolio aimed to diversify risk appropriately and ensure availability of funds to pay for healthcare services on behalf of beneficiaries when benefits become due. This also provides an indication of multiplier effects that medical schemes have on the economy through investment in various sectors. Total investment income for all schemes amounted to R 2.36 billion in 2012.[109]

Figure 17: Medical schemes' investments, 2012



Source: Data from the CMS[110], 2012/13.

Alongisde a strong portfolio of investments, the medical schemes industry as a whole has, for the past 12 years, maintained a solvency ratio (accumulated funds – excluding *inter alia* funds set aside for specific purposes and unrealised non-distributable profits – as a percentage of gross contributions) well above the required level. In 2012 the industry average solvency ratio was 32.6%.[111] This indicates the economic stability of the medical schemes industry.

4.2.2 Pharmaceuticals

Adcock Ingram, Aspen Pharmacare Holdings and Cipla Medpro are the 3 largest pharmaceutical groups that had JSE listings in 2012 (Cipla Medpro has recently delisted in 2013). Adcock Ingram was first listed on the JSE in 1950.[112] Aspen Pharmacare Holdings was listed on the JSE in 1998.[113] Both of these groups still have their primary (and sole) listing on the Johannesburg Stock Exchange (JSE) and hence substantially affect local investment, as well as taxation, as indicated in Table 7. The magnitude of

[109] See footnote 10, p. 268.
[110] See footnote 10.
[111] See footnote 10.
[112] Adcock Ingram website, Our Heritage.
[113] Aspen Holdings, April 2013 Fact Sheet.

investment and international recognition that the South Africa private pharmaceutical sector supports will be discussed further in section 4.4.3.

Table 7: Listed pharmaceutical groups' financial information, 2012 (R million)

	Revenue	Profit before taxation	Taxation	Total assets	Market capitalisation
Adcock Ingram	4,644	887	168	5,282	10,000
Aspen Pharmacare	15,256	3,440	772	31,719	57,234
Cipla Medpro	2,297	252	84	3,013	4,009

Source: Data from respective annual reports (Adcock Ingram, Aspen Pharmacare and Cipla Medpro), 2012

4.2.3 Analysis of rising expenditure

It is important at this point to note the fact that despite the impressive financial findings presented above, there has been much recent debate over the reason for rising private healthcare costs. This matter has been discussed in section 2.3.2, leading to the conclusion that there are varying reasons for increased rising private healthcare costs, with particular evidence suggesting that this is driven by increased utilisation rates. Such a conclusion thus does not detract from the impression of the above-mentioned financial contribution that the sector makes to the South African economy.

4.3 Education

South Africa takes pride in the skills and training of its healthcare practitioners. Practitioners trained in one of the prestigious 8 medical campuses around the country are invaluable to the nation. Moreover, boasting training in locations with good facilities where the volume of patients is high and the severity of problems are serious gives students an opportunity to attain intensive practical experience that would not be available in many other countries. It is thus not surprising that South African healthcare practitioners' training has a marked reputation globally.[114]

4.3.1 Career entry and supply levels

Despite the global reputation of South African healthcare workers, the constraints to entering such a market are significant, with varying barriers depending on which healthcare services are being considered. The direct and opportunity costs of studying, training and community service required to

[114] This positive perspective may have deteriorated recently due to inadequate funding for training platforms, a problem that is more pronounced in the public healthcare sector, but certainly impacts on the private sector.

become a healthcare practitioner can be substantial, particularly in the case of GPs, and even more so in the case of specialists. If one aspires to pursue a career in medicine, 5 – 6 years of training as well as 1 – 2 years of internship are required. Thereafter, one may register with the HPCSA, but would still require community service to be considered an independent practitioner. Specialisation will, on average, require a further 4 years of study and working as a registrar.

With the limited amount of local institutions available, the heavy educational requirements, and the opportunity costs of pursuing a career in medicine, practitioners are in short supply at all levels.[115] Private and public sector doctors are at full capacity and this is not predicted to change with the expected population growth. One solution is to train more practitioners at a faster rate. The private healthcare sector has been fundamental in proactively striving to achieve this goal.

4.3.2 Private sector training initiatives

In 2012, Life Healthcare committed R 78 million over 6 years for the training of specialists through the Colleges of Medicine of South Africa. Alongside this, they have taken even more immediate steps by currently having 1,250 nurses in training in South Africa (continuing their level of focus on training from previous years).[116]

Prior to this, in 2011, Netcare (SA) committed a total skills development spend of R 34 million for their annual year leading up to 31 March 2012. However, actual spend exceeded this and was recorded at R 42 million for 34,885 learning and development interventions. This represents a 5% year-on-year spend increase, with spending on African, Coloured, and Indian (ACI) employees growing to 78.5%. Currently 3,294 nurses are enrolled in training by Netcare in South Africa.[117]

Mediclinic pursues its training and development strategy through its 3-tiered CSI programme (see section 4.1.2), alongside their training of nurses, spending approximately 4% of payroll on training. Mediclinic's 2012 annual report records 35,320 structured learning interventions in Southern Africa.[118]

Medical schemes have also contributed to large-scale training initiatives. The Discovery Health Foundation, for example, launched a 10-year programme in 2006 for the training of an extra 300 specialists. The Foundation also supports skills development programmes in rural areas as well as training programmes for mid-level healthcare workers.[119]

