

Response to Certain Methodologies Used in the Department of Health's public submission to the Competition Commission's Private Health Sector Inquiry

Prepared for Mediclinic Southern Africa

2 March 2015

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1 Context for the Response

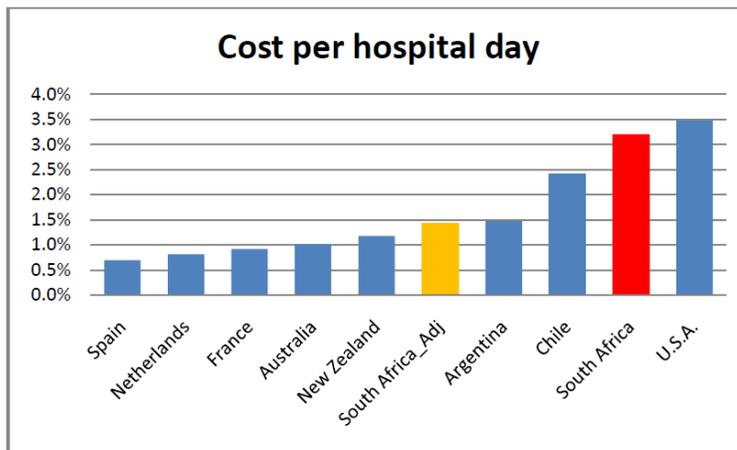
In this document we will respond to only three sections of the Department of Health's (DOH) public submission to the Competition Commission's (CC) Private Health Sector Inquiry. The relevant three sections are paragraphs 81-83, 84 and 97-98. For ease of reference, those paragraphs are copied here:

81. *The International Federation of Health Plans 2012 Comparative Price Report lists prices for hospital and specialist services in a number of countries, including South Africa.¹ Prices for each country are submitted by participating member plans (e.g. medical schemes) and are drawn from both public and private sectors.²*

82. *By calculating a ratio of these prices relative to annual gross household income (GHI), it is possible to compare prices across countries in a way that gives some indication of the affordability of the service. Figure 9 - Figure 13 below indicate that in South Africa this ratio is close to that of prices from the U.S.A, notorious for unaffordable healthcare costs.*

83. *In order to account for the fact that individuals who access specialist and hospital services through medical schemes are usually in relatively high-income groups, the ratios were also calculated using a roughly doubled GHI (South Africa_Adj). This has a negligible effect, indicating that prices are high relative to income, even when higher income groups are considered.*

Figure 9: Cost per hospital day as a ratio of GHI (2012)



¹ International Federation of Health Plans 2012 Comparative Price Report: Variation in Medical and Hospital prices by Country. Available at: http://hushp.harvard.edu/sites/default/files/downloadable_files/IFHP%202012%20Comparative%20Price%20Report.pdf

² Prices for the United States are calculated from a database with over 100 million claims that reflect prices negotiated and paid between thousands of providers and almost a hundred health plans. •Prices for Canada, New Zealand, Switzerland, and the United Kingdom are from the public sector, with data provided by one health plan in each country. •Prices for Australia, Chile, the Netherlands, Spain, and South Africa are from the private sector and represent prices paid by one private health plan in each country. •Prices for France and Argentina are a blend of public and private sector prices with the data provided by one health plan in each country. The usual caveats relating to comparisons across countries apply.

Figure 10: Cost of MRI Scan as a ratio of GHI (2012)

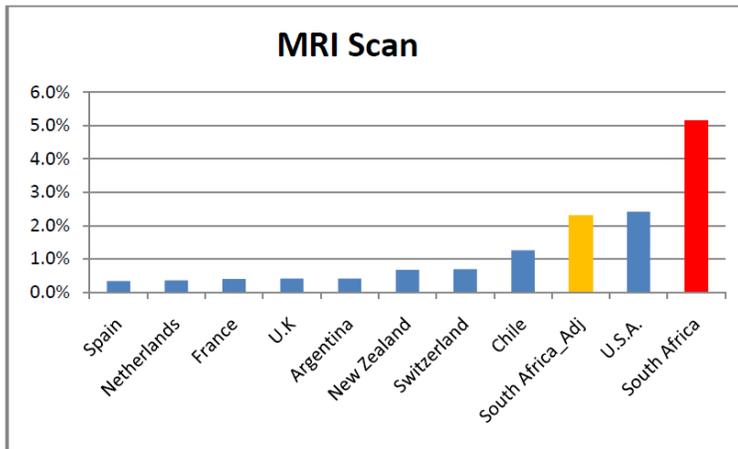


Figure 11: Cost of Hip Replacement as a ratio of GHI (2012)

