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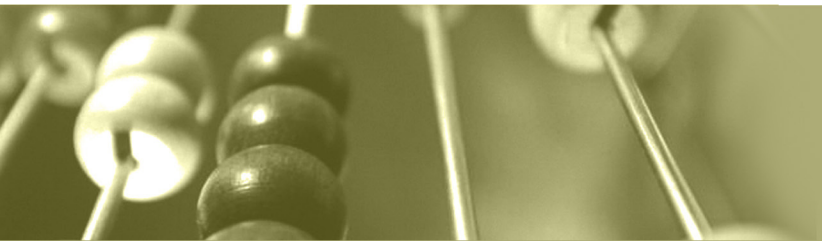


RESEARCH NOTE 32

NOVEMBER 2013

The South African Private Healthcare Sector: Role and Contribution to the Economy

Approximately half of national health expenditure in South Africa is currently being spent in the private healthcare sector. While this constitutes a large portion of total healthcare spending, this also underscores the importance of this sector. This research note summarises the main findings of a larger Econex report in which we considered the importance of this sector by looking at various potential linkages to the greater economy. The findings of our study indicate that the private healthcare sector interacts with, and thereby substantially affects, a number of other industries in the economy. The results indicate that 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 – is connected to other upstream and downstream industries and through these linkages has far reaching economic effects. The sector creates employment and investment opportunities, provides training and development programmes, creates international linkages, and encourages healthcare scalability through innovation and productivity gains.

1 Introduction

The private healthcare sector has grown and developed as a response to the historical path of policy reform in the healthcare sector as a whole[1] and the concurrent demise of the public healthcare sector.[2] Due to these circumstances, the private healthcare sector has grown to satisfy the demand for quality healthcare services for many South African citizens.

The relative extent of this demand and the 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. Furthermore, it was estimated that 37% of GPs, 59% of specialists and 38% of nurses were active in South Africa's private sector.[3] It is also estimated that in 2013 35% of hospitals and 28% of hospital beds are lo-

1. *See, for example, Van den Heever, A., 2012. Review of Competition in the South African Health System. Produced for the Competition Commission (CC) 19 June, p. 26: "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)…"*
2. *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. See, for example, Motsoaledi, A., 2013. Health Budget speech, National Assembly, 15 May 2013.*
3. *A description of the methodology used by Econex to arrive at these estimates is provided in the full report.*

cated in the private healthcare sector.[4] Between 2007/08 and 2011/12 an average of 47%, 50% and 3% of total health expenditure in South Africa was apportioned to the public sector, private sector, and donors/NGOs respectively.[5] These figures all indicate the size and importance of private healthcare in providing access to quality care in South Africa.

In terms of actual numbers, data[6] 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.[7] 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[8] respectively. There are also thousands of allied health workers (pharmacists, dentists, etc.) working in the sector. Beyond these service providers, from the demand side there is a well-defined role for funding and administration. At the end of 2012 there were 25 open medical schemes, 67 restricted medical schemes and approximately 30 medical scheme administrators[9] ,as well as various other health insurers.[10] 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. Again, these figures show the size and importance of this sector, as well as provide a first indication of its reach from an economic perspective.

The aim of our study was to investigate whether and how the private healthcare sector, with its current capacity outlined above, fits into the greater South African economy, by exploring backward and forward linkages. The findings of the research indicate that the private healthcare sector not only provides quality healthcare that is highly regarded at an international level[11], but also has had, and continues to have, a substantial effect on the economy through multiple means, a summary of which is provided below.

2 The Function and Importance of the Private Healthcare Sector

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.[12] This figure includes benefits paid by medical schemes, out-of-pocket expenditure, medical insurance and employer private contributions. It indicates substantial spending within the sector, which is used to finance capital, operational and social expenditures. These expenditures feed through to the rest of the economy via direct, indirect and induced channels. This concept is conveyed in Figure 1 and explored in sections 2.1 – 2.5.