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[115] Friderichs, C., 2012. South African Mobile Health Market Opportunity Analysis. Director of Health, GSMA. p. 5.
[116] Life Healthcare, 2012. Annual Report 2012, p. 26.
[117] Netcare, 2012. Annual Report 2012, p. 72.
[118] Mediclinic, 2012. Annual Report 2012, p. 92.
[119] Discovery, 2013. Website information.
Available at: https://www.discovery.co.za/portal/individual/corporate-view-content?corporateNodeName=developing-people

Some of the development efforts by the private sector have not been easily introduced. For several years the private sector was prevented from training nurses by a prohibition on accrediting new institutions. Although this moratorium was lifted in 2008, the SANC insisted that accreditation could not be granted until a new curriculum was finalised.[120] For example, Mediclinic obtained approval for a nursing college by the South African Qualifications Authority (SAQA) in 2007, but the new curriculum was only able to be introduced in 2012. This delayed the training of many new nurses.[121] Private sector hospitals have hence sought to recruit nurses from abroad. Mediclinic has been recruiting specialist nurses from India, while Netcare is attempting to attract South African nurses working in Britain.[122] This recruitment assists in providing training, supervision and distribution of technical skills for local workers.

4.4 International linkages

South Africa has long been a world leader in medicine. In 1967 Dr Christiaan Barnard performed the world's first successful human-to-human heart transplant. In the 1960s Dr Allan Cormack helped invent the first computerised tomography (CAT) scan. Such events have catapulted South Africa onto the medical stage of the world. The South African private healthcare sector has since built on such precedents and taken initiative to maintain such international interest for the country in various notable ways:

- Private hospital groups have won tenders to provide health services internationally;
- Private medical schemes are exporting some of their ideas to other countries;
- Some of the world's leading pharmaceutical companies are represented locally;
- The sector has made efforts to expand into other countries;
- The sector has deservingly attracted substantial foreign investment and interest; and
- Medical tourism, both North-South and South-South is growing.

These examples outline the success of South African private healthcare from a global perspective. Such international interest has assisted in the attaining of international support for investment, innovation and skills deployment in the South African economy.

4.4.1 International tenders by private hospital groups

Contracts have been awarded to private healthcare providers by the British National Health Service (NHS), which has experienced severe pressure to speed up the provision of medical care, particularly for surgical procedures.

[120] Khan, T., 2010. 'Bungling' Stymies Bid to Train South African Nurses, Business Day.
[121] See footnote 18.
[122] Henderson, G., 2008. Research Report on General Hospitals. Whom Owns Whom: Essentials Business Information.

In 2001, Netcare established Netcare United Kingdom (UK) to win tenders from the NHS to provide clinical services in the UK. The first contracts Netcare won were 4 "clinical teams" contracts. These included 929 cataract operations performed in Morecombe Bay; around 12,000 ear, nose and throat procedures in London; 338 hip and knee joint replacements in Southport; and 1,000 orthopaedic operations in Portsmouth. All procedures were conducted in NHS facilities by South African personnel. Overall, a total of around 200 South Africans participated by travelling to the UK on a rotational basis. Following this, Netcare UK won 2 tenders for Independent Sector Treatment Centres (ISTCs), which was the major start of their expansion abroad, heightened with their 2006 consortium acquisition of the General Healthcare Group.[123]

Life Healthcare (then Ahealth), in a joint venture with Care UK PLC, was in 2004 contracted to construct and operate 3 Diagnostic Treatment Centres in England, which included consulting rooms, radiology centres (including X-ray, CAT scanner, magnetic resonance imaging (MRI) and ultrasound), pathology laboratories, theatres, intensive care unit (ICU) beds, general beds and a rehabilitation gymnasium.[124]

These contracts that were awarded confirm and draw attention to the competency of South African private healthcare practitioners in providing world-class medical care. Moreover, such contracts result in substantial remittances to South Africa; these remittances form a stable contribution to the South African economy and assist in mitigating regional-specific income risks.

4.4.2 Export of ideas by private medical groups

South Africa has gained international recognition for the apartheid-era emigration of its leading community-oriented primary care proponents and the subsequent dispersion and development of community-oriented primary care principles.[125] This approach of holistic and preventative healthcare has since been innovatively developed by the private healthcare sector. Most recently and notably, Adrian Gore has brought international attention to the South African private healthcare sector through his Discovery Vitality system. In a report released by the Workplace Wellness Alliance at the World Economic Forum held in January 2013 in Davos, Switzerland, Vitality was acknowledged as a global case study on wellness, and a gold standard for incentivising healthy behaviour and outcomes.[126] "Who would have thought that this transformational wellness approach in the U.S. came out of a post-apartheid health insurance sector in South Africa…that this would trigger something now at the center not only of US healthcare, but globally?" voiced Tal Gilbert, Vitality's Senior Vice President for Marketing in the US. The Vitality programme started in South Africa and has made its path to the forefront of global medical

[123] Netcare website, Company Profile and Company History.
[124] Life Healthcare and Netcare company website archives.
[125] Kautzky, K. & Tollman, S.M., 2008. A Perspective on Primary Healthcare in South Africa. School of Public Health, University of Witwatersrand.
[126] Discovery, 2012. Annual Report 2012, p. 52.

scheme models. The structure of this concept is embedded in behavioural economics, where overall pooled risk is reduced by incentives at an individual level. The specifics of this concept are expanded on in section 4.5.2.