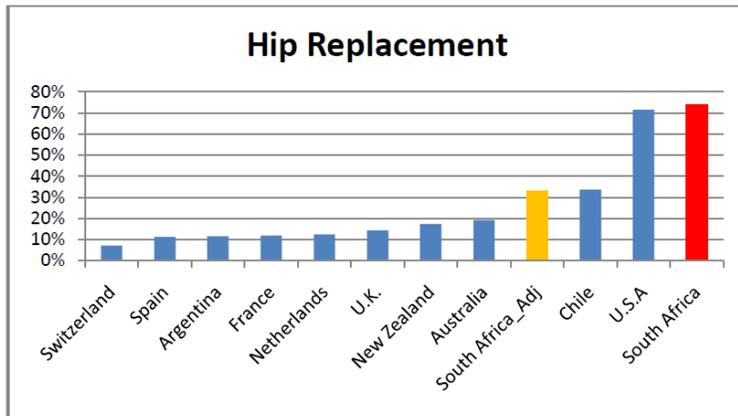


Figure 12: Cost of angiogram as a ratio of GHI (2012)

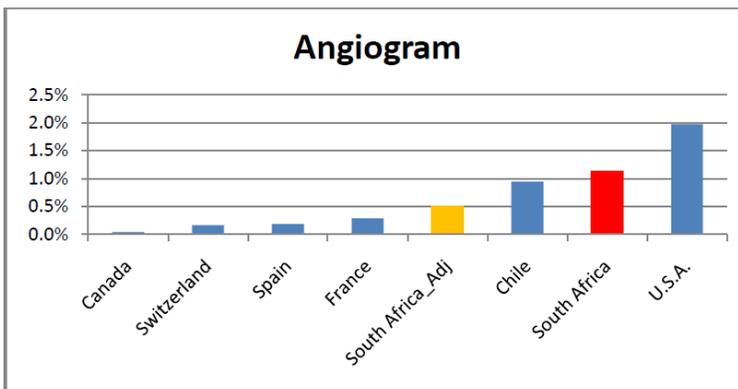


Figure 13: Cost of bypass surgery as a ratio of GHI (2012)

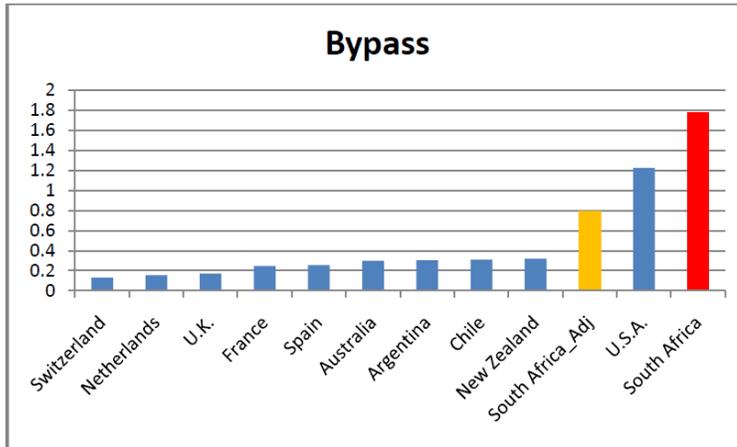


Figure 14: Cost of normal vaginal delivery as a ratio of GHI (2012)

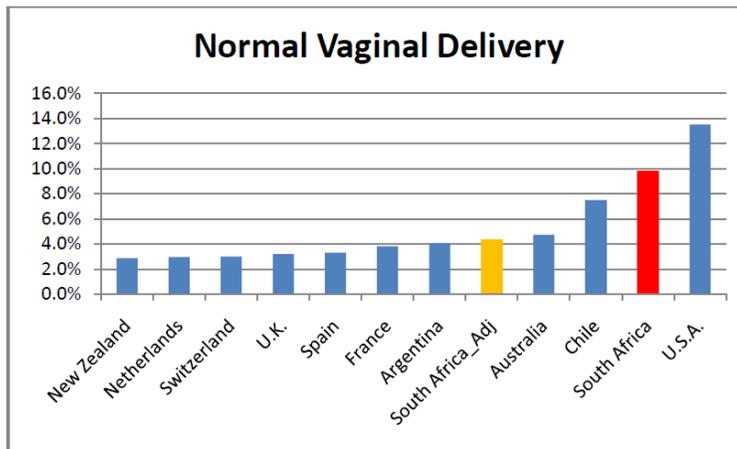
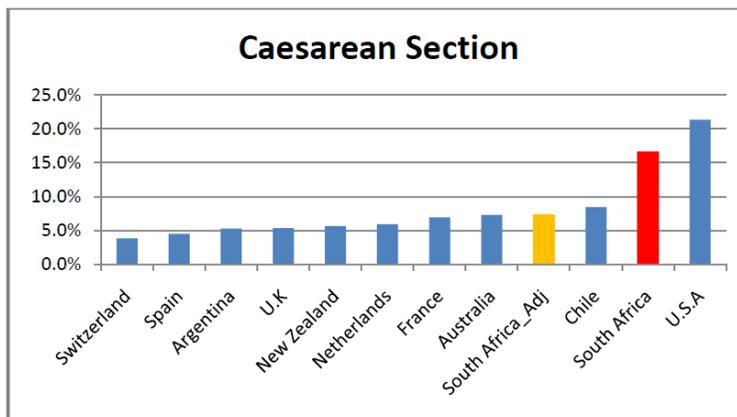


