

# Updated GP and Specialist Numbers for SA

## 1 Introduction

This note builds on National Health Insurance (NHI) Note 4 that was published in November 2009.<sup>1</sup> In that note the difficulties in obtaining accurate data on human resources in health (HRH) in South Africa (SA) were pointed out. At that stage an effort was made to collect data from various sources and to collate the data in order to arrive at a fair picture of the number of doctors and nurses in South Africa. Care was also taken to emphasise the problems and gaps in the officially available data.

The recent release of the ANC's latest NHI proposal<sup>2</sup> in September 2010, prompted us to update our initial HRH figures with the latest available data. This note shows that contrary to officially

quoted sources that state that there are 36,912<sup>3</sup> doctors practising in South Africa, we find evidence of only 27,432 doctors practising in total (17,802 general practitioners (GPs) and 9,630 specialists).

**Furthermore, when the distribution of these doctors between the public and private sectors is examined, our research indicates an almost equal distribution of GPs between the two sectors: 2,861 people per GP in the public sector and 2,723 people per GP in the private sector. We find that contrary to popular perceptions about the spread of resources, the majority (61.9%) of GPs work in the public sector. While more specialists (56.2%) work in the private sector, the population ratios are also not as skewed as commonly believed.**

## 2 The Use of HPCSA Data

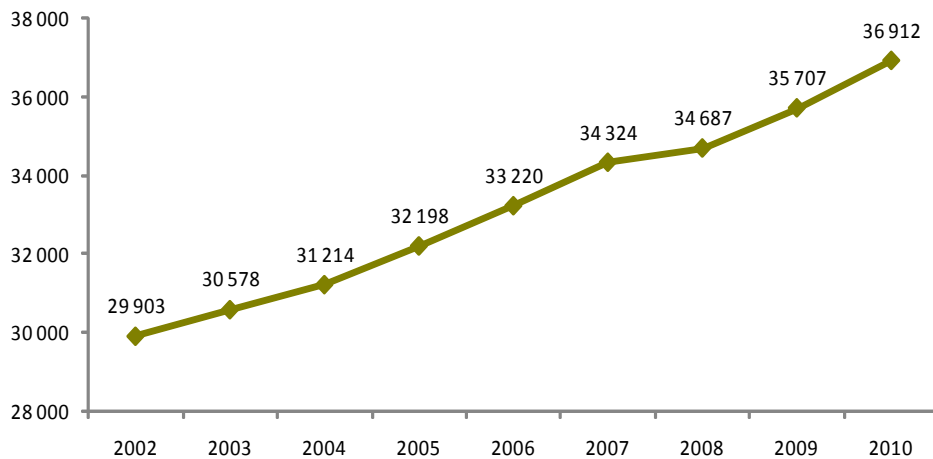
The September 2010 ANC NHI proposal (p. 35) uses figures from the Health Professions Council of South Africa (HPCSA) to indicate the total number of doctors. This data source shows a steady increase in medical practitioners (GPs and specialists) over the past decade – data shown in Figure 1.

However, as previously explained in NHI Note 4, the HPCSA figures overstate the number of doctors (GPs and specialists) actively working in SA. We know that the HPCSA figures (as given in Figure 1) include doctors who are registered in SA, but practise abroad or that have moved on to other occupations (such as those in management or other administrative jobs), but are still maintaining their regis-

This research note forms part of a series of notes dealing with issues of health reform in South Africa. In the interest of constructively contributing to the NHI debate, the Hospital Association of South Africa (HASA) has commissioned this series of research notes which can be accessed on the Econex website: [www.econex.co.za](http://www.econex.co.za).

1. Available on our website: [www.econex.co.za](http://www.econex.co.za)
2. ANC National General Council 2010, *Additional Discussion Documents*. Released September 2010. Available at: <http://www.anc.org.za/docs/discus/2010/aditionalo.pdf> (p.14)
3. See Figure 1.

Figure 1: Growth in medical practitioners (GPs and specialists), 2002-2010



Source : HPCSA figures from ANC NHI proposal (September 2010) & Health Systems Trust

trations with the HPCSA. The HPCSA does not distinguish between doctors actively working in SA as clinicians and those who are not practising here or are not practising as doctors, and therefore these numbers are inappropriate indicators and over-estimate the true number of doctors working in SA.