4.4.3 Representation by leading pharmaceutical groups

Adcock Ingram, Aspen Pharmacare Holdings, and Litha Healthcare Group are the 3 pharmaceutical groups listed on the JSE. Adcock Ingram originated in South Africa and was first listed on the JSE in 1950. Adcock Ingram has since made itself globally recognised by its acquisitions in India, Zimbabwe, Kenya and Ghana.[127] Aspen Pharmacare Holdings was listed on the JSE in 1998, and is now a noted multinational with operations in South Africa, Asia Pacific (including Australia, Philippines, Hong Kong, Malaysia), Sub-Saharan Africa (including Kenya, Uganda, Tanzania and Nigeria) and internationally (including Mexico, Venezuela, Brazil, Mauritius, United Arab Emirates, Ireland and Germany). Aspen has 17 manufacturing facilities at 12 pharmaceutical manufacturing sites on 6 continents[128]. Litha Healthcare Group has been listed on the JSE main board since 2010 and has since signed license agreements with Italian and Indian companies.[129] Together these 3 companies, amongst others, bring international recognition to South African pharmaceuticals and all revenue generated by these groups within the South African private health sector feeds through to the entire economy via the multiplier effects and interlinkages described above.

Corporate activity amongst local players within the private pharmaceutical sector is currently flourishing as the current and expected worth of the sector is realised. In 2012 South Africa's Litha Healthcare Group acquired Pharmaplan from Canada's Paladin Labs for R 590 million. In the same year South Africa's Ascendis Health bought local company Chempure for an undisclosed sum. Whilst such local investment activity creates security of demand for domestic production, it has not deterred international investors. For example, in 2012 multinational company Merieux NutriScience bought a majority stake in South Africa's Swift Micro Laboratories and in 2013 India's Cipla received approval for its Cipla Medpro South African acquisition.[130] These deals all substantially assist in industrialising South Africa through many direct and indirect channels.

4.4.4 Expansion of hospital groups into other countries

South African private healthcare companies have already established businesses in other African countries and have declared their intention to expand their investments in a wider range of countries. A

[127] See footnote 112.
[128] See footnote 113.
[129] Litha Healthcare Group, 2012. Annual report 2012.
[130] Dynes, M., 2013. "In Good Health." Africa Investor, July – August 2013, pp. 41 – 42.

2009 article in the Financial Mail[131] indicates the innovative and hands-on attitude that exists in the private healthcare sector: "Netcare is not sitting back and waiting or hoping for government to improve the investment landscape in South Africa. Private hospital companies battling to expand locally are now looking elsewhere for growth… In countries such as Zambia and Namibia, Netcare is conducting feasibility studies with a view to setting up PPP or co-location projects… It helps that there is a list of agencies including the Development Bank of Southern Africa and the World Bank's International Finance Corporation (IFC) keen on investing in healthcare in Africa today. Netcare is casting its net wider and looking at the likes of the Central African Republic, Ghana and the big fish, Nigeria, where new, fully fledged private hospitals are on the cards." Today Netcare operates the largest private hospital network in South Africa and the United Kingdom.

In 2012, the Life Healthcare Group acquired a 26% shareholding in Max Healthcare Institute (MHC), an Indian hospital group. MHC has 9 hospitals with 1,943 beds in the Delhi and surrounding regions. Such corporate action is aligned with the Group's strategy to become a pre-eminent hospital operator in selected offshore emerging markets with a particular focus on India and specific countries on the African continent.[132]

Mediclinic has operations beyond South Africa in Namibia, Switzerland and the United Arab Emirates. Specifically, in Switzerland, Mediclinic owns the largest private hospital group, Hirslanden, and in the United Arab Emirates Mediclinic holds the controlling share in Emirates Healthcare. This is aligned with their strategy to have a strong presence in diverse geographies and consequently mitigate country specific risk.[133]

Such international expansion of business activities by these locally listed hospital groups and pharmaceutical groups (referred to in section 4.4.3) generates additional portfolio investment inflows to the South African economy as foreign investors buy shares in these successfully growing companies. Moreover, such international expansions may also assist in directing foreign direct investment and aid to South Africa, as elaborated on in section 4.4.5.

4.4.5 Foreign investment attraction by the sector

Research conducted in 2008 by McKinsey in partnership with the IFC and the Bill and Melinda Gates Foundation indicated the IFC's intention to invest heavily in private for-profit healthcare organisations in Africa. In order to facilitate this, their research report called on African governments to "modify local regulations that impede the development of the private health sector." They also argued that donors

[131] Financial Mail, June 5, 2009, p. 62.
[132] Life Healthcare Group Annual Report 2012, p. 6.
[133] Mediclinic, 2012. Annual Report 2012, p. 4.