4. *HASA database. All private hospitals, February 2013; South African Health Review, 2012/2013.*
5. *National Treasury, 2007-2012 Budget Reviews.*
6. *Excluding private clinics within pharmacies, at factories or large companies, as well as travel, baby and other types of privately owned clinics.*
7. *HASA database. All private hospitals, February 2013.*
8. *A description of the methodology used by Econex to arrive at these estimates is provided in the full report.*
9. *CMS, 2013. Annual report 2012/13.*
10. *For example, in 2012 it was estimated that there were 1 – 1.5 million hospital cash plan policies in effect. See Finmark Trust & Lighthouse Actuarial Consulting, 2012. Review of the South African Market for Hospital Cash Plan Insurance. September 2012, p. 27.*
11. *The South African private healthcare sector has been ranked in the company of Australia, Sweden, Belgium, Switzerland and Ireland. See: The Monitor Group, 2008. Health Systems Comparison Project, July. Mimeo.*
12. *National Treasury, Budget Review, 2012 and discussions with representatives from the National Treasury, 2013.*

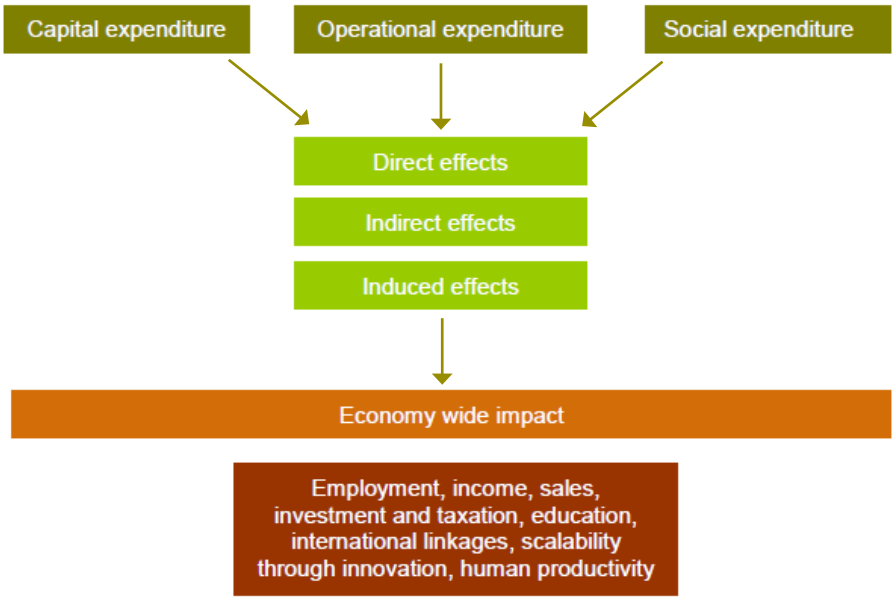
2.1 Employment and related variables

To gauge the influence of the private healthcare sector on employment and related outcomes we estimated employment figures and labour income supported by different participants in the sector, investigated the size of public-private partnerships (PPPs) and social statistics by the larger participant groups, and considered the potential effect of the sector on local skills retention.

We estimated that there are 7,529 GPs, 6,726 specialists, 77,569 nurses, 2,964 pharmacists and 3,527 dentists operative in the private healthcare sector.[13] Beyond this we considered that 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, we considered that the employment supported by the sector due to upstream and downstream value chain linkages in the economy is extensive. Per illustration, a previous study by Econex[14] studied the HASA member hospitals' (representing approximately 70% of all private hospital beds in South Africa) linkages to the economy and found that these hospitals had a workforce of 64,000 employees in 2010. However, this was only the direct effect when considering those that were directly employed by these hospitals.[15] When taking into account the indirect and induced effects,[16] it was found that the HASA members supported 218,000 jobs throughout the economy in 2010, generating labour income in excess of R 23 billion.