Figure 15: Cost of Caesarean Section Delivery as a ratio of GHI (2012)



84. An analysis made by the Department illustrates that private sector prices in South Africa compare unfavourably relative to upwardly adjusted public sector prices. The UPFS fees for

services included in Table 2 are inflated by VAT as well as ROCE (CapEx assumed to account for 35% of cost, and 20% return included). It has long been argued that price comparisons between the public and private sector need to take account of VAT, cost of capital and return on investment, which are contributors to private sector prices. After correcting for these differences there is still a significant disparity between public and private prices.

Table 2: Price comparison between adjusted UPFS and private sector prices:

Service	Public UPFS+VAT, +20% ROCE	Private Comparator*	Difference
Total Hospital and Physician Cost: Normal Delivery	R 7 448	R 16 721	125%
Total Hospital and Physician Cost: C-Section	R 10 117	R 28 339	180%
Total Hospital and Physician Cost: Knee Replacement Surgery	R 62 828	R 110 645	76%
Total Hospital and Physician Cost: Bypass Surgery	R 79 491	R 304 377	283%

*Private prices from iFHP, exchange rate average for 2012.

97. An international comparison of the availability of MRI and CT scanners indicates that the density of scanners in South Africa far exceeds that of countries with similar economic and health profiles.

Figure 18: Availability of MRI Scanners per 1 million people, as of 2004

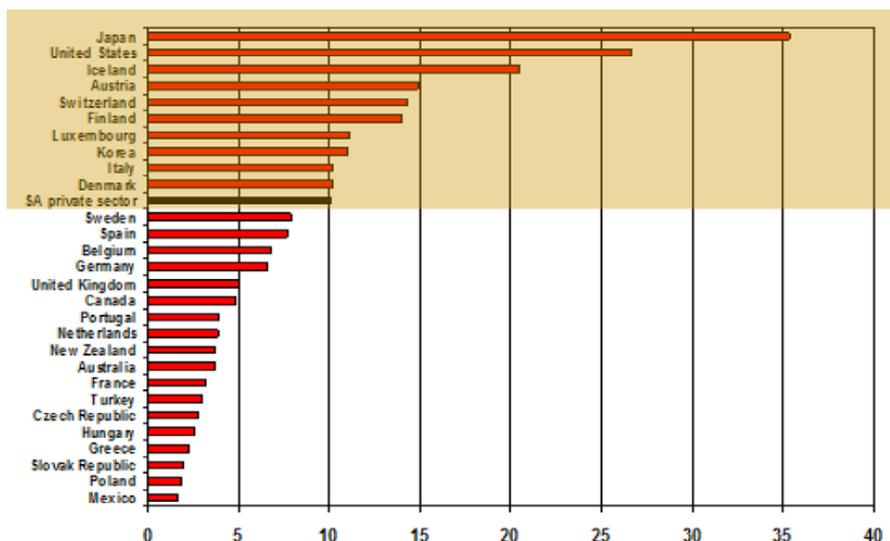
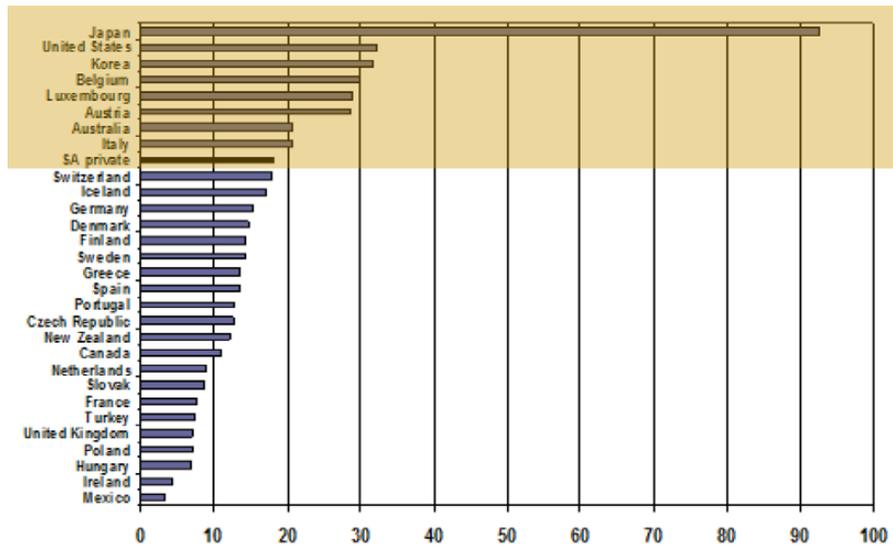


Figure 19: Availability of CT Scanners per 1 million people, as of 2004



Source: OECD Health data, all countries show the most recent known information to 2004. South African data is accurate as at January 2004.