(including private donors such as the Gates Foundation and governments of high-income countries) "should consider earmarking aid to directly support private-sector entities, and also expand risk-pooling arrangements."[134] In 2010 the IFC gained a 5% shareholding in Life Healthcare, with a value of US$ 93.1 million. Life Healthcare's latest (2012) report stated[135]: "We are busy concluding a joint venture with the IFC, to work together with our growth strategy within Africa." In the same 2012 annual report, foreign beneficial shareholding in the Group was quantified as constituting 44.26% of total beneficial shareholding.[136] This is just one example of how foreign investors wish to support the private sector's initiatives due to the sector's determination to successfully develop their services in new markets according to demand.

South Africa's attraction of capital inflows has been key to the economy's development. More recently, however, foreign capital inflows to South Africa have been threatened by factors such as local labour unrest.[137] In the midst of such events, it is crucial that sectors that attract large amounts of relatively stable foreign investment, such as the private healthcare sector, are preserved.

4.4.6 Medical tourism

Not only does the private healthcare sector reinvest local money into the economy, but to some extent it also brings foreign finance to the country. One specific means for this is through medical tourism, which has become a major focus of research and policy analysis in recent years.

Medical tourism represents trade in medical services. The destination country (in this case South Africa) becomes the exporter (and as such adds to GDP) whereas the home country becomes the importer. Therefore, it is crucial for the destination country to provide services of such a quality that it maximises exports. In this way, due to the high quality services that it provides, the private healthcare sector prominently attracts medical tourism to South Africa, whilst the public sector may not provide services of the required quality and specialist level. The private sector has hence recognised not only that they can provide quality services of the level required by foreigners, but also that South Africa inevitably provides an attractive location to develop the medical tourism industry due to a fair exchange rate relative to many countries and an ideal location for pre and post operation stay. This recognition by the private healthcare sector of such an opportunity has caused the development of an industry that now substantially contributes to the South African economy.

[134] Ghatak, A., Hazlewood, J., and Lee, T., 2008. How Private Healthcare Can Help Africa. The McKinsey Quarterly, March 2008, pp. 1 – 5.
[135] See footnote 132, p. 31.
[136] Life Healthcare Group, 2012. Annual Report 2012, p. 171.
[137] IMF, 2013. IMF Survey Magazine: Countries and Regions. "South Africa Searches for Faster Growth, More Jobs," October 1 2013.

Currently South Africa acts as a hub for North-South export (many patients have travelled to South Africa from the United Kingdom to avoid the long waiting times for medical care in the British NHS[138]) and also for South-South export (predominantly from other African countries). Not only do the physical exports of our health services in the private sector add to GDP, but there are spillover effects to other sectors of the economy as well, with the tourism sector being most pronounced. Data on the volume of medical tourism to South Africa are limited (due to travellers not clearly stating their reason for entry), but prior studies show that the number of medical travellers increased from 327,000 in 2006 to more than 500,000 in 2009 but dropped again to under 400,000 in 2010.[139]

4.5 Healthcare scalability through innovation

4.5.1 Healthcare demand and supply

As earlier stated in section 3.2.1, 8.7 million individuals (or approximately 17% of the population) access the private healthcare sector through private medical insurance. If one is to include an estimate of those who do not have medical insurance but nevertheless access private healthcare, this figure rises to 28% – 38% of the population (being served to some degree by the private healthcare sector).[140] Moreover, the data from the 2012 General Household Survey indicate that 29% of all households (not only those who use private healthcare) first consult a private GP when an individual falls ill (this percentage was 24.3% in 2011).[141]

The fact that the private healthcare sector has grown to service this extent of the population indicates that private healthcare providers and funders are taking some of the burden off the state by providing health services to a significant portion of the population; the sector has taken up the responsibility to respond to a market failure in the public health sector.

4.5.2 Product innovation

Beyond the above-mentioned response by the private sector, it is recognised that the sector is nevertheless under pressure as doctors and specialists are still in short supply. This explains why practitioners are often not inclined to trade off lower prices for volume – due to the fact that they are already operating at full capacity. This scalability issue has begun to be innovatively tackled by the private healthcare (funding) sector to increase efficiency whilst reducing expenditure.

[138] Browne, A., 2002. NHS Cases Pay for Quick Ops in South Africa. London, The Observer, March 17, 2002.
[139] Crush, J., Chikanda, A. & Maswikwa, B., 2012. Patients Without Borders: Medical Tourism and Medical Migration in Southern Africa. Southern African Migration Programme. Migration Policy Series No. 57.
[140] See footnote 42.
[141] HASA news, 2011, June/July, p. 1.

In order to cope with this excess of demand, practitioners aim to act efficiently, yet still in the best interest of the patient. The changing landscape of private sector medical care reflects this; there is now a focus on proactive or "consumer-driven" healthcare by the individual. The individual is to be empowered both before and after professional help to care for and monitor their own health. This encourages a system of self-referrals based on the ability of the patient to proactively research and assist their own condition of health such that their first point of contact with a private practitioner is more likely to be aligned with what is needed at that point, rather than a simple referral point. This may ensure that GPs' services are more efficiently and effectively used. Note that the success of such a process largely relies on education and technology access by the individual. Prevalent risk factors may then be reduced to some degree by activities entirely in the ability of the individual to control. These activities include choice of alcohol intake, smoking, dieting and exercise.

