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WHO/OECD submission to the HMI dated 30 August 2016

Comments

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Background

OECD Health Working Paper No. 85 ("OECD HWP 85"), featuring an analysis of South African hospital price levels as compared to those of selected OECD countries, was published in 2015. It formed the core of a submission to the inquiry into the healthcare market conducted by the South African Competition Commission in February 2016 by the South African WHO country office and the OECD health division.

Scenarium was requested by Mediclinic in March 2016 to have a look at the paper and to provide comment. We found numerous flaws in the paper — methodological, analytical and didactical. We were then commissioned by Mediclinic to analyse the OECD working paper and provide our comments in an independent report. We submitted our report ("Scenarium report") end of June 2016.

Rather than being provided an opportunity to present our findings and worries to the Competition Commission, the OECD/WHO team was given the floor once more to present their “defense” to the Competition Commission on 30 August 2016. We received their comments on our analysis via Mediclinic and herewith take the opportunity to respond to some of the more critical points.

The WHO/OECD submission dated 30 August 2016 ("WHO/OECD comments") refers to different documents or reports submitted by the South African hospital industry. We had not been aware at the time of the other reports commissioned by the South African hospital industry. We have not read them. We do not automatically subscribe to any statements that have been made by other organisations in the submissions on behalf of the South African hospital industry.

General observations

On a personal note: We find the WHO/OECD comments quite offensive. The authors have obviously not engaged with the analysis, with the critical and constructive points, or with the requests for further detail in the Scenarium report. They rather deliver a high-brow sweeping blow that does not address or serve to heal any of OECD HWP 85 weaknesses and flaws.

It is difficult to engage with the WHO/OECD comments because of their avoidance of responses to the points made in the Scenarium report. Here, we would like to react to a couple of points where the WHO/OECD comments explicitly misrepresent or misinterpret our argument. Beyond this, we would urge stakeholders to read the original Scenarium report and consider the justified criticism of OECD HWP 85 and the further arguments made by Scenarium. They are meant as a constructive contribution to the debate by experienced health economists and health policy experts with a solid knowledge of healthcare in South Africa and no affiliation with any relevant interest group.

The first part of the WHO/OECD comments (Attachment 1A) reintroduces many generic truths and truisms. We would hope that there is nobody engaged in health systems and health reform discussions who would not acknowledge the right to healthcare and health as a human right. We fully support the observation that the South African health system is in dire need of reform. We would also assume that every stakeholder in healthcare in South Africa is familiar with Section 27 of the South African Constitution, is aware of the NHI White Paper, understands the concept of market failure in health, and knows the relevant data.
On page 8, the WHO/OECD comments claim that “[a]ll of the reports ... pose strong arguments against government intervention in the private health care market”. The Scenarium report obviously has not been read properly. We would never have suggested this, as we understand the need for regulation of the healthcare markets in South Africa very well. After all, supporting governments in optimising the regulatory framework of national health systems is our main business; we believe in effective regulation embedded in democratic processes. It is because of our years of involvement in working towards the right regulatory framework that we do have major issues with HWP 85: The working paper contains neither the term “regulation” nor “regulate” but suggests price control, which is a rather rigorous form of “regulation”.

The polemic Attachment 1A of the WHO/OECD comments is highly suggestive in trying to highlight all the right things and implying that the critics may not subscribe to good and obvious principles. However, we do! We simply disapprove of using OECD HWP 85—a bad paper—as the core piece of a submission in a process that will have an impact on the future design of the South African health system.

Quick reaction to selected points made in Attachment 1B

It is indeed tempting to start dissecting the WHO/OECD comments sentence by sentence but we would rather contribute to deescalating the exchange and engage in a fair, effective and high-quality discourse around the matter. The text makes this difficult: Already the introductory paragraph of Attachment 1B takes the critics for fools by suggesting that there was criticism of the Eurostat-OECD methodology. I would assume that the various reports rather referred to particular pitfalls and limitations when it comes to applying the methods to “hospital prices”, which is an area that has not been “refined over a period of thirty years”. There is nothing wrong with acknowledging limitations; this is merely proper conduct, allows for further debate and methodological progress.