98. Although it is necessary to retain a degree of excess capacity within the hospital market, this excess should be considered in light of global standards, and affordability. Investment in technology and infrastructure can have significant benefits for patients, and cost-saving technologies result in efficiency gains. However, excessive competition based on investment in cost-increasing infrastructure and technology has a negative impact on efficiency. The unnecessary duplication of expensive medical equipment in order to attract doctors and patients leads to expenditure that does not result in equivalent health gains in outcomes.

Our response is structured as follows: First, we will consider the appropriateness of international comparisons across health systems, highlighting the various caveats and potential problems with these comparisons in general, and with specific focus on comparing the South African private health sector with other jurisdictions. Secondly, we will examine the validity of specific assumptions on which the DOH's statements and conclusions are based. This will include an assessment of the relevance of i) the Uniform Patient Fee Schedule (UPFS) tariffs as a costing benchmark for the public sector prices (as well as comparing these with private sector prices); and ii) the accuracy of registries and ownership of MRI and CT scanners.

2 Caveats of International Comparisons

When comparing any international data, the first important factor is to ensure that one is comparing like with like. Especially in across health sectors, where almost all aspects thereof are heterogeneous in nature, it is difficult to make accurate comparisons. In this section we highlight some of the general problems when comparing health data between countries. Unique features of the South African private health sector are also discussed within the context of the DOH's comments and conclusions based on the comparative data presented in their submission.

2.1 General concerns

Many country-specific factors should be considered when comparing international health data. National burdens of disease and associated utilisation patterns, the specific institutional and regulatory structure, as well as the nature of the services provided are some of the factors that influence the measured variables. Together with the institutional structure, country-specific service delivery models, will also influence the extent to which the public and private health sectors in a particular country are substitutes for or compliments to each other. Specific to the pricing data referenced in the DOH submission, the above factors will result in unique equilibrium prices determined by the interplay of market forces (on both the demand and supply side).

Endogenous differences in national health system designs further limit comparability across countries. One would typically expect countries with predominantly public health systems to be more preventative in nature, than the private health system in South Africa, for instance, which is largely focused on curative care/ catastrophic cover. A 'larger' public health system providing quality care to the majority of the population, may result in a smaller complimentary private health system where prices are not determined in the same way as in another country's private health system that provides substitutive services to a bigger part of the population.

Health service prices are also determined by the relationship between providers and payers. In many countries much of the health services are provided by private sector players, who receive payment from the public sector via a universal coverage system or state insurance scheme. Examples of countries where private sector players are reimbursed by the state include the UK via the National Health Service (NHS) and many other European countries, as well as Columbia and most of the South American countries. In other countries the private sector may be vertically integrated to some extent, such as the United States' Health Maintenance Organisation (HMO) model where private payers and providers of the services are closely linked.

2.1.1 Which price is being measured and compared?

In addition to the institutional, regulatory and other differences between health systems, one also needs to consider exactly what data are being compared across countries. In the DOH submission they reference pricing data that were collected for the 2012 IFHP comparative pricing report.³ It is clearly stated in that report what type of pricing data were used for each country and it is not only data from the private sector. For Canada, New Zealand, Switzerland, and the United Kingdom prices are from the public sector and from *one* health plan only. For France and Argentina, prices are a mix between that of the public and private sectors. The data for the USA is very comprehensive: “calculated from a database with over 100 million claims that reflect prices negotiated and paid between thousands of providers and almost a hundred health plans.”⁴ Pricing data for the other countries in the sample, including South Africa, are from the private sector, but also only from *one* health plan.

Evidently, neither the prices themselves, nor the data sources, are comparable between the different countries. Some of these prices would have been determined by the government or other authorities, while others are the result of negotiations between various parties. The data from the health plans are also likely to be reimbursement rates, rather than the actual price of the service provided (with co-payments and other supplementary insurance contributing to the difference). It is further highly unlikely that the prices from one health plan is representative of the country as a whole or even just representative of the private sector alone. To emphasise this point, we quote from the IFHP report itself: “Comparisons across different countries are complicated by differences in sectors, fee schedules, and systems. In addition, for some countries a single plan’s prices are real for that plan but may not be representative of prices paid by other plans in that market.”⁵ The extent to which country-specific taxes were included or excluded is also uncertain.

Without the data being comparable, it is not possible to make any meaningful conclusions from the pricing differences between countries.

2.1.2 Converting prices to a single currency

Comparing prices across countries implies the use of some conversion factor or exchange rate to ensure all prices are presented in the same currency. This may seem an easy task, but is in fact complex; with many factors to consider. The IFHP report does not give any detail as to the methodology used for the conversion of prices to US Dollars. However, in this section we describe some of the issues to be considered when making international price comparisons.

