Response to public submissions

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## Contents

**Section 1**  
Executive Summary  
The evidence on price and concentration  3  
Bargaining Power  5  
Collective bargaining  10  
Medical Arms Race  13  
Competition economics and healthcare: remarks in relation to two specific concerns  14

**Section 2**  
About this report  16

**Section 3**  
The time-series evidence on the evolution of ‘price’ and concentration  18  
Claims and evidence  19  
Our assessment of the evidence  23  
Summary  37

**Section 4**  
Bargaining power  39  
A robust analysis of bargaining power must consider the outside options of both sides in the negotiation  40  
Evidence relevant to the evaluation of outside options  41  
Summary  51

**Section 5**  
Reintroducing collective bargaining is not likely to be good policy  53  
Competition policy in respect of collective bargaining in South Africa  56  
Considerations relevant to choosing a remedy to a regulatory distortion  58  
Collective bargaining is likely to have adverse effects  60  
The alleged advantages of collective bargaining are uncertain  69  
The international examples cited by the Department do not support its position on collective bargaining  72  
Summary  73

**Section 6**  
Medical Arms Race  76  
The Department’s submission  76  
The evidence presented by the Department  77  
The Department’s discussion of the economic literature on medical arms race is one-sided  79  
Competition for specialist physicians  83  
Game Theory and the Medical Arms Race  84  
The Department’s analysis of MRI and CT scanner density is unreliable and potentially misleading  85  
Summary  86
<table>
<thead>
<tr>
<th>Section 7</th>
<th>Competition economics and healthcare: remarks in relation to two specific concerns</th>
<th>89</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The argument that price controls are a suitable remedy to counter “monopolistic production”</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Does the evidence support claims that hospital providers are responsible for utilization increases?</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>100</td>
</tr>
<tr>
<td>Annex A</td>
<td>Netcare “Transition of Care Review, 2012”</td>
<td>102</td>
</tr>
</tbody>
</table>
Section 1

Executive Summary

1.1 This report has been prepared at the request of Netcare Limited (Netcare), through its counsel Nortons Inc., for submission to the Competition Commission of South Africa in its market inquiry into the private healthcare sector (the “Inquiry”). We have been requested to comment on various economic aspects of submissions made to the Inquiry. The very significant volume of submissions to the Competition Commission necessarily means that this paper does not try to respond to every submission. Rather we focus on what appear to be the most relevant submissions for private hospitals; including, in particular, the submissions made by the Department of Health (the “Department”), the Board of Healthcare Funders of South Africa (the “BHF”), Discovery Health, Medscheme, Profmed and Bestmed.

1.2 Where relevant, we draw on the findings of our earlier submissions to the Inquiry regarding bargaining between Netcare and medical schemes (the “Bargaining Paper”) and also in relation to the analysis of the relationship between Price and Concentration (the “Price-Concentration Paper”). For brevity, we have not repeated the conclusions of those papers, which respectively provide a comprehensive examination of the bargaining process between Netcare and medical schemes and the relationship between Netcare’s tariffs and local market concentration. In addition, at various points in this report we refer to the earlier “Geographic Report” by Ms Margaret Guerin-Calvert and also on her subsequent submission which

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1 These submissions were published on the Inquiry’s website on 5th February 2015.

2 Davis, P., A. Parkinson, V. Kumar and A. Lam (2014) “Evidence on bargaining between medical schemes and Netcare in South Africa”.

3 Davis, P., A. Parkinson, V. Kumar and A. Lam (2014) “Evidence on the relationship between Netcare’s prices to medical schemes and local market concentration”, submission to the South Africa Competition Commission’s Health Market Enquiry.

responds to related aspects of the submissions made to the Inquiry (hereafter “Ms Guerin-Calvert’s response”).