The world renowned Discovery Vitality programme (started by the private healthcare sector in South Africa), epitomises this concept of reducing the need for "sick care" by focusing on "health care". In this system members are compensated or subsidised for looking after themselves (buying health products, going for basic medical check-ups, gym attendance, etc.). Due to the fact that everyone is equally incentivised, the overall risk for the group is reduced and participation in the system is hence more attractive. From a behavioural economic theory perspective, it would be challenging to attain this level of incentive and hence active participation from a public system where everyone indirectly and to some extent buys-in (through taxes), regardless of their risk level.

4.6 Human productivity

The private healthcare sector provides services to members of medical aid funds, those who choose to pay out-of-pocket for healthcare and employees of companies with their own health facilities. These individuals that utilise private healthcare services are highly correlated with the formally employed population and thus, for the productive functioning of the economy, it is essential that these individuals are able to attain the quality healthcare that they require in order to fulfil their function in the economy effectively and efficiently.

Data show that these individuals who utilise the private healthcare sector do indeed perceive that they are receiving very high standards of care.[142] The 2011 and 2012 GHS indicate that, in 2011, 93% of the respondents using facilities in the private healthcare sector were "very satisfied" (62% of the respondents

[142] Please note that there are limitations to using self-reported satisfaction data, as it is difficult to decipher how one forms their perception and to what extent this is influenced by expectations. When one reports their satisfaction level it is inevitable that they are unable to entirely disentangle their perception of relative level of service over time from absolute level of service over time. For example, if one forms an expectation based on previous experiences that they will wait in line for 6 hours before seeing a doctor, however they then actually only wait in line for 3 hours, they may report that they are very satisfied with the experience, when actually they are only satisfied with the relative improvement (possibly not the absolute level of service). This is just one example that cautions against excessive reliance on self-reported data.

using facilities in the public healthcare sector were "very satisfied").[143] In 2012, 92% of the respondents using facilities in the private healthcare sector were "very satisfied" (57% of the respondents using facilities in the public healthcare sector were "very satisfied").[144]

Due to the fact that individuals may show subjectivity in their perception of the standard of care that they receive, it is necessary to direct more attention to the actual results of such healthcare. A study by the Monitor Group in 2008 is useful in this regard. The aim of this study was to assess the quality of healthcare systems in 48 countries (comprised of both developed and developing countries). The quality variable was compiled using a rich set of variables including perceived health status, life expectancy, immunisations, prevalence of a selected number of diseases, obesity, smoking, a number of mortality indicators, the World Health Organisation (WHO) health system responsiveness score and TB treatment success rate (under Directly Observed Therapy, Short-course (DOTS)). South Africa's health system fared poorly, ranking tenth from the bottom. The analysis then proceeded to evaluate the South African public and private sectors separately as if they represented 2 different countries. The South African public sector was ranked eighth from the bottom based on its performance, while the South African private sector was placed sixth overall – in the company of Australia, Sweden, Belgium, Switzerland and Ireland.[145]

The fact that the private healthcare sector produces such world class health indicators shows that it also substantially affects productivity in the economy through the productive capacity of those who utilise the sector. Research shows that this theory holds vehemently true in reality. Data for 104 countries from 1960 – 1990 show that a 1 year improvement in a population's life expectancy leads to an increase of 4% in output (GDP).[146]

Indeed in South Africa it is expected that those who utilise the private healthcare sector achieve more effective and efficient work as well as fewer sick days and longer productive work lifespans. The end result includes longer and more stable earning periods for individuals and through this growth of investment and secure retirement, as well as inter-generational planning and transfer of skills. Moreover, increased physical and mental capacity brings innovation, strengthened businesses and more local and foreign investment. Hence strengthening of overall investment is the end achievable result for businesses, individuals and the economy as a whole.

In summary, it has been found that the private healthcare sector not only provides quality health services ensuring overall economic productivity gains, but also has had, and continues to have, a substantial effect

[143] Statistics South Africa, 2011. General Household Survey 2011.
[144] Statistics South Africa, 2012. General Household Survey 2012.
[145] See footnote 39.
[146] Bloom, D.E., Canning, D. & Sevilla, J., 2003. The Effect of Health on Economic Growth: A Production Function Approach. World Development, Vol. 32, No. 1, pp. 1 – 13.

on the economy by creating employment and income, investment opportunities and public funds, training and development programmes, international linkages and healthcare scalability through innovation. Accordingly, the private healthcare sector not only assists the state in fulfilling its constitutional obligation to provide healthcare services, but the activity of the sector also has a profoundly positive effect on the greater South African economy. Looking forward, such findings deserve due consideration and it would be wise for the government to facilitate a regulatory environment that supports the long-term growth and sustainability of the industry. In the following section we show that despite the impressive economic contribution and far reaching effects of the private health sector, the current regulatory environment is not conducive to sustained growth in this sector.

5 Looking Forward

The private healthcare sector has grown considerably in response to the strong demand for high quality healthcare services. However, looking forward, the regulatory and institutional landscape of the sector in its current form may not necessarily provide a sustainable solution to South Africa's healthcare problems, specifically because of the existing funding structure. The current means and form of funding – through medical schemes and significant out-of-pocket payments – is threatened by the lack of appropriate regulation in some specific areas.