³ See footnote 1.

⁴ See footnote 1 (p.3).

⁵ See footnote 1 (p.3).

Using a simple currency exchange rate (market exchange rate) is not sufficient. While the market exchange rate gives the price of a currency, it does not speak to the purchasing power or true value of that currency. Many different (local) factors influence the purchasing power of a currency that are not necessarily adequately taken account of in the prevailing market exchange rate as determined by international market forces (demand for and supply of specific currencies), as well as political factors, etc.

In developing countries for instance, the cost of labour is often less than in developed countries; significantly reducing input costs and therefore lowering the real price of goods and services in developing countries as compared to developed countries. (Interestingly, in this specific case, the cost of labour, i.e. nurses and doctors, may drive up real prices as there is a shortage of human resources in the healthcare sector in South Africa.) Various factors impacting on the purchasing power of a currency, make international comparative analyses based on market exchange rates alone generally unreliable. In order to overcome this problem and account for differences in the purchasing power of currencies, purchasing power parity (PPP) values are used.

“The absolute PPP exchange rate equates the national price levels in two countries if expressed in a common currency at that rate, so that the purchasing power of one unit of a currency would be the same in the two countries.”⁶ It follows that the PPP implied exchange rate is seldom equal to the market exchange rate. As explained, using the market exchange rate for price conversions would not give the ‘true’ comparative values, and therefore PPP implied exchange rates are generally preferred when performing international price comparisons.⁷ Since the PPP values used for comparison controls/ adjusts for the national price levels, any difference in the converted values of a common good/ service or bundle of goods/ services implies pricing differences between the countries which are unrelated to differences in the respective national price levels (for instance, it could be related to differences in productivity).

Comparing prices in the health sector specifically, comes with additional difficulties – some of which were mentioned above as well, but are repeated here within the context of the chosen methodology. While it is relatively simple to convert prices into a common currency using any of the PPP conversion tables, the comparison of prices across borders introduces a number of issues which should be addressed prior to the PPP adjustment.⁸ The first problem is that the health service or product must be perfectly comparable in all the countries concerned. However, products which appear to be homogeneous at first glance may still prove to be problematic. Some health products or services may include value-added taxes in the prices and products may be bundled differently or have vast quality differences. Exchange rate effects may also already be included in the local prices as many medical products (e.g. equipment, drugs) are imported – especially in South Africa, this may drive up prices.

⁶ Van Marrewijk, C. (2007) “International Economics: Theory, Application and Policy,” Oxford University Press, Chapter 20, p.427

⁷ Gulde, M. and Schulza-Ghattas, M. (1993) “Purchasing Power Parity Based Weights for the World Economic Outlook”. IMF.

⁸ OECD. (2010) “Comparing price levels of hospital services across countries: results of a pilot study,” OECD statistics working paper, 2012/03.

Also important for comparison is the need to ensure that the representativeness of the product in society is similar. The health services being compared must be typically or similarly consumed and purchased in each country.⁹ If a service is scarce in one country and common or more easily accessible in another, the prices will reflect as much. This is a particularly important consideration when using PPP values in the comparison of healthcare prices across countries.

The next problem, which plagues healthcare price comparisons, is that some of the goods being produced and supplied may be produced by non-market producers (such as the government) who price products differently to normal market producers. In healthcare, as services are often supplied by the state or non-profit organisations (where the prices charged are likely to be far below the typical market price), comparisons are especially problematic as the extent to which these non-market producers participate in the market varies significantly.

There is also some concern as to the use of input or output measures to calculate PPP values in the health sector and in the rest of the economy too. Generally speaking, however, the comparative values used in PPP comparisons are usually final expenditure output figures, such as selling prices;¹⁰ the reason being that PPPs, besides playing a role as currency converters, are also price deflators which take varying inflation rates into account. The prices used should thus be consistent with the methods of valuation used to estimate the final expenditures on GDP. There are some cases, however, where values have been determined using input costs, such as hospital services for example, where final prices may be artificially regulated.¹¹

There is a lot of academic literature on the approaches that have been commonly used to convert healthcare costs into a common 'currency' to compare across countries.¹² This is not our current focus though, especially since it is unclear how the data presented in the DOH submission were converted. However, one would have expected the IFHP report to state if PPP adjustments were made, but only normal US dollar prices are given. The methodology employed impacts directly on the reliability and comparability of the prices across countries, also bringing in doubt any related conclusions.

2.2 Gross household income (GHI)

As stated in paragraphs 82 and 83 of the DOH submission, the data presented in Figures 9 to 15 are ratios of the prices in the IFHP report to annual GHI. There is no information in the DOH submission on

⁹ See footnote 8.