In the Scenarium report, we did not bring up the question as to whether OECD HWP 85 had been properly (peer) reviewed. However, since the WHO/OECD comments raise the issue (p. 14), we would like to question that the listed experts have indeed properly read the working paper, given that the presentation of some of the most basic statistics in the paper is incoherent (as pointed out in the Scenarium report).

In the following, we shall constrain our points to comments with direct reference to the Scenarium report.

3.4 Misinterpretation of the methods to analyze affordability (WHO/OECD comments)

The presentation of this section repeats the content of OECD HWP 85; it does not take into account our critical assessment of the affordability issue in the Scenarium report.
5.3. **Coefficient of variation** (WHO/OECD comments)

[Scenarium report (pp. 25-33)]

The Eurostat-OECD Methodological Manual on Purchasing Power Parities (Eurostat 2012) points out the importance of variation on different levels. As part of the Quaranta editing procedure there is reference to the variation among a country’s PPP-indices:

“Country variation coefficient […] Measures dispersion among a country’s PPP-Indices for a basic heading. In other words, it measures the variation in a country’s price levels among the products it priced for the basic heading and the reliability of its PPP for the basic heading. The higher the coefficient’s value the less uniform are the country’s price levels and the less reliable are its PPPs. A coefficient with a value over 33 per cent is an outlier and should be investigated.” (p. 364f.)

As a part of the intra-country validation procedure the Eurostat-OECD Methodological Manual on Purchasing Power Parities (Eurostat 2012) also states that …

“5.96 […] The measures used to identify outliers among the average survey prices are their variation coefficient and the ratio between their maximum and minimum price observations - called the max-min price ratio. There are two critical values for each measure. **Average survey prices with variation coefficients of over 20 per cent or with a max-min price ratio larger than 2.0 are flagged with one question mark (?) as questionable and need to be checked – […]**. **Average prices with variation coefficients of over 40 per cent or with a max-min price ratio larger than 4.0 are flagged with three question marks (???) as extremely questionable and require to be investigated rigorously.**”

Although this refers mainly to reporting errors, the conclusions drawn are also relevant for “accurate observations”.

“5.99 Products with price variation caused by too broad a specification or inconsistent pricing across outlets **should be deleted if they are unrepresentative** or if they are representative and the country already has enough representative items for the basic heading.”

We do conclude that price variations within the case types remain a major topic when evaluating the validity of PPP based price comparisons and should be considered in combination with the aspect of representativeness.

Concerning the editing procedure the authors of OECD HWP 85 comment [p. 38]:

*The results of the analysis of variation or the Quaranta editing was conducted as part of the standard process of hospital price comparison as described in the OECD-Eurostat methodology. Among the countries in the OECD study, only four countries show a value higher than 33%.* What would be interesting to know in this context is: What are those four countries, were they excluded from the study, and what are the respective values for South Africa for the three coefficients of variation – product, country, and overall - for each case type?

The authors also remarked, that the estimation of the coefficient of variation for Germany was unclear [p. 38f]

*Mediclinic-Scenarium also reported a significant correlation between the coefficient of variation in price for Germany and the difference between the average price for OECD countries and the SA price by case type. It is unclear how the coefficient of variation in prices for Germany was estimated.*
The coefficient of variation in prices was calculated according to the Eurostat-OECD Methodological Manual on Purchasing Power Parities (Eurostat 2012) “When the case type is linked to more than one DRG category, the average quasi price for the case type is the weighted average of the quasi prices of the DRG categories with which it is linked where the weights are case numbers for typical cases.” The average price for each case type was calculated as a weighted average using DRG-specific prices and the number of cases (for each primary diagnosis and/or procedure). The coefficient of variation is calculated as the standard price deviation divided by the average price.

*It is also unclear why they qualify the latter (Y axis variable) as price level.*

In figure 4 the Y axis variable is correctly qualified as „Price difference OECD/SA“.

