Inflation, Costs and Comparisons of Hospital Services in South Africa

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Schüssler has 16 years experience in economics. Hailed as a "truly independent" economist, he scooped the coveted South African Economist of the Year for the second time, mainly for his forecasts for 2005 and 2008. Schüssler teaches part-time at a number of international companies and universities, including Unisa and Free State University.

Understanding hospital inflation and costs in South Africa is not easy. One can easily become entangled in a web of different interest groups critical of the neutrality of one's figures and viewpoint.

A reasonable researcher relies on statistics that do not represent any interest group. These are statistics that cannot be "accused" of bias. These figures must be accurate and above suspicion. Furthermore, the agency needs to have established a very good track record when it comes to producing statistics and releasing such results. Better even if that agency is Statistics South Africa (Stats SA), widely referred to as the official supplier of South African statistics. Even when there is "controversy" over the current weightings of the consumer price index (CPI), financial markets react to that data when it is released.

The CPI dataset is one of the most important sets of Stats SA's monthly data. The inflation data is trusted as neutral in many contracts, including wage negotiations, pension and debt securities. In short, billions, if not trillions, of rands depend on this data. International bodies such as the IMF, World Bank and many others rely on Stats SA.

WHAT MAKES UP CURRENT MEDICAL INFLATION?

Overall inflation in SA is made up of 17 major categories, including a medical basket. Stats SA's breakdown of medical inflation measures 400 medical goods and services from time to time. Not all prices get measured every month. Like in other inflation categories, some prices only change once a year, while others change every month. This basket includes medicine, medical insurance and doctors, nurses and hospital fees.

Medical inflation also includes healthcare costs, such as general healthcare workers and nursing homes, as shown in Table 1 (just from this it can be seen as the relevant inflation rate to use for increasing medical costs).

TABLE 1: MEDICAL INFLATION AND THE WEIGHTS OF THE INDIVIDUAL COMPONENTS FOR THE AVERAGE SOUTH AFRICAN

CPIX Medical Inflation Components	Weight of CPIX	Weight in medical
Doctors and nursing fees	2,58	31,97
Hospital and nursing homes	0,72	8,92
Medical and pharmaceutical products	2,95	36,56
Therapeutic appliances	0,18	2,23
Contributions to medical aid	1,11	13,75
Insurance	0,53	6,57
Total medical inflation weight	**8,07**	**100,00**

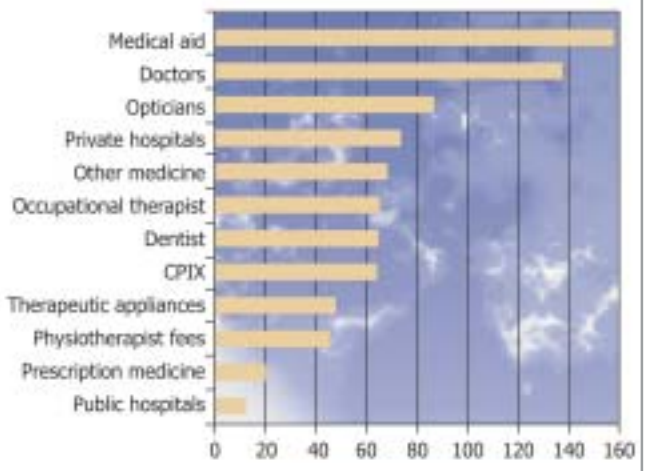
Source: Statistics SA

Using the private hospital sector inflation data from Stats SA would be the only method, and certainly the most reliable data, on which one can currently get a neutral picture of actual private sector hospital costs, without being accused of bias.

This data goes back to 2000 and can be used to give the most accurate view of the drivers of medical inflation, one of the 17 major categories in the SA inflation index (data before 2000 is available, but the weighting of goods and service changes, so one would need to rework the time series and one would want to keep a complex subject simple).

Since 2000, overall medical inflation increased 3,65% per year more than did the overall CPIX, but within medical inflation certain components increased faster than others and the overall medical inflation (see Graph 1).