Targeted, well-designed regulation can play an important role in addressing market failure where needed. It steers market players in the desired direction by defining the 'rules of the game' and protecting the rights of citizens. It should be noted though that regulation often has unintended consequences, unforeseen by the regulator. An example of this is the 2003 decision by the CC to stop collective bargaining by hospitals; a decision which may have contributed to subsequent tariff increases. Such adverse effects can impact significantly on a particular market and this is also what is witnessed in the private healthcare sector at the moment. Lack of regulatory coordination, as well as incomplete and misinterpreted laws/regulations, are affecting the economic behaviour of patients, beneficiaries, funders and providers. Amongst other things, we see this impact through increased utilisation rates, escalating costs and dramatic price increases. These are systemic issues which need to be addressed in order for the private healthcare sector to continue growing in a more sustainable way in the short to medium term, but also alongside the NHI in the longer term.

At present, the regulatory framework fails to ensure the long-term sustainability of the private health industry. Theoretically, private medical schemes rest on 3 pillars, namely community rating, open enrolment, and mandatory membership[147]. *Community rating* entails that within a medical scheme option, every person is charged the same contribution rate regardless of their age or health. The medical aid contribution is therefore based on the health status of the entire pool and not the health of a specific individual. *Open enrolment* ensures that a medical scheme must accept any applicant regardless of their age or health status. The third pillar, *mandatory membership*, dictates that medical scheme membership is compulsory for a specific group, i.e. all formally employed individuals for instance. The South African open medical schemes environment currently comprise of the first 2 pillars. Due to partial implementation of these pillars, the long-term sustainability of open medical schemes is threatened by increased prevalence of anti-selection, whereby younger and healthier individuals choose not to be part of a medical scheme. These individuals are not willing to pay the higher premium that results from the inclusion of the old and sick population in the risk pool. As such, fewer people are left in the risk pool to fund the medical scheme, which pushes up the medical scheme contribution rate even further. These higher premiums

[147] Mediclinic, 2012. Understanding The Elements Of Your Medical Scheme Environment. Available at: http://thefutureofhealthcare.co.za/understanding-the-elements-of-your-medical-scheme-environment/.

provide even more of a disincentive for younger and healthier people to be part of a medical scheme, which ultimately erodes the risk pool.

Secondly, concurrent to anti-selection and the expected resultant increased utilisation rates in open medical schemes, inadequate regulation with regards to PMBs in the private healthcare sector may further contribute to the reported cost escalations. This is a relevant problem for all medical schemes, both open and restricted. Due to broad definitions and other coding issues related to PMBs, utilisation of services in this category is under pressure. This is a regulatory matter that requires scrutiny and it is expected that the specific setting of PMBs will soon be subject to change. This is just one pertinent example that highlights the fact that tightening of regulation is expected throughout the private healthcare sector, possibly also as a result of the imminent inquiry by the CC.

Other issues that are currently under review include the updating of clinical diagnosis and treatment codes, as well as the actual price of services provided by healthcare professionals. The use and publication of a reference price list in the private health sector has a long, contentious history and such a mechanism is again being considered in great detail by the HPCSA which has already received many public submissions in this regard. As a result of the issues mentioned above, as well as other cost drivers in the industry, some form of price regulation could potentially solve, at least partially, the problems related to overcharging (especially when it comes to PMBs). *While we do not believe the outright fixing of prices by the government is appropriate and will have the desired economic outcomes, the current gap in regulation requires the regulator to act decisively and address existing problems with great urgency.*

Another structural feature of the private health sector funding model which impacts the sustainability of the industry is the primary use of a fee-for-service payment system. This billing method or funding model has been shown to drive up costs and does not provide the necessary incentives for cost-containment.[148] Recently there has been some progress in this regard with a few funders testing capitation based payment systems, as well as alternative reimbursement models (ARMs) such as per diems, diagnosis-related group (DRG) payment systems, etc. We expect that increased pressure from patients, beneficiaries and the regulator will push funders and providers to further explore these types of arrangements that introduce risk-sharing and establish cost-minimising incentives.

The option of introducing a risk-equalisation fund (REF) which would have gone a long way in addressing the problem around anti-selection and curbing the actuarial death spiral in the absence of any mandatory

[148] Econex Health Reform Note 6. Available at: www.econex.co.za.

membership requirement, is no longer on the table according to the CMS. Considering the severity of the cost escalation problem and underlying causes thereof, the REF could have been an 'easy-fix', so to speak. While we believe that the reason for not implementing this mechanism is related to the expected introduction of the NHI, we make the argument that the problems plaguing the private health sector require immediate attention that will ensure the sustainability of this sector in the short to medium term.

The NHI will not change the institutional landscape overnight, but due to the pressures highlighted above, the private healthcare sector, with its current funding arrangements, is not entirely sustainable. However, the evidence from the previous two chapters makes it clear that the sector plays a crucial role in the South African economy and assists the government in fulfilling a mandate which cannot be ignored. Accordingly, slight regulatory changes are expected (argued for) in future to ensure the economic survival of this pivotal industry. Although the NHI is only expected to impact the sector in the long term, it would be prudent to realise that business will not continue in its current fashion forever.[149]

The CC will soon bring all of these issues under the looking glass during the private healthcare inquiry due to start in January 2014. Similar to the private health sector inquiry currently underway in the United Kingdom (UK), all market players and stakeholders are expected to bring evidence and share their views/ experience related to current cost structures, market power and economic relationships in the sector. This should assist the Commission in understanding present utilisation trends, as well as cost and price increases. It is anticipated that they will publish their findings and make detailed recommendations as to the required government intervention and regulation, to ensure a sustainabile growth path. This will take into account the goal for the national health system to achieve universal coverage as soon as possible and the important role that the private health sector has to play in shouldering the burden of providing quality healtcare services that are accessible to all.