1.3 We begin by noting three common themes which are worthy of introductory remarks:

a. First, throughout this report we repeatedly make the observation that the submissions by the Department and the BHF provide remarkably little by way of evidence beyond their own testimony on a particular topic. At the same time, those submissions make a number of stark assertions about the functioning of vast swathes of the healthcare industry in South Africa. The absence of documentary or empirical evidence is at times difficult to engage with meaningfully, but we have sought to do so to the extent practicable. The Competition Commission has previously made clear that it intends to pursue an evidence-led approach to its inquiry.

b. Second, since there is a great deal of focus on market concentration in the submissions, we note that economics shows there is no necessary connection between market concentration and adverse outcomes for consumers – whether in the form of higher price levels, less choice or less innovation. We described the proper economic approach to an analysis of bargaining power in our Bargaining Paper. However, more generally, we note that economics strongly suggests that market concentration can lead to efficient market outcomes because firms that are more efficient (in terms of achieving lower costs, adding greater value for consumers, or launching more innovative products) may tend to have greater market shares and provide good outcomes for consumers. Thus, economics does not suggest an overly simplistic approach which presumes market concentration is ‘bad’, but instead that a careful case-by-case analysis of the evidence is required in order to come to a reasoned and evidenced view. It is certainly not sufficient to simply measure market shares, or calculate measures of market concentration such as HHIs, and take for granted that high market shares and market concentration will produce poor market outcomes for consumers.

c. Third, we note that while economics does suggest that the specifics of healthcare are worthy of consideration and should be accounted for in an analysis, private healthcare


Specifically, at para. 16 of the Draft Statement of Issues, the Competition Commission states that, “[t]he inquiry will evaluate the various explanations for costs, prices, and expenditure increases in the private healthcare sector and will identify competitive dynamics at play. This will provide a factual basis upon which the Panel can make evidence-based recommendations that serve to promote competition in the interest of a more affordable, accessible, innovative and good quality private healthcare [emphasis added].”
markets are not so fundamentally different from other markets as to mean that competition cannot deliver good outcomes for consumers. For example, the UK Competition and Markets Authority (the “CMA”) in its recent investigation into private healthcare sought to support competition, not to replace it with price regulation.7 We do not believe the economic literature supports the Department’s and the BHF’s submission that competition in private healthcare markets cannot deliver good outcomes for consumers, so that private healthcare markets require price regulation or collective bargaining.8

1.4 In what follows, we group the statements made in the submissions by theme, and comment accordingly.9

The evidence on price and concentration

1.5 Several submissions argue that current levels of concentration in the private hospital sector affords hospital groups bargaining power (or “market power”), and/or that consolidation in the private hospital sector has led to increased bargaining power of the private hospital groups over time.

1.6 The primary evidence proffered by such submissions, and in particular that of the Department, seeks to relate increases in concentration over time to increases in prices. We find that this evidence is unreliable and potentially misleading.

1.7 First, we note that the Department (drawing on van den Heever (2012)10) does not consider a measure of price but instead a measure of average expenditure (real medical scheme hospital costs per average beneficiary per annum). The analysis of whether increases in average expenditure are above inflation conflates two different effects – increases in hospital prices (tariffs) and increases in utilisation – since average expenditure is driven by both.

1.8 The Department argues that the evidence shows that medical scheme contribution rates have increased in excess of CPI in recent years, and seeks to ascribe this to (inter alia) hospital provider market power. However, it presents no evidence to support its implicit assumption that price increases rather than increases in utilization are driving the observed increases in


8 Ms Guerin-Calvert’s response further expands on these issues.

9 We have not provided comprehensive reference to the submissions in which the statements are made in this Executive Summary. The reader is referred to the main text for full references.

average expenditure. The evidence presented in submissions by Discovery Health and Medscheme largely contradicts the Department's submission and instead indicates that increases in average expenditure are primarily due to demand-induced increases in utilisation (for example, because of aging, increased disease burden or adverse selection). The position that increases in utilization are largely responsible for increasing average expenditures is consistent with our own findings in the Bargaining Paper that Netcare's prices exceed CPI, but price inflation was consistently similar to the wage inflation\(^{11}\) and also those of Barry Childs from Insight Actuaries and Consultants (“Expert Report of Barry Childs”).\(^{12}\)

1.9 Second, we note that there are significant disagreements between the Department's submission and other analyses regarding the timing of consolidation. Whilst the Department focusses on the period 1999-2004, other authors date increased concentration in the private hospital sector commencing earlier, in particular the period 1994-1999. When considering whether there is evidence of a causal link between concentration and price, the Panel will need to carefully consider the relative timing of the increase in concentration and the claimed increase in price.