GRAPH 1: DIFFERENT MEDICAL INFLATION COMPONENTS: TOTAL INCREASE 2000 TO APRIL 2008



Source: Statistics SA

When looking at total price increases from 2000 to April 2008, eight of the medical inflation sub-categories have an inflation rate higher than the overall CPIX. Four have an inflation rate below CPIX.

Medical schemes had the highest increase (158%), followed by doctors (which includes nursing fees) at 137% over the total period. In the same period, opticians increased their fees by 87%.

Private hospital inflation was 74%, half the increase that medical schemes had over the same period. Overall CPIX increased with 64% over the period in question and public hospitals inflation measured only 13% for the period.

PUBLIC HOSPITALS GET MORE FROM GOVERNMENT FUNDING THAN FROM PATIENTS

Consumer price indices only measure what the consumer pays and not what the price increase to the government would be if public hospitals had bigger funding requirements than what

consumers were charged for. This means that the actual inflation rate for public hospitals is a fiscal and spending tool that is used by government to achieve social objects. A better way to perhaps judge public sector hospital price changes is to look at the funding it receives from government revenue. Government revenue per admission would not be 100% compatible to inflation measures, but would be the closest thing publicly available. National treasury data is published regularly in the Inter-Government Fiscal Review and its annexure.

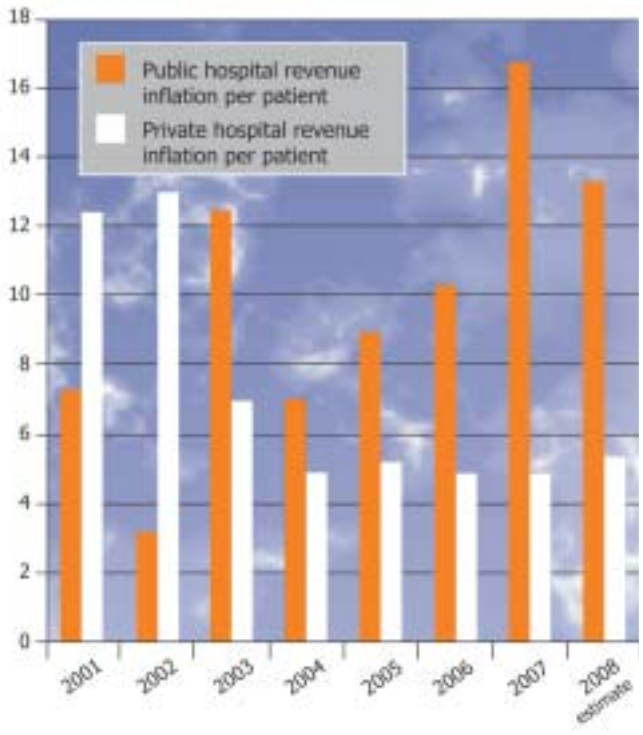
According to the Inter-Government Fiscal Review's data from the National Treasury, government spending from March 2000 to March 2007 per admission in a public hospital increased by 86%. While disease and case mixes may have changed, one can surmise that hospital inflation in the public sector was between 90% and 100% in total by April 2008, to make it compatible with the Stats SA time period (indications are that 2008 data could show another 10%-plus increase in the public sector per patient funding requirement).

In five of the seven years, public sector hospitals had a higher increase in funding per admission than the private sector hospital inflation rate. In only two years, the private sector registered a higher inflation rate per patient than the public sector (see Graph 2).

Even when using the Council for Medical Schemes (CMS) annual reports from 2001 to 2006, the total cost per admission into private hospitals increased by 22,1%. The same CMS reports show the 57,7% total cost per admission into public hospitals from 2001 to 2006. CMS likes to compare costs on a per beneficiary, per month basis, but when comparing price increases the United Nations Statistical Agency prescribes that costs must be on a per use basis. Admissions would represent a per use basis closer than a per beneficiary basis, as not all beneficiaries would make use of a hospital stay every year.

There can be no doubt that actual price or tariff increases from the private sector hospitals are in line when compared to overall medical inflation, medical schemes inflation or even the funding increase per admission in the public sector.