¹⁰ <http://www.oecd.org/std/pricesandpurchasingpowerparitiesppp/37984956.pdf>

¹¹ Amerini, G. (1999) "Purchasing Power Parities for Medical Care and Health Expenses: An Informal Report," NBER Chapters, in: *International and Inter-area Comparisons of Income, Output, and Prices*, pages 233-238 National Bureau of Economic Research, Inc.

¹² Schreyögg, J., Tiemann, O., Stargardt, T. & Busse, R. (2008) "Cross-country comparisons of costs: the use of episode-specific transitive purchasing power parities with standardised cost categories," *Health Economics*, John Wiley & Sons, Ltd., vol. 17(S1), pages S95-S103.

the source of GHI or the methodology used to convert GHI figures into a single currency.¹³ One also does not know whether the same years of data were used for the pricing information and the GHI data.

A more important concern is the appropriateness of dividing the IFHP prices by a GHI figure. While comparing (correctly adjusted) GHI figures between different countries can provide valuable information, this may not be the case for the healthcare price comparison specifically. GHI is an average of household income (or at best a median) for the entire population, not just for the small sample population to which the chosen price is applicable. In many countries the private health sector is much smaller than the public sector that provides services to the majority of the population. Calculating a ratio of *one private* health plan's price to that of an entire population's average household income cannot be meaningful or appropriate, especially in making comparisons between different countries given all the problems described above.

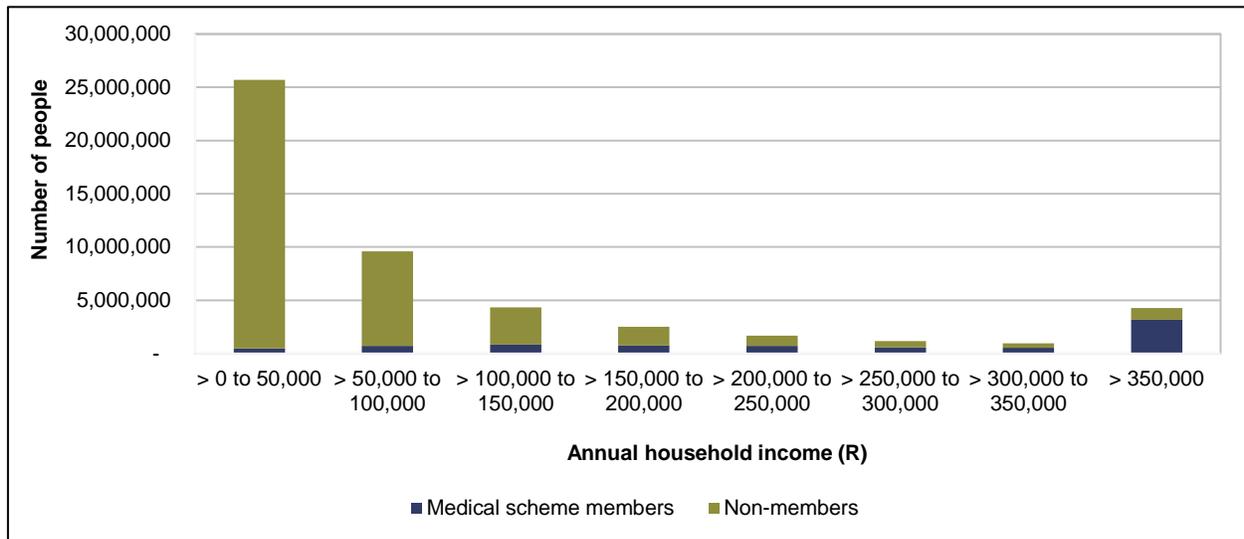
2.3 South African private health sector considerations

It seems in paragraph 83 of the DOH submission that some cognisance is shown of the problem described above, i.e. that (at least for South Africa) the GHI figure is not representative of the population to whom the private health plan's prices apply. It is mentioned that medical scheme members are usually in relatively high income groups and that they used a "roughly doubled GHI" figure to calculate the ratio for South Africa. Again, no information on the methodology for "roughly" doubling the unknown GHI figure is given. However, just doubling household income will not solve the problem, as it will still not be representative of the medical scheme members to whom the price applies. We consider Income and Expenditure Survey (IES) data for 2012 to illustrate the point.

In Figure 1 the total South African population of 50.4 million people in 2012 is divided among medical scheme members (beneficiaries) and non-members in each income band. As is shown, there are only a few medical scheme members in the lower income groups, with 74% of people in the highest income group being medical scheme members. According to the same data, the average annual household income for the entire population was R119,800 in 2012. If one were to double this (according to the DOH submission), annual household income would be R239,600. This is a lot less than R371,700 which is the average annual household income of all medical scheme members. (Average annual household income for medical scheme members in the top income bracket was R658,300 in 2012.)

¹³ Most international databases make some PPP adjustment to compare household income across countries.