1.10 Third, the choice of the relevant measure of concentration itself requires consideration. In particular we note that price-concentration analyses seek to explain movements in prices by reference to changes in concentration. As such, the measure of concentration that should be used should reflect the way in which market structure is believed to have affected price-levels. In particular, we note that:

a. The analysis submitted by Econex calculates a HHI which takes account of collective bargaining prior to 2004 and consequently is significantly higher than the HHI used in the Department's analysis during the period of collective bargaining. The HHI then falls significantly when collective bargaining comes to an end. In contrast, the time-series of the Department's measure of concentration rises during the period.

b. Relating national concentration to price fits uncomfortably with the fact that geographic markets for hospital services are local, as discussed in the Geographic Report. To convincingly analyse bargaining power in a national negotiation one must consider the outside options available in particular locations, and then consider the degree to which any ability to exercise market power locally would translate into national bargaining power. Accordingly, the simplest national concentration measure may not capture the cumulative effect of the local factors which we would expect to affect relative bargaining power and, therefore, tariffs.

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\(^{11}\) See para. 3.36 et seq. of the Bargaining Paper.

1.11 Fourth, we note that any analysis seeking to relate price and concentration must be performed carefully and, where the wider evidence base suggests other changes have affected the price measure over the period, they must be controlled for. For example, in this case:

a. the analysis should carefully consider other factors which may have affected average expenditure over time, such as increases in utilisation or increases in input costs such as pharmaceuticals or surgical equipment; and

b. the analysis should consider whether changes in the regulatory and competitive environment have affected price levels; in particular, it should consider changes such as the end of collective bargaining, the increase in medical scheme concentration and the impact of the Medical Scheme Act in 1998 (which we understand introduced community rating, open enrolment and PMBs) as each of these are potentially drivers of changes in the Department’s chosen hospital price measure (real medical scheme hospital costs per average beneficiary per annum).

1.12 Finally, we note that the analysis relied upon by the Department relates two variables which trend upwards (average expenditure and concentration). The economic and statistical literature has long recognised the dangers of relying on correlations between trending variables and uses the term “spurious correlation”, to warn researchers that correlations between trending variables must be treated with great caution since any two variables which trend upwards over time will appear to be correlated even if there is no causal relationship between them.

1.13 We conclude that the time series evidence used, for example by the Department, to suggest a causal relationship between ‘price’ and concentration is unreliable and has the potential to be misleading.

Bargaining Power

1.14 In this section we consider the evidence in relation to arguments made in the submissions of the Department, the BHF, Discovery Health, and Medscheme and others regarding the relative bargaining power of hospital groups and medical schemes (or medical scheme administrators negotiating on behalf of medical schemes).

1.15 We begin by explaining that economists and competition authorities begin to analyse bargaining power by considering each party’s outside options in a negotiation. While concentration may be relevant for such an evaluation, a more granular analysis of each side’s

13 We note that if hospital groups were coordinating effectively during the collective bargaining period, it is not clear why increases in hospital market concentration during that period should have had an effect on their bargaining power and hence prices. The end of collective bargaining, however, is argued to have potential to impact prices (negatively according to Econex and positively according to those who argue collective action by medical schemes acted to moderate hospital groups’ bargaining power). Such effects must be considered carefully in a convincing analysis.
outside options in the negotiations is required in order for the evaluation to be convincing. Certainly, one cannot only consider simple measures of size or concentration indicators from one side of a market and expect to come to a robust view on relative bargaining positions.

1.16 We then consider the evidence in the submissions to the Inquiry on four specific factors which are argued to affect hospital groups’ and medical schemes’ relative bargaining positions, namely: (i) DSP networks; (ii) national negotiations; (iii) PMBs; and (iv) the strength of the competitive constraint from independent hospitals.

DSP networks

1.17 We first consider the role of DSP networks (or “network options”) in influencing relative bargaining power. The BHF reports two examples of negotiations which it claims shows that hospital groups have greater bargaining power than most medical schemes: a hospital group threatening schemes with large price increments unless in each case it was designated a DSP and a hospital group engaging in “bull-dog tactics”.14 Profmed’s submission asserts that smaller schemes are not able to use DSP networks to extract low prices. In relation to these concerns we note that:

a. First, we explained in our Bargaining Paper that: (i) (DSP) network options improved medical schemes’ outside options and improved their bargaining position; (ii) we gave examples of small schemes utilising DSP networks, such as Spectramed;15 and (iii) we examined Netcare’s prices to different medical schemes and [CONFIDENTIAL].