Evidence of this comes from the HPCSA themselves. In the SA Health Review (2008: 358) there is reference to an announcement by the Registrar of the HPCSA at the time that “11,500 healthcare practitioners would be erased for

non-payment, including more than 6,300 emergency care practitioners and 1,942 medical practitioners and dentists.” This was confirmed in a media statement<sup>4</sup> by the HPCSA earlier this year, saying that, “Last year the HPCSA was forced to suspend some 12,800 practitioners who did not comply with their requirements...” (To date, however, this reduction in the data has not been observed.)

Consequently, it is not appropriate to use these inaccurate figures, as an estimate of the total number of

doctors in SA. This note serves to correct the misleading notion that there are almost 37,000 doctors in SA and aims to provide a more accurate and up to date assessment.

### 3 Updated HRH Figures for South Africa

Following from the above discussion, Econex updated the work done in NHI Note 4 in order to see how the situation might have changed since 2009, as well as to provide the latest HRH figures. This should inform the ongoing debate around the details and implementation of a NHI system in South Africa. Table 1 provides the latest estimates for GPs and specialists actively working in South Africa.

#### 3.1 Data sources and scenarios

In accordance with our original methodology, we used the latest data from the government’s public sector Personnel and Salary Administration System (PERSAL) as a starting point for both GPs (11,309) and specialists (4,442) in the public sector in 2010. Medical

### About ECONEX

ECONEX is an economics consultancy that offers in-depth economic analysis covering competition economics, international trade, strategic analysis and regulatory work. The company was co-founded by Dr. Nicola Theron and Prof. Rachel Jafta during 2005. Both these economists have a wealth of consulting experience in the fields of competition and trade economics. They also teach courses in competition economics and international trade at Stellenbosch University. Director, Cobus Venter, who joined the company during 2008, is also a Senior Economist at the Bureau for Economic Research (BER) in Stellenbosch. For more information on our services, as well as the economists and academic associates working at and with Econex, visit our website at [www.econex.co.za](http://www.econex.co.za).

4. HPCSA Media Statement, 11 March 2010. Available at: [http://www.hpcsa.co.za/downloads/press\\_releases/current/hpcsa\\_annual\\_fees\\_now\\_due.pdf](http://www.hpcsa.co.za/downloads/press_releases/current/hpcsa_annual_fees_now_due.pdf)

scheme industry estimates (6,949 GPs and 5,695 specialists) were used for the updated totals in the private sector, based on doctors visited by members and subsequently reimbursed by schemes.

In order to avoid double counting, one has to exclude from the public sector part-time and sessional doctors that are working primarily in the private sector, but one also has to exclude doctors in the private sector who primarily work in the public sector. Since there is no indication in either dataset who these doctors may be, or exactly how many there are, it is a very difficult adjustment to make. If one were to make the adjustment in both sectors, one would certainly underestimate the number of doctors.

Medical scheme industry estimates assume that there are 5% of private GPs and 10% of private specialists in their databases who are working in the public sector as well as the private sector (and are therefore already included in the PERSAL data). However, we do not make the adjustment in the private sector only as this methodology may result in underestimating the private sector num-

bers – especially when it comes to the population ratios in section 4.

When analysing Table 1, one should keep in mind that it is not only the underlying split between the private and public sectors that is important, but rather the absolute number of doctors in the country. That is ultimately what we are trying to determine. The need for doctors over the next decade or two should therefore be assessed based on the total number actively working in SA (as will be shown in the following Health Reform Note).

Three human resource scenarios are created to address the issue of double counting (i.e. where doctors work in both public and private sectors):

1. In the first scenario the respective 5% and 10% decreases for GPs and specialists were made in the public sector alone. Thus, the PERSAL figures given above were adjusted accordingly, while the private sector estimates were left unadjusted.

2. The second scenario assumed the same adjustments, but for the private sector only – implying that the PERSAL

figures were used as is, while the private sector estimates were decreased with 5% and 10% for GPs and specialists respectively.

