

## The demand for healthcare and health insurance in South Africa

by Johann van Eeden

*The extent of health insurance coverage in South Africa has risen to prominence with the government suggesting the possibility of a National Health Insurance (NHI) scheme in the near future. At present, a very small percentage of the South African population (14.3%) is covered by some form of health insurance. Furthermore, this general figure does not reveal the skewed allocation between the various racial groups. Coverage among the Black/African section of the population e.g. is only 7.4%.*

*The aim of this research note is to provide a snapshot of the current state of health insurance coverage in South Africa, by considering all available data sources. The main source of information on medical scheme membership and contributions are the reports of the Council for Medical Schemes (CMS). We combine this data source with data from the General Household Survey (GHS) and the Income and Expenditure Survey (IES) to construct a comprehensive picture of health insurance coverage in South Africa. This status quo description should highlight current and future challenges as well as different policy options.*

### 1. General factors influencing the demand for healthcare

Before analysing in detail the extent of health insurance coverage in South Africa, it is important to briefly highlight some important aspects of the demand for healthcare. The demand for healthcare differs from the demand for a standard retail product in at least three ways:

1. The 'derived demand' nature of healthcare expenditure;
2. The existence of an excess demand for healthcare;
3. Supply induced demand of healthcare.

The first factor reflects the fact that individuals do not consume healthcare primarily for the utility gained from direct consumption, but rather for the perceived benefits in terms of their general health status. In the theoretical literature this aspect of the demand for healthcare is usually linked to Grossman's demand for healthcare model. The second factor listed above refers to the increased demand due to ageing populations and advances in health technologies, but also to the fact that those individuals who are covered by health insurance schemes are more likely to have an excess demand for healthcare, since the medical schemes act as third-party payers of at least a part of their health expenses. This implies these individuals are less sensitive to the level of healthcare costs. Finally, the demand for healthcare is often described as 'supply induced', as the information asymmetry that exists between a patient

and the health worker can often lead to an oversupply of services in order to maximise profits.

### 2. Expenditure on healthcare and health insurance in South Africa

It was explained above that the demand for healthcare is driven by factors other than the usual determinants of demand such as the price of the product, income, interest rates, etc. The overwhelmingly positive growth rates in the graph below illustrates that consumption expenditure by households on medical services, medical products and pharmaceutical products in South Africa has grown consistently between 1990 and 2007 (measured in constant year 2000 prices). However, in the last decade, expenditure growth on medical services has far surpassed that of medical and pharmaceutical products. As a result, the ratio of medical services expenditure to medical and pharmaceutical products expenditure in 2007 was almost 6:1, compared to a ratio of less than 3:1 in 1990.

The consistent growth in the demand for medical services can be ascribed to the factors driving demand which were mentioned above e.g. an ageing population, excess demand, supply induced demand, etc. Medical and pharmaceutical product expenditure, on the other hand, has been largely curtailed by the introduction of generic pharmaceuticals and the introduction of the single-exit pricing policy.

*Figure 1: Growth in final consumption expenditure by households on medical services, medical products and pharmaceutical products in constant rand millions (2000 prices), 1990 to 2007.*

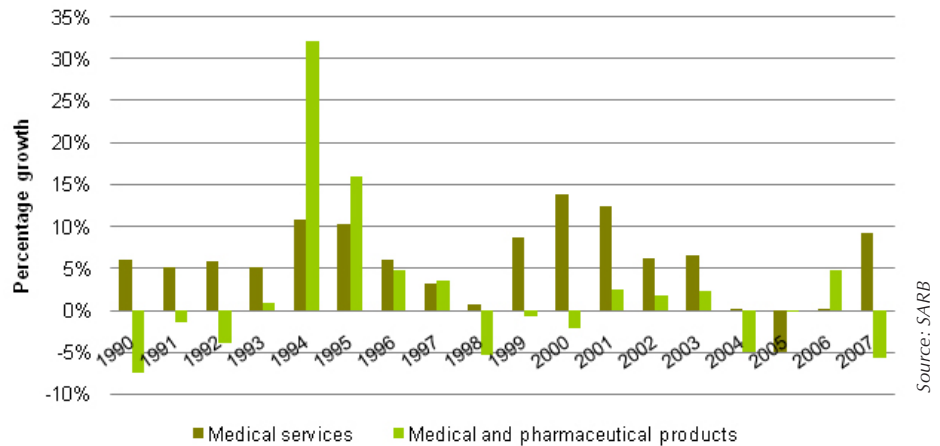
The next question that needs to be addressed is how this increased spending on medical services has translated into the demand for health insurance.

The most recent (2005) Income and Expenditure Survey (IES) provides a good indication of the portion of their income that South Africans set aside for health related expenditure. Expenditure on healthcare and health insurance in South Africa according to income decile and race are shown in the figures that follow.