Figure 1: Number of medical scheme members and non-members in each income band, 2012



Source: Econex, IES 2012

It is clear that any GHI figure, or “roughly doubled” GHI figure, is not representative of the population to whom the pricing data applies. Without detailed knowledge and research of each of the comparative countries in the analysis, it will be very difficult to make the correct adjustments in order to calculate an appropriate, meaningful ratio of the specific prices to GHI. The data presented in Figures 9 to 15 of the DOH submission is therefore questionable and certainly not meaningful or applicable.

3 Validity of Assumptions

Here we critically assess the assumptions in paragraphs 84 and 97-98 of the DOH submission. Strong conclusions regarding price levels and the distribution of medical technologies in the private health sector are based on these assumptions, which are shown to be unsubstantiated and of questionable accuracy.

3.1 UPFS tariffs and comparison with private sector prices

In paragraph 84 of the DOH submission, public sector prices are compared with private sector prices. Although a comparison of the respective prices is a useful exercise, we note some criticisms regarding the methodology employed in conducting this comparison.

It should be noted that these two sectors have very different regulatory and institutional landscapes that influence the market forces in determining the prices. For the public sector, the tariffs are determined by government, while final prices (reimbursement rates, in this case) in the private sector are determined via negotiation that takes into account many different factors. It is unclear whether the UPFS tariffs are a fair reflection of the costs (or the price) of providing care in the public sector. It is made up of a 'facility fee' and a 'professional fee', but no further detail is given regarding the methodology for determining the tariffs. Since some cost items (like capital costs) run through different state departments, it is unlikely that these are included in the tariffs determined by the DOH. And if included, there is no publicly available information on how this is accounted for. As a result, it is difficult to compare like with like. However, we note that if such a comparison is done, appropriate adjustments should be made to enable any meaningful conclusions. Performing the same exercise in a much more sophisticated manner, Ramjee¹⁴ states that there are many factors that drive cost differences between the private and public sector, including corporation tax (28%), VAT (14%), cost of capital, costs of labour, access to cheaper inputs, provision of other outputs, differences in case mix.

We therefore note that although the DOH has undertaken a potentially useful exercise in paragraph 84 of their submission, there are methodological flaws which impact on the reliability of their results. The private sector prices used in the comparison are sourced from the IFHP report which uses prices from only one South African health plan. As argued above, the representativeness of those prices is questionable and the exchange rate conversion methodology may also detract from the usefulness of the data. It is our understanding that the IFHP report used Rand prices that they converted to US Dollar prices, which the DOH then converted back to Rand prices. It is doubtful that the same methodology was used by the IFHP and the DOH in converting these prices to and from Rands, as no information is given on either calculations.

¹⁴ Ramjee, S. 2013. Comparing the Cost of Delivering Hospital Services across the Public and Private Sectors in South Africa. Research commissioned by *The Hospital Association of South Africa (HASA)*

While the DOH uses the UPFS tariffs for the public sector price, Ramjee¹⁵ uses data from the annual performance plans from each provincial DOH, from the South African Health Review published by the Health Systems Trust and data from the District Barometer Report. For the private sector she uses data collected from the CMS (for all medical schemes and not just one health plan), which is more representative of that sector as a whole. Overall, Ramjee uses a more comprehensive dataset than employed by the DOH, although we do not comment on the reliability of all the sources that are used.

We note that the exercise conducted by the DOH attempts to answer the same question as Ramjee's paper. However, we argue that Ramjee used different data sources and employed a more sophisticated model to conduct a more appropriate price comparison.

In order to compare private and public sector prices, the DOH inflated the UPFS tariffs by including VAT and a 20% Return on Capital Employed (ROCE). Ramjee also made an adjustment for VAT in her comparison, but continued to make additional (necessary) adjustments, namely a corporate tax and cost of capital adjustment, an adjustment to take into account the employment of doctors in the public sector, as well as an adjustment for pharmaceutical and surgical tender prices (which enables the public sector to obtain discounts for certain pharmaceutical and surgical products).

Regarding the abovementioned adjustments made by the DOH, we note the following with respect to the use of 35% CapEx (included in their ROCE assumption). There is no mention of the forms of capital included in this calculation, the denominator used in the calculation, or whether the capital expenditures are spread across the useful lives of assets or expensed immediately when incurred. There is also no mention of the inclusion of depreciation of previously invested capital or the inclusion of capitalised financing costs.

Similarly, the use of 20% ROCE is vague and not appropriately motivated. Specifically, one is not able to determine whether it is 20% profit on goods and services and, if so, how this profit is determined. We are also not sure if the return is calculated before or after tax and what expenses are included in the determination of this return measure. There is no evidence presented to substantiate the 20% figure.

In addition, adjusting the figures for tenders is especially relevant, given the large discount afforded to the public sector, as shown in Table 1 below.

¹⁵ See footnote 14.