In addition to the magnitude of the above employment estimates for the private sector, it is important to understand how the private sector interacts with the public sector and the employment and other effects of such relationships. We found that the larger hospital groups contribute substantially to capacity building in the public sector. Life Healthcare now has a 100% stake in Life Esidimeni (with 12 healthcare community facilities and 4,165 beds), a PPP with government which was established more than 50 years ago (in 2001 Life Healthcare bought a 55% stake and in 2008 they acquired the remaining 45%). Netcare currently operates 4 PPP hospitals, has had 14 PPPs to date, and most recently

Figure 1: The private healthcare sector's multiplier effects on the economy



Source: Econex

13. *A description of the methodology used by Econex to arrive at these estimates is provided in the full report.*
14. *Econex, 2012. The Contribution of HASA Member Hospitals to The South African Economy. Research Note 25, January 2012. Please note that this study was based on a theoretical model to estimate the effect that HASA member hospitals have on the economy.*
15. *Recall that in accordance with the HPCSA ethical rules, private hospitals in South Africa are prohibited from employing health professionals registered with them.*
16. *Found when considering all economic multiplier effects on the economy.*

Table 1: Listed hospital groups' financial information, 2012 (R million)

	Revenue	Profit before taxation	Taxation	Total assets	Wealth created	Market capitalisation
Netcare[19]	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

in 2012 also partnered with the Government of Lesotho in a further venture. Mediclinic has a 3-tiered corporate social investment (CSI) programme (based on pillars of partnerships, monetary and product offering and skills sharing).

We explored social statistics of the different hospital groups to pursue the question of whether their internal workforce is aligned with some of nation's social objectives. It was found that, in 2012, Netcare, Life Healthcare and Mediclinic had 47%, 66.4% and 62.7% of their total workforce as black employees respectively, alongside B-BBEE levels of 3, 4 and 3 respectively. Moreover it was found that these 3 hospital groups together trained more than 2,000 new nurses in 2012.[17]

The above findings indicate substantial employment contributions by the sector, in addition to the private sector effects discussed above. The private hospital groups also play an important role in retaining needed human capital in the local economy by offering many who otherwise may have emigrated a favourable employment opportunity with fair compensation and working conditions. Whilst we do not estimate the exact effect that the sector has on "reversing the brain drain" we believe that this should not be underestimated, as previous studies have shown that in previous years up to 25% of South Africa's registered doctors leave the country.[18]

2.2 Investment and taxation

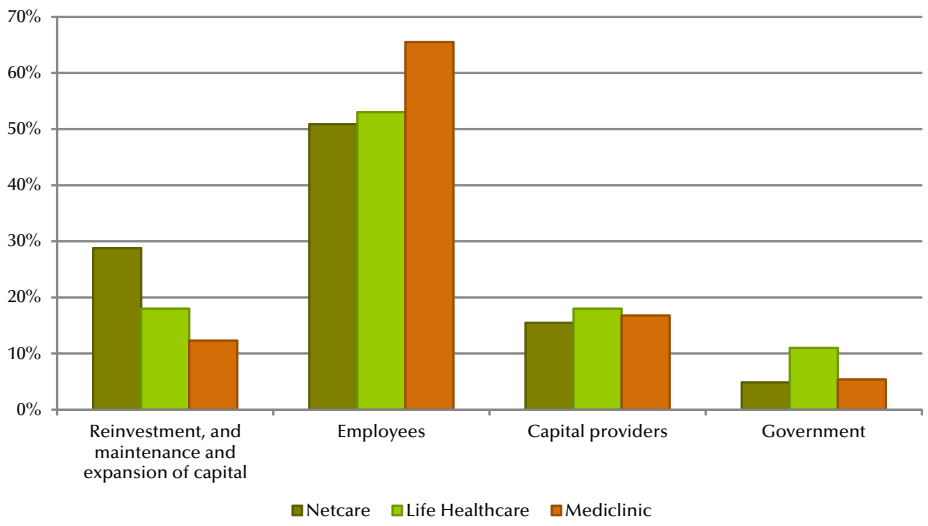
In order to investigate the influence of the private healthcare sector on investment and taxation we reviewed the historical and current financial information of the main private hospital groups, medical schemes and pharmaceutical companies. The financial contributions by these particular participants do not represent those by the sector as a whole, but provide some indication.