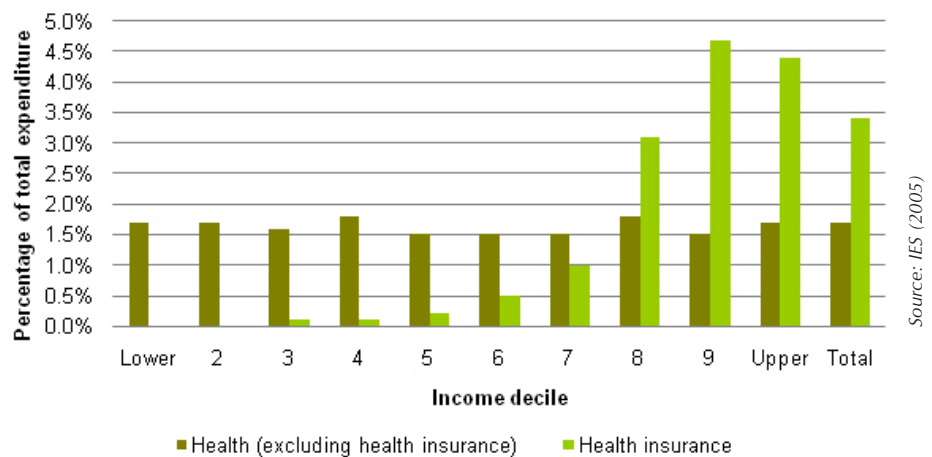
*Figure 2: Expenditure on health and health insurance by income decile (2005).*

In terms of race, Whites spend the largest portion of their income on both general health expenditure and health insurance (1.9% and 4.7%, respectively). Coloureds spend the smallest percentage of their income on general health, but possibly compensate for this with expenditure on health insurance that is comparable to that of Indians (3.0%). Combined, percentage wise expenditure on health and health insurance is still lowest for the Black/African grouping with a total of 3.6%. Data from the same source (Income and Expenditure survey, 2005) also indicate that males tend to spend a much higher

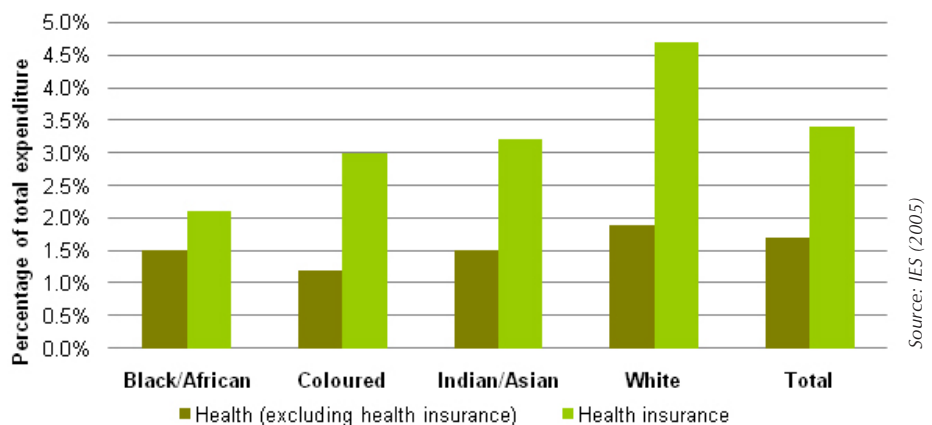
*Figure 3: Expenditure on health and health insurance by race (2005).*



Source: SARB



Source: IES (2005)



Source: IES (2005)

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percentage of their income (3.8%) on health insurance compared to females (2.3%). Both sexes spend a similar portion of their budget on health related goods and services excluding health insurance (1.6% for males and 1.7% for females).

Of particular interest to this research note is the distribution of health related expenditure according to income decile. Figure 2 above shows that while the percentage of a person's total expenditure that goes to general health related expenditure remains largely the same for all income deciles (between 1.5% and 1.8%), expenditure on health insurance only exceeds that of general health expenditure in the upper three deciles. Proportional expenditure on health insurance reaches a maximum for people in the 9th income decile at 4.7% of total expenditure. In line with intuition, individuals residing in rural areas spend a much smaller proportion on health insurance (1.9%) compared to urban dwellers (3.7%)<sup>1</sup>. However, rural inhabitants spend a marginally larger percentage of their income on general health expenditures (1.8%) compared to city dwellers (1.6%).

### 3. Health insurance coverage in South Africa

In general, the number of medical aid schemes has decreased while the total number of members as well as beneficiaries increased between 2000

and 2007. Much of this increase is due to developments in the medical insurance market over the past two years. These will be discussed in detail below.

The total number of medical aid schemes<sup>2</sup> declined from 142 in 2000 to 122 in 2007. Both closed and open schemes declined in number over the corresponding period with closed schemes down to 81 in 2007 from 96 in 2000 and open schemes numbering 41 in 2007 compared to 46 in 2000. Also, both real contributions to medical schemes and nett claims grew at a consistent pace between the years 2000 and 2007.