3. For the third scenario the adjustments to the PERSAL and medical scheme industry estimates were split between the two sectors, i.e. a 2.5% decrease for GPs were made in the public and the private sectors, while we subtracted 5% from the specialist figures in both sectors.

From the figures above one can see that the different scenarios do not yield significantly different numbers. Whilst some industry experts believe the incidence of public sector doctors working part-time in the private sector is more prevalent than the other way around, we are cautious not to underestimate private sector resourcing. We therefore elected to use the third scenario to determine the most likely number of doctors in SA, as opposed to the second scenario. Accordingly, the best estimates are a total of 17,802 GPs and 9,630 specialists in the country, or 27,432 doctors in total.

This total is in line with a recent statement by the South African

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Table 1: Updated estimates of active doctors, 2010

	Public	Private	Total
<b>GPs</b>			
- scenario 1	10,744	6,949	<b>17,693</b>
- scenario 2	11,309	6,602	<b>17,911</b>
- scenario 3	11,026	6,775	<b>17,802</b>
<b>Specialists</b>			
- scenario 1	3,998	5,695	<b>9,693</b>
- scenario 2	4,442	5,126	<b>9,568</b>
- scenario 3	4,220	5,410	<b>9,630</b>
<b>Total doctors (scenario 3)</b>	<b>15,246</b>	<b>12,186</b>	<b>27,432</b>

Source : Medical scheme industry estimates and PERSAL

Medical Association (SAMA) who estimates that with 14,000 members they represent about half of SA's doctors.<sup>5</sup> Also the College of Medicines in South Africa (CMSA) estimated that there were about 27,641 doctors in SA at the end of 2009.<sup>6</sup>

The fact that one has to consider various scenarios and use different data sources in order to obtain the best estimate, emphasises the danger of using the HPCSA figures as is. As the CMSA con-

firms, "There is the need for a central data source on specialists (and all medical and dental professionals) which is monitored and updated annually."<sup>7</sup>

#### 4 Public / Private Sector Split

As was pointed out in NHI Note 4, there is a common misconception about the relative distribution of doctors and specialists between the public and private sectors. One often finds the figures given

by Wadee and Kahn<sup>8</sup> reported in the media, even though the authors acknowledge that there is a "paucity of data regarding the true public-private distribution of HRH and the public-private split is contested..." (2008: 143). According to their estimates, 27.4% of GPs work in the public sector vs. 72.6% in the private sector, while 24.8% of specialists work in the public sector compared to 75.2% in the private sector.

However, using the updated numbers from scenario 3 as calculated above in Table 1, the public / private split looks substantially different from Wadee and Kahn's estimates. Table 2 gives the revised distribution which looks very similar to the most recent estimates from the CMSA. They find that 42.1% of GPs work in the private sector and 57.9% in the public sector, and of specialists 55.6% work in the private sector with 44.4% working in the public sector.<sup>9</sup>

#### 5 Population Ratios

Another important point is that the distribution of GPs between the public and private sectors

5. Kahn, T., 2010. "Plea for details of health insurance plan," *Business Day*, 30 September. Available at: <http://www.businessday.co.za/articles/Content.aspx?id=122325>

6. Strachan, B., 2009. "Meeting South Africa's Needs: A Preliminary Report of an Investigation into Specialist Training and Development," *The Colleges of Medicine in South Africa*.

7. See footnote 6. (p.34)

8. Wadee, H. & Kahn, F., 2008. "Human resources for health," Chapter 9 in the *SA Health Review 2007*.

9. See footnote 6.

Table 2: Updated public / private split, 2010

	Public	Private
<b>GPs</b>	61.9%	38.1%
<b>Specialists</b>	43.8%	56.2%

Source : Econex calculations

users is also different from what is commonly believed. McIntyre et. al. (2007)<sup>10</sup> estimate that 35.8% of the population were dependent on the private sector for primary healthcare services in 2005. We updated this percentage for 2010,<sup>11</sup> and found that at least 36.9% of the population currently utilise private medical services for their primary healthcare needs. This means that there are 0.37 GPs per 1,000 population in that group (private sector) and 0.35 GPs per 1,000 population for the rest of the population who depend exclusively on public sector services for primary healthcare needs in 2010, based on the latest figures in Table 1.