The 3 largest private hospital groups (Netcare, Mediclinic and Life Healthcare) are listed on the Johannesburg Stock Exchange (JSE) and thereby substantially affect local investment and taxation. The 2012 annual reports for these 3 groups record joint assets of more than R 103.673 billion, joint taxation of more than R1.651 billion, joint wealth created of more than R 38.283 billion, and joint market capitalisation of more than R 83.668 billion. This is indicated in Table 1. Figure 2 shows the wealth distribution of these hospital groups, providing some indication of the financial linkages that these

17. *Respective hospital groups' (Netcare, Life Healthcare and Mediclinic) 2012 annual reports.*
18. *Who Owns Whom Report, 2009. Research Report on Medical and Dental Practice Activities. pp. 6 – 7.*
19. *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.*

groups have to the real economy. 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. For instance, during 2010 HASA members spent more than R 14 billion on goods and services that they needed to provide healthcare services, including pharmaceuticals and other medical supplies, food for patients, cleaning products, water and electricity, as well as repairs and maintenance.[20] 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.

Figure 2: Listed hospital groups' distribution of wealth, 2012



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

On the demand side, medical schemes contribute substantially to investment in the economy through the management of healthcare funds. In 2012, registered medical schemes had total assets of R 55.4 billion, net contribution income of R 106.7 billion, a net healthcare result[21] of R 26 million and a net surplus after consolidation of results[22] of R 3.7 billion. Figure 3 illustrates the distribution of investments of all South African private medical schemes at the end of 2012. It shows the portfolio of investments aimed at diversifying risk appropriately and ensuring 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. [23]

Due to 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 advised level (of 25%). In 2012 the industry average solvency ratio was 32.6%.[25]

The effects of the larger private pharmaceutical groups on the economy's investment and stability are equally im-

20. *See footnote 14.*
21. *The net healthcare result is calculated as net contributions less relevant healthcare expenditure and less net non-healthcare expenditure (administration expenses, management services, broker fees, net impairment losses and net reinsurance results).*
22. *The net surplus after consolidation of results is calculated as the net healthcare result less other net impairment losses, other expenditure and finance costs and with additions for other investment income, realised and unrealised gains /(losses), other income and own facility surplus /(deficit). The resultant surplus (/deficit) is finally consolidated to arrive at the net surplus (/deficit) after consolidation of results.*
23. *See footnote 9.*
24. *See footnote 9.*
25. *See footnote 9.*

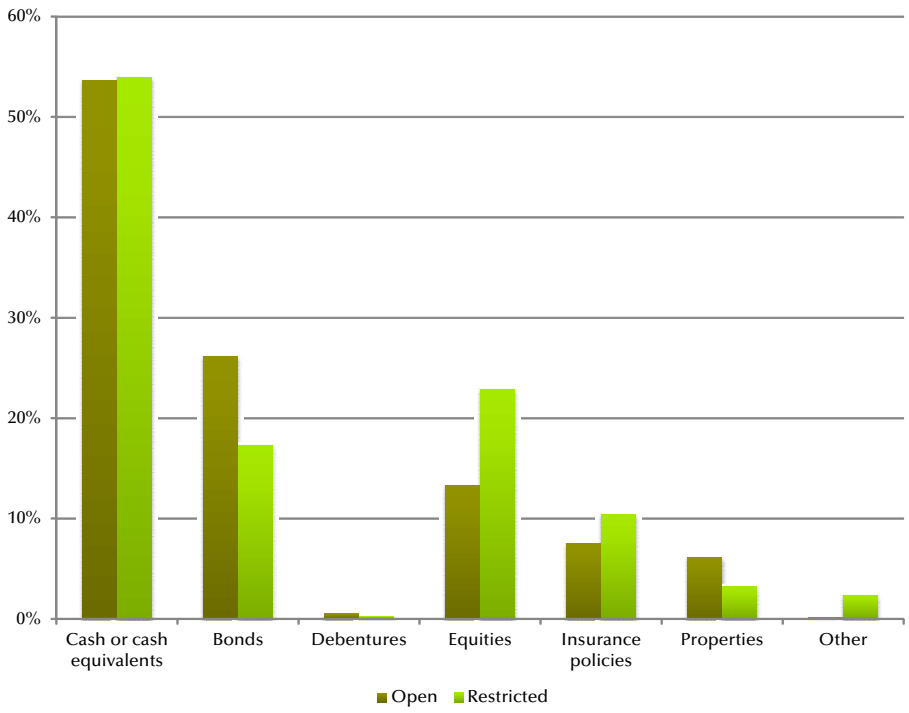
portant. Adcock Ingram, Aspen Pharmacare Holdings and Cipla Medpro were the 3 largest pharmaceutical groups listed on the JSE in 2012,[26] consequently having a significant impact on local investment, as indicated in Table 2.