Over the corresponding period there has been an increase in medical aid membership, measured by members and

beneficiaries. Growth in membership, again distinguishing between open and closed schemes, is shown in figure 4. The past two years produced comparatively high levels of growth in membership of 6.2% (2006) and 8.3% (2007). Regarding beneficiaries, the number in open schemes decreased to 5 million in 2007, from 5.1 million in 2006. The number of beneficiaries in closed schemes increased to 2.5 million in 2007 from 2.1 million in 2006 (CMS Annual Report 07/08: 61). Most of the growth has, therefore, come from increases in the membership and beneficiary numbers of restricted schemes. Closed scheme membership (and beneficiaries) is still much smaller in absolute terms compared to open scheme participation.

Figure 4: Growth in South African medical aid scheme membership, 2001 to 2007.



Source: Author calculations based on CMS membership report 2007/2008

<sup>1</sup>Rural inhabitants, on average, tend to have lower income than their urban counterparts as well as decreased access to the health insurance market.

<sup>2</sup>Closed schemes are only available to individuals from a certain grouping, for example a particular company or government department. Open schemes are theoretically open to everybody.

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The large increase in closed scheme participation between 2006 and 2007 seems to have been largely due to the introduction of the Government Employees' Medical Scheme (GEMS). This scheme was registered on 1 January 2005, but only started operations with effect from 1 January 2006 (CMS Annual Report 07/08: 118). According to this source, "the growth in membership of restricted schemes can be attributed primarily to Renaissance and GEMS; the former experienced growth of more than 50.0% and the latter of more than 300.0%".

Another important trend in South African health insurance membership relates to dependency ratios. Dependency ratios decreased from above 1.5 for closed and open schemes to below 1.4 for both, between 2000 and 2007. One factor that in all likelihood had a significant influence on the trends in dependency has been the decline in average household size since 2002. Average household size in each of South Africa's nine provinces declined and, on aggregate, the number of people in a South African household declined from 3.97 to 3.61 between 2002 and 2007 (GHS,2007). What is also interesting to note is that the dependency ratio for open schemes declined by much more than that of closed schemes over the corresponding period.

Statistics South Africa data from the General Household Survey (2007) shows that the majority of South Africans ( $\pm 86\%$ ) do not belong to a medical scheme. This is shown in table 1. While only  $\pm 14\%$  of the entire population belongs to a medical scheme, the comparable figure is 66.5% for the White population. The large increase in medical aid membership between 2006 and 2007 (described above), is also evident in the Statistics SA

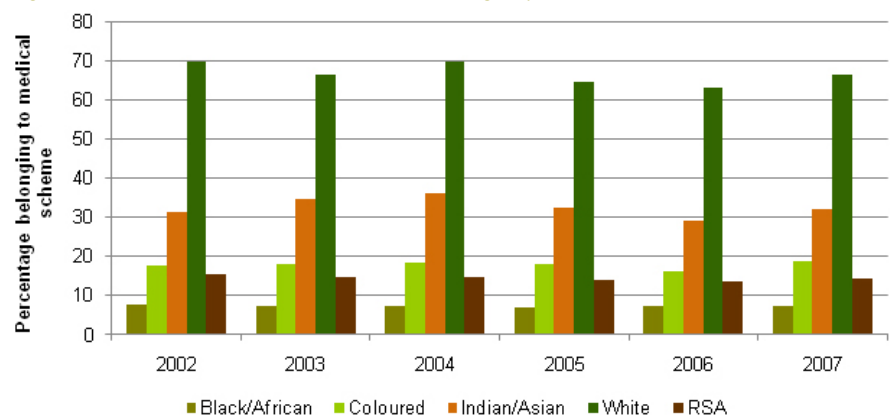
data. However, it seems that the largest increases were among the White and Coloured groups and not in the Black/African group.

Table 1: South Africa health insurance coverage (2007).

	2002	2003	2004	2005	2006	2007
Individuals covered by medical aid scheme ('000)	6923	6794	6902	6561	6506	6834
Individuals not covered by medical aid scheme ('000)	38439	39149	39471	40273	40824	40817
Total ('000)	45362	45943	46373	46834	47330	47651
Percentage of population covered by medical aid scheme	15.3	14.8	14.9	14.0	13.7	14.3

Source: GHS (2007)

Figure 5: South Africa health insurance coverage by race (2007).



Source: GHS (2007)

## 4. Conclusions and policy implications

The data presented above show that although there has been relatively large growth in the number of people with medical aid membership, the majority of the population is still excluded from medical insurance. The data also indicate, however, that as more people (and presumably this will be skewed towards Blacks/Africans as part of government's general BEE policy) join the general government and GEMS, that significantly higher growth in medical aid membership can be expected off a very low base. The medical aid coverage of the total population is almost twice that of the Black/African group and there is clearly room for growth in this category. Given that this is the largest racial grouping, the potential is very large. An increase in medical aid coverage in this race group will, however, depend on coinciding growth in real disposable income and formal employment. However, a NHI will make a crucial contribution to rapidly increasing the percentage of the population covered by medical insurance.

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