b. Second we explain that, on the basis of the limited information available in the BHF submission, we believe that the Panel should interpret the ‘bull-dog’ negotiating tactics used by the hospital group, as described by the BHF, as being consistent with a vigorous negotiation that eventually led to a lower negotiated price for the scheme; it appears that the hospital group offered a zero increase in tariffs – i.e., a reduction in real terms – if a DSP was implemented. This is consistent with our review of Netcare’s evidence, reported in our Bargaining Paper that schemes with restricted DSP networks achieve lower prices, which we ascribed to effective bargaining on the part of the medical scheme. Offers of

14 BHF submission, para. 6.4: “For instance one hospital group threatened a medical scheme with a double digit price increase unless that medical scheme made them a designated service provider for the scheme. BHF can confirm that another medical scheme had a 13% increase for 2014 by this hospital group and that this was reversed after a DSP arrangement was signed. Another hospital group was described as using ‘bulldog tactics’. The bargaining power of private hospitals is usually much greater than that of most schemes for a number of reasons.”

15 Bargaining Paper, para. 7.46. The CMS annual report states that Spectramed had around 65,000 beneficiaries as at 31 December 2011.
price reductions should not lightly be judged undesirable for medical scheme members (as implied by the BHF).

1.18 Next we consider two specific concerns in respect of network options raised by Discovery Health.

a. We find that Discovery Health’s concern that schemes’ bargaining power “is constrained by limited supply in some regions”\(^\text{16}\) is not sufficiently specific to evaluate in detail. However, we do note that the Geographic Report concluded that Netcare does not hold “regional dominance” and instead suggested that the majority of Netcare’s hospitals face many competitors,\(^\text{17}\) while only six of Netcare’s smaller hospitals are solus. Moreover, in the Bargaining Paper we provided evidence showing that Netcare’s solus hospitals were, in fact, regularly excluded from restricted DSP networks, including Discovery Health.

b. Discovery Health also argues that “competition between open schemes […] limits the ability of schemes to switch hospitals in and out of networks”.\(^\text{18}\) In respect of this concern we make the following observations:

i. First, we note that this observation may imply that consumers have preferences for particular providers, and so may not always welcome that provider’s exclusion from a given medical scheme’s network. If so, the Panel will need to be careful to evaluate consumers’ overall interests – since medical schemes’ interests are not necessarily the same as consumers’ interests.

ii. Second, we note that if competition between open medical schemes is limiting the ability of schemes to switch hospitals in and out of networks, a natural next step for the Panel may be to consider for example whether a lack of information for consumers in the medical scheme market is limiting or distorting competition in the medical scheme market. If scheme members are able to make informed choices between different medical scheme options (which may vary in coverage and contributions), then medical schemes should similarly be able to design products which match their customers’ preferences over price and network coverage. We note that there is evidence to indicate that consumers can make such trade-offs when choosing whether to purchase medical scheme options with restricted networks and lower prices.

iii. Third, as we described in our Bargaining Paper, it is the relative attractiveness of outside options which is important for the Panel’s overall assessment of relative bargaining position. In this regard, while we agree that it will certainly not be costless

\(^{16}\) Discovery Health submission, para. s56 on p. xiv.

\(^{17}\) Geographic Report, para. 7. Relatedly, in the Bargaining Paper (para. 7.14) we consider only six Netcare hospitals to be “solus” sites: Kokstad Private, Kroon, Cuyler, Settlers, Port Alfred and Margate.

\(^{18}\) Supra note 16
for a scheme to change the composition of its network for a DSP network option, the hospital group's outside option is typically relatively worse; the exclusion of a hospital from a restricted network means that it would receive very few patients from that network option due to the significant out-of-pocket payment required from patients to use out-of-network hospitals.

National negotiations

1.19 We next consider the claim that national negotiations are potentially undesirable if national negotiations mean that prices do not reflect regional variations in supply and demand. Economics suggests that contractual and organisational structures often arise for specific reasons. A question for the Panel is whether the fact that we observe of national bargaining is reflective of the exercise of bargaining power – whereby hospitals insist on national negotiations – or whether instead national bargaining is used because it is economically efficient. In this regard we note that:

a. multiple regional or local negotiations would increase transaction costs;

b. regional or local contracting may impede the development of alternative reimbursement mechanisms (“ARMs”) which require large patient volumes on which to base pricing;

c. there can be regional elements to a national pricing tariff, for example Netcare’s tariffs do include some instances of differential discounts by location (although the proportion of revenues covered by such discounts is small); and

d. economics suggests that it is not clear whether or not regional or local pricing would be positive overall for medical schemes; it is instead likely there would be winners and losers from such a change.