Table 1: Examples of public sector discounts on products

Product	Supplier	Private sector SEP per unit ex VAT	DOH tender price	DOH tender price ex VAT	Duration of DOH tender	Public sector discount on private sector prices (ex VAT)
TARGOCID INJ 400mg/ 20ml 3ml WATER-1	Sanofi Aventis	1345.33	289.56	254.00	Up to 31 Jul 2013	81%
CLEXANE INJ 0.4ml 40mg PREFILLED SYR-10	Sanofi Aventis	67.37	19.38	17.00	1 Jun 12 to 31 May 14	75%
MERONEM VIAL 1G-1	Astra Zeneca	326.5	125.95	110.48	Up to 31 Jul 2013	66%

Source: Ramjee 2013, p.28 [Table 16]

We therefore argue that these more extensive adjustments enable Ramjee to make a more thorough comparison than in the DOH's submission. Taking into account the more sophisticated model and thoroughly defined comparison criteria, Ramjee finds that costs are only 5.8% higher in the private sector. This differs greatly from the difference shown in Table 2 of the DOH submission, which finds a range of 76% to 283% for the chosen procedures.

3.2 MRI and CT scanners

With reference to paragraphs 97-98 where it is stated that the density of MRI and CT scanners in South Africa's private sector "far exceeds that of countries with similar economic and health profiles", we want to draw attention once again to the caveats of such a comparison, as well as the accuracy of the data used.

In Figures 18 and 19 of the DOH submission, data for the South African private sector are compared with national data for different countries, presumably including both the private and public sectors in those countries. Such a comparison is not meaningful, as the picture that emerges will look very different if the public sector data are also included for South Africa, or only private sector data shown for the other countries. As argued above, the DOH is not comparing like with like and it is not prudent to make any conclusions based on data where the representativeness of the variables considered are not similar across countries.

Various endogenous health system differences between the countries will also influence the availability of such devices, including resource constraints, service delivery models, health needs, other unique demand and supply factors, etc. (Although it is mentioned in the DOH submission that some of the

countries have similar economic and *health* profiles, no evidence of any such assessment is provided, nor is it clear to which countries they are referring. Such vague, unsubstantiated statements only add to the unreliability of the conclusions reached.)

There is also concern regarding the accuracy of the South African data used for the comparison. While the source of the international data is given (OECD Health data), no source is provided for the South African private sector data. The OECD only recently started collecting data for some non-member countries, such as the BRICS countries, and the *only* data on medical devices for South Africa in the OECD Health dataset is given in Table 2 below.

Table 2: MRI and CT scanners in South Africa, 2012

	CT scanners	MRI scanners
Number	41	10
Per million population	0.78	0.19

Source: OECD Health data

According to the OECD health data for South Africa, the country as a whole had far fewer CT and MRI scanners in 2012, than the private sector alone in 2004 (according to the DOH). Even if the OECD data in Table 2 is only for the public sector (this could not be confirmed) it emphasises the earlier point about the inappropriateness of comparing private sector data with national data for other countries.

Since the source of the South African private sector data used by the DOH for 2004 is not given, one can only assume that it must have been taken from the national registry as kept by the Directorate of Radiation Control (part of the DOH). It is our understanding however, that the accuracy of these registries cannot be confirmed. Already in 2011 the Democratic Alliance stated that the Directorate of Radiation Control was non-operational.¹⁶ At that time it was stated that in 2003 the Directorate was “unable to investigate 358 lost radiation devices across the country”.¹⁷ There is no indication that the situation has improved over the last decade or that the registries are correct.

3.2.1 Ownership of MRI and CT scanners

Again, without any evidence to support such an allegation, the DOH states that in the context of the hospital market “excessive competition based on investment in cost-increasing infrastructure and technology has a negative impact on efficiency.” We would like to highlight two important factors when making such a statement.

¹⁶ Press release available at: <http://www.da.org.za/archive/radiation-control-directorate-non-operation-poses-threat-to-public-safety/>

¹⁷ See footnote 16.

First, MRI and CT scanners are generally not procured or owned by private hospitals. These types of devices are bought by radiologists and other related specialties. Since private hospitals also do not interfere with any clinical decisions regarding diagnostic or treatment protocols, it is near impossible for the hospitals to engage in “excessive competition” with the perceived consequences as stated in the DOH submission.

Secondly, private hospitals have very little (if any) incentive to invest in “cost-increasing infrastructure and technology” as this will decrease profits. There is an incentive to attract specialists by procuring certain medical devices or technologies (other than MRI and CT scanners), but this is usually done after a detailed assessment of the expected return on investment (ROI) and only if it will *increase* efficiencies.

4 Concluding Remarks

Following this critical assessment of the relevant sections of the DOH submission to the CC, it is our opinion that the arguments made are flawed and unsubstantiated. Their conclusions are based on improper international comparisons, not comparing like with like. None of their methodologies are adequately explained, nor is any evidence given of the various allegations against the private hospitals.