### 5.4. Representativeness of case types and invalid comparisons (WHO/OECD comments)

[Scenarium report (pp. 33-39)]

*Regarding the comment about the representativeness of cases, as noted previously, the OECD methodology weights each case type by its number of cases and price. By so doing we take into account differences in the distribution of cases among case types by country.*

The weighting of case types does take into account differences in the distribution of cases among case types but will not account for shortcomings in comparability due to lack of representativeness. We did show (Table 7 of our report) that in the South African sample in seven of the surgical case types there were less than 500 cases included, all of which showed a marked difference in the share of cases compared to the OECD sample and most of which – with the exception of S14 peripheral vascular bypass – show distinctly higher average prices than the OECD average. The weighting of case types will cushion the effect of including high-priced, non-representative cases, but it will not eliminate this effect.

*The Mediclinic-Scenarium authors conclude that “there is a higher case mix index for South Africa”.* We did not conclude that there is a higher case mix index for South Africa.

On several occasions the authors of OECD HWP 85 question the validity of comparisons made by Scenarium [p. 39].

*Furthermore, the validity and comparability of the authors’ comparison is unconvincing, primarily because of the limited sources of data.*

The aim of our study was to point out – on the basis of the data available – critical aspects in the PPP based comparison of South African private hospital price levels as carried out by the authors of OECD HWP 85. We are well aware that a comparison of the Mediclinic sample – comprising only the hospital component of roughly a quarter of all the cases included – with prices in the OECD comparator countries would lack external validity. Our example serves to point out the high variability of prices within the case types for the hospital component of Mediclinic cases. The overall variability within the South African sample for all price components – including specialists, radiology, pathology etc. – may be lower, comparable or higher. Whether or not this holds true for the South African sample can and should be made transparent by the authors of OECD HWP 85. With the information provided in the working paper and in the given response to the comments a thorough assessment of the validity of hospital price level comparisons cannot be carried out.
What the authors of OECD HWP 85 should disclose

The Eurostat-OECD Methodological Manual on Purchasing Power Parities (Eurostat 2012) states:

With the output-price approach PPPs are calculated with the market prices that participating countries collect for a sample of comparable and representative products. Before prices can be collected, the products to be priced have to be selected and defined. Therefore, prior to collecting prices for hospital services, it is first necessary to select and define the products – that is, the treatments – that participating countries have to price. (p. 161)

Therefore, the validity of the international comparison of South African hospital price level still depends on the homogeneity of prices included in the sample case types and on the sample composition. In their response the authors still fail to disclose relevant data to evaluate the validity of results. In order to clarify these points the authors of OECD HWP 85 should disclose:

1. The composition of cases by case types for the comparator countries for 2011, 2012 and 2013. This serves to evaluate, in how far the structure of the South African sample is comparable or different from the sample structures of the 20 OECD countries and the subset of seven OECD “lower income” countries.

2. For the South African sample: Number of cases, average price and variation coefficients for each case type before and after exclusion of outliers. How many cases were excluded and how did this affect the average price of the case type?

3. Which are the four countries that exceeded the value of 33% and were they excluded from the study? What are the values for the South African sample (i.e. the three variation coefficients – product, country, and overall variation coefficient - for each case type)?

7.4 The affordability of private voluntary health insurance is relevant for all South Africans ...

(WHO/OECD comments)

This section of the WHO/OECD comments contains rather discourteous and manipulative statements regarding our critique in the Scenarium report. In our report, we explicitly discuss the question of affordability and go into more detail about the calamitous dichotomy of the South African health system and the afflictions of inequality. We criticise the naiveté of the respective discussion in OECD HWP 85. In reaction to the inappropriate discussion of the problem in OECD HWP 85 and the associated diagram (p. 25, Figure 5) and an additional presentation by WHO/OECD for the Competition Commission with the upper four consumption deciles plotted into the same diagram (reproduced in WHO/OECD comments, p. 53), we demonstrate that by calculating the average consumption expenditure of the alleged private sector hospital users (using IES data) it can be shown that the country lies exactly on the “OECD income-price trajectory”.

However, we are undertaking the exercise for the sake of the argument and describe the presentation as “problematic”. We discuss this point in the context of affordability and the question of financial protection. It is absolutely inappropriate to suggest that our report “hides the variation by expenditure decile and thus provides a less detailed and misleading picture” (which—if appropriate—would apply even more to the respective presentation, and several others, in OECD HWP 85). This accusation wrongly suggests that we present the correlation as a justification; it ignores our argument.