2.3 Education

Given the small number of local institutions available for training, the burdensome educational requirements, and the opportunity costs of pursuing a career in medicine or related fields, practitioners are in short supply at all levels.[27] Our findings suggest that the private healthcare sector has been fundamental in proactively striving to alleviate this constraint to healthcare provision and in doing so has substantially contributed to skills development, a central goal of the South African government. We highlight here some of the educational/ development contributions made by the large hospital groups and medical schemes.

In 2012, Life Healthcare committed R 78 million over 6 years for the training of specialists through the Colleges of Medicine of South Africa. They are also involved in training of nurses and, at the time of their 2012 annual report, had 1,250 nurses in training in South Africa (continuing their level of focus on training from previous years). In 2011, Netcare (SA) committed a total skills development spend of R 34 million for their annual year leading up

Figure 3: Medical schemes' investments, 2012



Source: Data from the CMS[24], 2012/13.

Table 2: 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.

26. *Cipla Medpro delisted in 2013.*
27. *Friderichs, C., 2012. South African Mobile Health Market Opportunity Analysis. Director of Health, GSMA. p. 5.*

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%. At the time of their 2012 annual report, Netcare (SA) had 3,294 nurses enrolled in training. Mediclinic pursues its training and development strategy through its 3-tiered CSI programme 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. 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.[28]

2.4 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 points that are referred to in this section suggest that the South African private healthcare sector has built on such precedents and taken initiative to maintain such international interest for the country. This has assisted in the attaining of international support for investment, innovation and skills deployment in the South African economy.

Today, the large private hospital groups - all of which are locally listed - have expanded abroad. Netcare operates the largest private hospital network in South Africa and the United Kingdom. Life Healthcare operates in South Africa, India and Botswana. Mediclinic has operations beyond South Africa in Namibia, Switzerland and the United Arab Emirates.

The large South African private pharmaceutical companies also represent South Africa abroad, whilst supporting local investment through their listings on the JSE. Adcock Ingram, Aspen Pharmacare Holdings, and Litha Healthcare Group are the 3 pharmaceutical groups listed on the JSE at present.[29] Adcock Ingram has made itself globally recognised by its acquisitions in India, Zimbabwe, Kenya and Ghana.[30] Aspen Pharmacare Holdings is now a noted multinational with 17 manufacturing facilities at 12 pharmaceutical manufacturing sites on 6 continents.[31] Litha Healthcare Group is a more recent listed

28. *Respective groups' (Life Healthcare, Netcare, Mediclinic, Discovery Foundation) 2012 annual reports. Available at: https://www.discovery.co.za/portal/individual/corporate-view-content?corporateNodeName=developing-people*
29. *Ascendis Health also listed on the JSE on November 22, 2013 and has sales in 45 countries.*
30. *Adcock Ingram, 2012. Annual Report 2012.*
31. *Aspen Pharmacre, 2012. Annual Report 2012.*

entity but has already signed license agreements with Italian and Indian companies.[32] Alongside the expansion by these local pharmaceutical companies, corporate activity, both local and international, within the private pharmaceutical sector is flourishing.[33]

In addition to international expansion by locally listed private hospital and pharmaceutical groups, the South African medical schemes industry has gained international recognition through its development of community-oriented primary care principles.[34] An example is the Discovery Vitality programme, which started in South Africa and has made its path to the forefront of global medical scheme models. Today the programme is acknowledged as a gold standard for incentivising healthy behaviour and outcomes.[35]

The international expansion of business activities by locally listed private hospital groups and pharmaceutical groups, as well as the export of innovative concepts by locally listed medical scheme groups, has attracted substantial local and foreign investment to the sector. This is evident through foreign portfolio investment and foreign direct investment in the sector. Entities such as the International Finance Corporation (IFC) and the Bill and Melinda Gates Foundation have encouraged investment in the sector[36], indicating their expectation of its on-going success. In the midst of events that threaten South Africa's dependence on foreign investment (such as local labour unrest), it is crucial that sectors that attract large amounts of relatively stable foreign investment, such as the private healthcare sector, are preserved.