In the recent ANC NHI proposal<sup>12</sup> the distribution of healthcare resources significantly differs from our calculations, but the former figures

are based on overstated and out-of-date HPCSA data from 2005. The proposal also does not draw from other reliable sources to inform the estimates. Accordingly, the indication is that there are 588 people per GP in the private sector (based on 35.8% of the population seeing private GPs in that year) and 4,193 people per GP in the public sector. However, our estimates show that there are at least 2,723 people per GP in the private sector and 2,861 people per GP in the public sector (see Table 3 for a comparison).

Table 3: Population per general practitioner

	Public	Private
<b>ANC NHI proposal (2005 data)</b>	4,193	588
<b>Econex estimates (2010 data)</b>	2,861	2,723

Source : ANC NHI proposal (September 2010) & Econex calculations

10. McIntyre, D., Thiede, M., Nkosi, M., Mutyambizi, V., Castillo-Riquelme, M., Goudge, J., Gilson, L. & Erasmus, E., 2007. "A critical analysis of the current South African health system," Health Economics Unit, University of Cape Town and Centre for Health Policy, University of the Witwatersrand. Available at: <http://heu-uct.org.za/research/publications/reports-and-working-papers/>

11. See methodology in Health Reform Note 4 on our website: [www.econex.co.za](http://www.econex.co.za).

12. See footnote 2. (p.14)

tor specialists. Private hospital data indicate that about 15% of their patients seeing private specialists are not medical scheme beneficiaries. Given that there are 8,126,193 medical scheme beneficiaries at the moment,<sup>13</sup> it implies that 9,560,227 people (19.1% of the total population) are dependent on private sector specialists, while the remaining 80.9% sees only public sector specialists. Under that scenario, there are 0.57 specialists per 1,000 population in the private sector and 0.1 specialists per 1,000 population in the public sector. This translates to the population per specialist estimates shown in Table 4.

Although the public sector estimates in Table 4 are close to each other, the private sector ratio still differs significantly between the two sources. In other words, there is not a “23 times difference in the number of people served per spe-

Table 4: Population per specialist

	Public	Private
ANC NHI proposal (2005 data)	10,811	470
Econex estimates (2010 data)	9,581	1,767

Source : ANC NHI proposal (September 2010) & Econex calculations

cialist,”<sup>14</sup> but rather a 5.4 times difference.

## 6 Conclusion

In light of the current (proposed) changes in the health sector in SA, it is imperative that the policy debate is appropriately informed. Hence, this note provided a brief update on the HRH figures in SA. It shows that the widely used HPC-SA data, which is also used in the ANC NHI proposal, overstates the number of doctors in this country. Whilst there is no argument

against the fact that the private sector is better resourced, it is shown that proportionally more GPs and specialists are active in the public sector than often reported. It was also shown that the population per GP ratios quoted in the ANC NHI proposal is incorrect, and that this ratio is roughly the same for the private and public sectors.

Our next note in this series will use the updated HRH figures provided here as a starting point to calculate different scenarios related to the future requirement/need for doctors and nurses, respectively.

## ECONEX Services

Econex has extensive experience in competition economics, international trade and regulatory analysis. Strategic analysis was recently added as practice area. We have an established reputation for providing expert economic advice for high profile mergers and complaints that appear before the competition authorities. Some of the more recent highlights include the complaint against British American Tobacco, the merger between MTN and iTalk, the complaint against Senwes and the acquisition of KayaFM by Primedia. Apart from competition work we have also been involved in trade matters which included analyses of the effects of tariffs, export taxes and anti-dumping tariffs.

As a result of our work in competition analysis we also have invaluable experience in some of the sectors of the South African economy where regulation continues to play a role, e.g. the telecommunications, health and energy sectors. We use economic knowledge of these sectors to analyse specific problems for some of the larger telecommunications, health and energy companies.

13. Council for Medical Schemes, *Quarterly Report for the period ended 31 March 2010*. Available at: <http://www.medicalschemes.com/Publications.aspx>

14. See footnote 2. (p.13)