The government has a further essential role to play that will also require significant changes in the future, i.e. the adequate provision of public health services. Private health services are not geared to supply the demand for health services by the entire population, nor should it have to. The provision of high quality public health services is necessary both for the survival of the private and public health sectors. Competition from the public health sector (as is the case in many other countries) will be one of the best cost-containment strategies for the private sector, as it incentivises optimal economic behaviour that should also curb price increases by private sector providers. If patients had a real choice between public

[149] At this current point we await certain key developments, each of which have called for the public's expectation of development for some time. Firstly, the commencement of the private healthcare sector inquiry on 6 January 2014, as per the final terms of reference, released on 29 November 2013. Secondly, the NHI White Paper is expected soon, particularly as 2 years have passed since the NHI Green Paper was released, allowing time for thorough consultation derived from public comment and engagement on broad principles. Thirdly, the NHI funding paper by the National Treasury should also be released for public comment soon. The National Treasury is working with the Department of Health to examine the funding arrangements and system reforms required for NHI. This is the cornerstone of the NHI's successful development. Fourthly, the HPCSA tariff guidelines process is still underway. After the removal of reference tariffs in 2008, these were again reviewed in 2010 and were subsequently declared invalid and set aside by the Gauteng North High Court following on a successful challenge against the published RPL by SAPPF, HASA, Netcare 911 and ER 24.

and private health services where the quality and outcomes are comparable, we would have gone a long way in addressing the problems that plague the private sector, as well as addressing some of the existing inequalities (without direct market intervention that could have unforseen negative consequences, as discussed above).

Moving forward, there are some immediate steps both by government and private sector stakeholders that could impact significantly on current problems in the private healthcare sector. These include regulation related to some form of mandatory membership or at least the introduction of the REF, as well as clarity on issues that affect the daily operation of the industry (PMBs, coding, reference prices, etc.). Through the findings and recommendations of the healthcare inquiry, the government is also expected to take a longer-term view of the role and involvement of the private health sector, especially considering the structure of the NHI and long-term sustainability of this important industry. While we are of the opinion that some regulatory intervention is required, we do not think that direct government intervention in micro aspects of private health delivery will be optimal. It is preferable to leave the shaping of a future private health sector to market forces that respond to the suggested (needed) regulatory changes.

6 Concluding Remarks

The private healthcare sector has grown and developed as a response to the historical path of policy reform in the healthcare sector and the concurrent demise of the public healthcare sector. Due to these circumstances, the private healthcare sector has risen to satisfy the demand for quality healthcare services. The relative extent of this demand and consequent growth and development of the sector is such that in 2012 the private healthcare sector provided primary healthcare services for an estimated 28% – 38% of the South African population.[150] This magnitude of service is largely made possible through GPs, specialists and other healthcare providers that dedicate their skills to the private healthcare sector. Approximately 37% of GPs and 59% of specialists are active in the private sector.[151]

Today the private healthcare sector is not only substantial in size from a relative perspective (as indicated above), but also from an absolute perspective. Modest estimates (excluding private clinics within pharmacies, at factories or large companies, as well as travel, baby and other types of privately owned clinics) indicate that at the beginning of 2013 there were 314 day-clinics and private hospitals in South Africa, allowing for a total of 34,572 private beds.[152] Alongside this infrastructure, it is estimated that the numbers of doctors and nurses working in the private healthcare sector are 14,255 and 77,569 respectively. There are also thousands of allied health workers (pharmacists, dentists, etc.) working in the sector. Beyond all of these service providers, there are substantial roles for funding and administration. At the end of 2012 there were 25 open medical schemes and 67 restricted medical schemes.[153] Moreover, the overall provision of healthcare services by the private sector is only possible because various other industries supply the necessary goods and services to the industry. If one is to consider the extent of the sector from this perspective, one begins to have an idea not only of how large the sector is, but also of how far-reaching it is from an economics perspective.

The intention of this report was to investigate whether and how the private healthcare sector, with its current capacity outlined above, affects the greater South African economy. The findings of the research show that the private healthcare sector not only provides excellent quality healthcare that is highly regarded on an international scale, but also has had, and continues to have, a substantial effect on the economy. The sector creates employment and investment opportunities, provides training and development programmes, creates international linkages, and encourages healthcare scalability through innovation and productivity gains.

Despite the impressive findings regarding the functioning and impact of the private healthcare sector, given the increasing risk pools and the increasing utilisation levels, it is expected that the institutional

[150] See footnote 42.
[151] See footnote 45.
[152] See footnote 49.
[153] See footnote 10.

landscape of the sector will inevitably change over time. We await many changes that are expected to arise in the healthcare sector as a whole, including those with regard to the phasing in of the NHI. In the meantime, an understanding of the ways in which the private healthcare sector has been and is performing well, may assist policy makers in determining the means for the sector's incorporation into future healthcare plans for the country as a whole. From the overall findings of this report, it is evident that the sector does indeed contribute substantially to the economy and as such is a national asset that should not be overlooked. Accordingly, with the landmark move toward the important goal of the NHI, one can appreciate that South Africa has much that has been and is already successful in terms of private healthcare, on which we can build and develop capacity going forward.

