

NHI not a moral debate – it’s a maths problem

Biz News 9th September 2019

by Chris Bateman

Sometimes it takes an ordinary man in the street to tell the politicians a downright inconvenient truth. Meet David Drew, a humble, rational chemical engineer, who sat down and did some number-crunching based on the most conservative NHI funding estimates available, using the broadest possible swathe of sources. Here’s his conclusion; even with the most cautious assumptions, we simply don’t have the tax base to support the universal healthcare promise that’s been tabled. This is not rhetoric claiming the NHI to be a utopian dream. It’s a data-based, hard-nosed argument that the money will place an impossible burden on the existing tax base and per-person healthcare spend. Here’s a teaser; the government will need R550bn annually to fund the 46 million people currently using public healthcare – more than 3 times the current Health budget and more than 40% of the total tax collected by SARS annually. Corporate taxes would double. With 80% of personal income tax paid by about 1.9 million people (3.3% of the population), Drew reckons funding an NHI would cost each of us privileged few over R13,000 extra in personal income tax per month. Something or someone’s going to have to give. Good luck Eskom, good luck SOEs. – Chris Bateman

By David Drew*

There has been so much discussion about NHI recently but surprisingly the hard numbers appear to be very difficult to find. Perhaps this is intentional but it could just be that few have bothered to really do the maths. At University I had a rather irreverent Applied Maths Professor that told us as wide eyed first year engineers that “gambling was a tax for people that can’t do maths”. I’m beginning to think that NHI is an idea being proposed by those that also can’t do maths.

As indicated the numbers are hard to find and even harder to find consensus on, but I’ve tried to trawl through government statistics and a variety of published reports to try make some sense of exactly how much we spend on health as a country to try and do the maths myself.

The answer, that most agree on, is that currently the private medical industry & public health service spend similar amounts per annum. The now Ex-Health Minister said that government spends 4.1% of GDP on Health and the private sector 4.4%, but based on the latest GPD figures from StatsSA, this estimate exceeds the official Treasury 2019/20 health budget of R163bn by around R40bn. Fin24 recently reported that collectively we spend R4trn /year on Health Care, but considering that our current GDP estimate (StatsSA August 2019) is only R4.98trn, I think they have added a zero somewhere.

Read also: Don’t blame doctors, blame the system – Van den Heever

As such I have to assume that the total health care spend (including out of pocket expenses) is between R330-R400bn/year, with the private medical care exceeding public spending by a few %. Of course the total spend is not the issue, the key is the R/person spend and all agree that public health care spending covers far more people than the private schemes. Again the estimates vary from around 14-16% (Health Minister, Competition Commission) to between 20-25% (Africa Check). If we accept the population estimate of around 56 million people in South Africa currently and choose a mid-point of the estimates above, this allows us to calculate an approximate spend per person, per year. And this is where it gets interesting.

Based on the assumptions above, this suggests that in the Private medical space we spend around R19,000 per person per year and in the public sector only around R4,000 per person

per year. The latter aligns with published government data which gives me some confidence in my estimates. So basically government spends only around 20% per capita compared to the private sector.

Now clearly some may argue that private medical aid exceeds the standard that we aim to provide under NHI, but at the very least NHI claims to be able to cover the prescribed minimum benefits (PMB's) as currently defined for private medical aids. I would argue that most would expect MORE from NHI than just PMB's and the NHI white paper actually suggests that they "include other services" beyond those covered by medical aids and eliminate out of pocket expenses, but let's assume that this is the absolute minimum.

Read also: [NHI nightmare: Why it's bad for your health AND wealth – SA market expert](#)

How much of our medical aid contributions go to cover PMB's is difficult to determine as an outsider, but in 2016 the Competition Commission estimated the cost at R608/per beneficiary per month for 2015 and increasing at about 2 to 3 times CPI. This would put the 2019 cost at around R950 per month or about 60% of the cost of private health care, which seems reasonable.

Now if we assume that public health care can deliver the same efficiency as the private system, which even if we build in the cost / profit of medical aid administrators is a bold assumption, the math suggests that government would need to AT LEAST be spending about R1,000 per person per month for the approximately 46 million people currently relying on the public health system. This works out at around R550bn/year. Although combined with private spend this only around 15% of GDP (which is not unusual in global terms), this is more than 3 times the current Health budget and more than 40% of the total tax collected by SARS annually. And this is before we increase the burden on the public purse from those that then opt out of private medical aid or go much beyond offering PMB's.

Clearly many will opt out of private medical aid if this scenario ever became a fully funded reality, but let's exclude them for now because they are currently covering their own costs in one way or another. So at the very least we need approximately R390bn more for the public health system to cover PMB's. If we expect more than PMB's from the NHI, then that number can only grow.

So where could this extra R390bn come from? Well clearly it needs to come from one form of tax or another and therefore we look to the usual suspects, Personal Income Tax, VAT and Company tax which make up 80% of our taxes collected. It doesn't sound difficult until you look at the numbers. As per Treasury, the estimated collections from Corporate income tax in 2019/20 is only R218bn, so we would need to more than DOUBLE corporate income taxes to raise this. VAT isn't much better, with an estimated R325bn in 2019/20. Basic maths suggests that even with VAT raised to 20% we would only raise around R100bn more per year and clearly that isn't going to happen.

So more than likely the burden will be expected to fall on personal income tax which in 2019/20 should be just short of R500bn/year. To some extent this is implied in the published documents on NHI which suggest that the "health costs for the poor and vulnerable are shared by the whole of society". Whilst this may work in more affluent countries the problem once again is simply a math problem. There are simply just far too few "rich" to bear this additional cost.

To give some context to the practical realities of the problem, consider that Southern Africa Labour and Development Research Unit (SALDRU) recently published that a household after tax income of just R7,313/month puts you in richest 10% of all South Africans and R48,753 puts you in the top 1%. In terms of taxes Africa Check recently confirmed public statements that suggested that as much as 80% of personal income tax is paid by as few as 1.9 million people (3.3% of the population).

So if we assume that this same ratio would apply to this additional funding requirement, (i.e. 80% must be paid by around 1.9 million people) then we can calculate that on average this would mean an average of around R164,000 more personal tax per tax payer per year or round R13,600 per month. In the context that 70% of these 1.9 million tax payers have an estimated take home monthly income of LESS than R48,753 per month, per house hold, it's easy to see that this is simply not possible. Clearly in a progressive tax environment the burden on the poorest of this 3.3% would be lower than R13,600 per month, but equally the individual burden on the richest would be many times higher.

It's important to remember that these tax payers are the same people that we assumed would continue to contribute to their private medical aid or contribute a similar amount through taxes. As such the amount above would be in addition to all of these costs. Simply put, to recover all of this additional funding from personal income tax would mean an average of 78% increase from what in global terms are already extremely high marginal tax rates.

As much as NHI is a noble concept and in a utopian South Africa it would dramatically change the lives of millions of South Africans, at this point, the inconvenient truth is that even with the most conservative assumptions, we simply don't have the tax base to support the promise that has been tabled. And this is before the potentially negative impact of government inefficiency, fraud and corruption. It also assumes that there will be no net negative impact of those currently covered by private medical aid opting out and effectively then contributing less than they currently do to private schemes through taxes which I believe is highly likely.

Unfortunately NHI is not a moral debate, it's a math problem.

- **David Drew is a Chemical Engineer by training and a Director of Silaxco Coatings.**