GRAPH 2: PUBLIC AND PRIVATE HOSPITAL INFLATION INCREASES PER YEAR COMPARED



Sources: Statistics SA and Inter-Government Fiscal Review 2007 and 2008 Budget.

PRIVATE SECTOR COST PRESSURES

STAFF COSTS

Every industry has its own cost drivers, and the biggest driver of private hospital costs is staff costs, made up of both administrative and medical staff. The private hospital sector has about 60 000 staff in full- and part-time agreements.

According to economists.co.za and annual reports of the two JSE-listed groups, staff costs make up more than 50% of total costs.

Using the quarterly employment survey from Stats SA, the 34-sector data set has a category for non-government health and social workers. The latest data indicate that around 190 000 people work in this part of the formal sector. The non-government health and social sector is where private hospitals slot in. While private doctors and social workers also make up a part of this sector, private hospitals make up around 31% of the employment in this sector.

While not ideal, the fact is that this is the best available indicator that shows staff costs in the private sector are a major, real cost-push factor.

Moreover, the current skill shortage has been acknowledged by the public hospital sector when granting 21% salary increases to health workers in the 2007/08 wage negotiation year.

While average staff cost increases between 2003 and 2005 seem very low, the fact is that, in the past two years, staff cost increased by 25% in 2006 and 13% in 2007. Early indications for 2008 show a year-on-year increase of over 17%.

OTHER COST INDICATORS

Using PPI data from Stats SA in several relevant time series that have an effect on hospital operations – such as pharmaceutical products, medical, precision, optical and other related equipment, electricity, water, gas and food – PPI is seen as a direct cost measure and is used by many industries in SA to base contracts on. There are specific engineering indices in the PPI, which these industries use in making contract negotiations viable when discussing multi-year contracts. Companies rely on the PPI for price negotiations. Industries such as road freight use PPI indices for continuous price adjustments or quarterly price adjustments to long-running contracts.

While some items are not measured directly (such as, say, uniforms, but rather clothing, and cleaning chemicals, which must be measured under basic chemicals, and some time series no longer available, such as rubber for gloves), we believe that more than 90% of goods and services, as bought by the private hospital industry, can be measured by the Private Hospital Cost Index.

Currently, the only major factor left out is financing, as this depends both on project size and interest rates or the cost of capital. Nonetheless, for a basis of cost factors, the private hospital cost index should prove quite a useful tool for the private hospital sector when making its case to the funding industry for cost increases.

However, one gets enough data that can be measured to make a comprehensive private sector cost index, weighted by actual expenditure of the private hospital sector.

This cost index is neutral as most parts are measured via time series of Stats SA and is accepted as accurate by many institutions, including government.

As can be seen in Table 2, the private hospital costs index indicates that, on average, the private hospital had cost increases around 4,1% higher than the overall inflation, and this is probably the major reason why private hospital inflation has increased more than inflation.

TABLE 2: THE CPIX, THE PRIVATE HOSPITAL COST INDEX AND THE DIFFERENCE BETWEEN THEM

	CPIX	Private Hospital Index	Difference With CPIX
2000	7,7	9,6	1,9
2001	6,6	9,1	2,5
2002	9,3	14,4	5,0
2003	6,8	16,8	10,0
2004	4,3	9,0	4,6
2005	3,9	0,8	-3,1
2006	4,6	9,8	5,2
2007	6,5	13,2	6,7
Average	6,2	10,3	4,1

Sources: Statistics SA and economists.co.za

Other advantages are that the index is neutral and it allows hospitals to make constant forecasts. It will also allow funders a way of seeing the cost pressures in the hospital arena and give negotiations a neutral input when making assessments in yearly negotiations.

Both actual hospital inflation and costs in the private sector can be measured, and this will make for much more transparent debate as the figures are transparent and most come from the official supplier of South African statistics. This makes it difficult for anyone to call them false. While no inflation figures will be exact in every case, they may help to take the debate back to where it belongs.

SA needs quality healthcare to keep quality people here to grow the economy – and that should be the priority now, not just arguments about prices.