Appendix 1: Estimated Numbers of Private Sector Specialists, 2013

Table 8: Estimated numbers of private sector specialists, 2013

Practice code	Practice description	Number of specialists[154]
10	Anaesthetists	852
12	Dermatologists	180
15	Family medicine specialists	59
16	Gynaecologists	740
17	Pulmonologists	43
18	Specialist medicine physicians	837
19	Gastroenterologists	39
20	Neurologists	104
21	Cardiologists	113
22	Psychiatrists	466
23	Oncologists[155]	127
24	Neurosurgeons	138
26	Ophthalmologists	295
27	Clinical haematologists	11
28	Orthopaedic surgeons	546
30	Otorhinolarynologists	251
31	Rheumatologists	17
32	Paediatricians	460
33	Cardiology paediatricians	12
36	Plastic and reconstructive surgeons	143
38	Radiologists	143
42	Surgeons	520
44	Thoracic surgeons	91
46	Urologists	195
52	Clinical pathologists[156]	228
62	Maxillo-facial surgeons	115
98	Oral pathologists	2
	Grand total	6,726

[154] See footnote 45 for an explanation of the methodology used.
[155] Due to the fact that oncology practices are often very large, data provided by administrators were supplemented with data from the Independent Clinical Oncology Network (ICON) of South Africa.
[156] Due to the fact that pathology practices are often very large, data provided by administrators were supplemented with data from the National Pathology Group (NPG) of South Africa.

Appendix 2: Analysis of Medical Scheme Benefits Paid, 2012

Table 9: Analysis of medical scheme benefits paid, 2012

Healthcare provider category[157]	Cost (R'000)	% of total[158]
GPs	**7,473,029**	**7.23**
Medical Specialists	**24,029,976**	**23.25**
Consulting,Diagnosing & Surgical specialists	*12,412,085*	*12.01*
Dermatologists	158,895	0.15
Gynaecologists	1,513,552	1.46
Pulmonologists	73,071	0.07
Physicians	1,886,952	1.83
Gastroenterologists	68,572	0.07
Neurologists	200,610	0.19
Cardiologists	398,564	0.39
Psychiatrists	639,921	0.62
Medical oncologists	117,508	0.11
Neurosurgeons	415,869	0.40
Nuclear medicine	119,460	0.12
Ophthalmologists	1,088,499	1.05
Clinical haematologists	41,521	0.04
Orthopaedic surgeons	1,372,396	1.33
Otorhinolaryngologists	387,848	0.38
Rheumatologists	12,865	0.01
Paediatricians	867,179	0.84
Paediatric cardiologists	17,166	0.02
Physical medicine	1	0.00
Plastic and reconstructive surgeons	135,311	0.13
Radiotherapists	922,386	0.89
General surgeons	1,182,956	1.14
Thoracic surgeons	309,721	0.30
Urologists	481,262	0.47
Clinical Support Specialists	*11,617,891*	*11.24*
Anaesthetics	2,056,594	1.99
Radiologists	4,269,854	4.13
Pathologists	5,118,605	4.95
Other	172,838	0.17
Dentists	**2,784,492**	**2.69**
Dental specialists	**743,273**	**0.72**
Dental therapists	158,877	0.15
Dental technicians	54,571	0.05

[157] Listed as per the order of the CMS 2012/13 report analysis.
[158] Sub-items percentages are subject to rounding of actual figures.

Maxillo, facial and oral surgeons	181,576	0.18
Oral pathologists	678	0.00
Orthodontists	281,971	0.27
Periodontists	35,280	0.03
Prosthodontists	29,735	0.03
Other dental specialists	586	0.00
Support and allied health professionals	**7,975,704**	**7.72**
Audiologists	224,944	0.22
Hearing aid acousticians	57,260	0.06
Biokineticists	66,589	0.06
Chiropractors and osteopaths	100,144	0.10
Clinical technologies	1,398,670	1.35
Homeopaths	47,865	0.05
Occupational therapists	170,737	0.17
Optometrists	2,310,565	2.24
Pharmacists	883,671	0.86
Physiotherapists	1,345,632	1.30
Psychologists	752,609	0.73
Radiographers	110,492	0.11
Speech therapists	34,675	0.03
Dieticians	93,766	0.09
Private nurses	110,136	0.11
Other (including complimentary medicines)	267,949	0.26
Private hospitals	**37,582,131**	**36.37**
Provincial hospitals	**334,748**	**0.32**
Total medicines	**16,340,020**	**15.81**
Other benefits	**3,771,315**	**3.65**
Managed care arrangements	**2,227,741**	**2.16**
Ex-gratia payments	**72,509**	**0.07**
GRAND TOTAL [159]	**103,334,938**	**100.00**

[159] Please note that this indicates health expenditures. Non-healthcare costs may be considered alongside this. This includes costs for administration (R 8.8 billion), managed care (R 2.7 billion), impairments (R 189 million) and distribution (R 1.4 billion). These costs total to R 13.1 billion.