Alongside substantial investment in the private healthcare sector of South Africa, estimated levels of medical tourism, among other indicators such as the international contracting of South African doctors abroad[37], reinforce the competence and success of the sector from a global perspective. The most recent studies of medical tourism estimate that the number of medical travellers to South Africa was 400,000 in 2010.[38]

2.5 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. This suggests that the 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 used in our research show that individuals who utilise the private healthcare sector do indeed perceive that they are receiving high standards of care.[39] Per illustration, the 2012 General Household Survey (GHS) indicates that 92% of the re-

32. *Litha Healthcare Group, 2012. Annual report 2012.*
33. *See, for example, Dynes, M., 2013. "In Good Health." Africa Investor, July – August 2013, pp. 41 – 42.*
34. *Kautzky, K. & Tollman, S.M., 2008. A Perspective on Primary Healthcare in South Africa. School of Public Health, University of Witwatersrand.*
35. *Discovery, 2012. Annual Report 2012, p. 52.*
36. *Ghatak, A., Hazlewood, J., and Lee, T., 2008. How Private Healthcare Can Help Africa. The McKinsey Quarterly, March 2008, pp. 1 – 5.*
37. *Which brings substantial remittances and international experience to South Africa.*
38. *See, for example, 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.*
39. *In the full report we note that there are limitations to using self-reported satisfaction data.*

spondents using facilities in the private healthcare sector were "very satisfied".[40] 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[41] is useful in this regard. The aim of this study was to assess the quality[42] of healthcare systems in 48 countries (comprised of both developed and developing countries). When considering the South African private sector separately (split from the public sector), the South African private sector was placed 6th overall – in the company of Australia, Sweden, Belgium, Switzerland and Ireland.

The fact that the private healthcare sector produces world-class health indicators supports the theory[43] that it also substantially affects productivity in the economy through the productive capacity of those who utilise the sector.

3 Looking Forward

The private healthcare sector has grown considerably in response to the strong demand for high quality healthcare services. However, it must be recognised that given the needs of South Africa in terms of healthcare delivery for all, the regulatory and institutional landscape of the sector in its current form may not necessarily provide a sustainable solution.[44] Moving forward, it is important that government policy should bear in mind the role and contribution of the private healthcare sector. Currently, gaps in the regulatory structure, as well as certain behaviour by funders and providers are problematic, resulting in increased costs and prices. 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 government to improve the quality of service delivery in the public health sector, thereby offering patients a choice between the two sectors and incentivising price competition in the private health sector. While some regulatory intervention is required, direct government intervention in micro aspects of private health delivery may not be optimal. It may be preferable to leave the shaping of a future private health sector to market forces that respond to the suggested (argued for) regulatory changes.[45]

More Information

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40. *Statistics South Africa, 2012. General Household Survey 2012.*
41. *See footnote 11.*
42. *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)).*
43. *See, for example: 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.*
44. *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.*

4 Concluding Remarks

The South African private healthcare sector has developed to satisfy the strong demand for quality healthcare services. Today the private healthcare sector is substantial in size, as has been outlined in section 1 of this report. The intention of our research was to investigate whether and how the sector, with its current capacity, affects the greater South African economy. The findings of the research, summarised in section 2 of this report, show that the private healthcare sector not only provides excellent quality healthcare, but also has had, and continues to have, a substantial effect on the South African economy. The sector creates employment and investment opportunities, generates public funds, provides training and development programmes, creates international linkages, and encourages healthcare scalability through innovation and productivity gains.

Despite the findings regarding the functioning and impact of the private healthcare sector, given the deteriorating risk pools and the increasing utilisation levels, it is expected that the institutional 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. 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 is a national asset that should not be overlooked. Accordingly, with the landmark move toward the important goal of the National Health Insurance (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.

45. *Lack of regulatory coordination, as well as incomplete and misinterpreted laws/regulations, often has unintended consequences, unforeseen by the regulator.*