1.20 Finally, we note that Medscheme’s allegation that the hospital groups are unwilling to negotiate regionally is unsupported in the case of Netcare; Netcare told us that it cannot recall any instance where Medscheme requested regionally negotiated tariffs.

PMBs

1.21 We considered the role of PMBs in determining relative bargaining power. In relation to this concern we note that:

a. First, Netcare does not charge different rates for PMB and non-PMB conditions.\(^{19}\) Moreover, we understand that hospital groups such as Netcare do not decide whether to

\(^{19}\) For completeness, we note that the set of conditions covered by PMBs is determined by regulation and not by Netcare.
admit patients; instead, that decision is in the hands of clinicians, while patients also make choices as to whether to choose a provider where co-payments would be required.

b. Second, in contrast to the Bestmed and Profmed argument that hospital groups have no incentives to enter into network agreements with schemes because of PMBs, we note that Netcare’s documentary evidence suggests that it actively seeks inclusion into DSP networks.\(^\text{20}\) We also note that the BHF has stated that hospitals groups aggressively seek their inclusion in DSP networks via the use of ‘bull-dog’ tactics. One would presumably not expect to see hospital groups aggressively seeking DSP contracts if they had no incentives to do so (as argued by Bestmed and Profmed).

c. Third, it appears unlikely that medical schemes do not have incentives to manage their costs in respect of PMB patients, and so would simply accept whatever is offered to them by hospital groups. This could, for example, be the case if there were no competition between medical schemes for members. However, it seems more likely that a medical scheme’s costs will affect its ability to profitably offer products with an attractive benefit-price combination to its members. Since the costs of servicing PMBs will affect both the costs of offering that product (and so whether it is offered at all) to members and also its overall profitability – since an attractive offering by an open scheme will allow it to attract or retain more members – it does not appear likely to be the case that medical schemes would, in negotiations, simply accept whatever the hospital groups demand because of the existence of PMBs.

1.22 We conclude that the Panel will need to carefully consider the incentives that do and do not result from PMBs in reality, and their impact on relative bargaining power. We believe that the arguments made by Bestmed and Profmed in their respective submissions are overly simplistic.

*The competitive constraint from independent hospitals*

1.23 We considered the evidence submitted by the BHF arguing that independent hospitals constituted a weak competitive constraint on the larger hospital groups. We did not find that the newspaper article cited by the BHF provides reliable evidence in support of the proposition that independent hospitals do not act as a competitive constraint on larger hospital groups and, in fact, a number of observations made in the article are consistent with the proposition that they do. For example, the article argues that independent hospitals sometimes offer services at lower prices than those offered by larger hospital groups and that independent day-clinics have a significant cost advantage over private hospitals and are winning medical schemes’ business from acute hospitals.

\(^{20}\) See Bargaining Paper, para. 7.46, 8.6.
Collective bargaining

1.24 We next consider the merits of collective bargaining between private hospitals and medical schemes. We find that the Department’s call for the Competition Commission to use the market inquiry to bless the reintroduction of industry wide collective bargaining to be very surprising. Such an approach does not sit easily within a traditional approach to competition law and policy. We do not consider that the Department makes a convincing case for its reintroduction for (at least) the following reasons:

1.25 First, South Africa’s Competition Act 1998 includes a clear prohibition against agreements between parties in a horizontal relationship if it involves a “restrictive horizontal practice” including, in particular, “directly or indirectly fixing a purchase or selling price or any other trading condition.”

1.26 Second, relatedly, for a competition agency to bless an arrangement that it has previously condemned as tantamount to cartel behaviour would require a complete reversal in approach; when the Commission prohibited collective bargaining in 2004, it held that “collective negotiation created a platform for collusion.” The Panel will no doubt be acutely aware that a radical change in approach that was not based on a clear and compelling evidence base has the potential to damage the Competition Commission’s domestic and international reputation (which could in turn have real consequences in terms of its activities in other sectors – such as its reputation for cartel deterrence).

1.27 Third, it is unlikely that collective bargaining would be the least intrusive effective remedy to any distortion identified. Bestmed’s submission argues that Regulation 8 (relating to PMBs) is potentially distortionary and that collective bargaining may help to control such costs. If, at some later stage of this process, the Panel were convinced that Regulation 8 was distortionary, then a proper consideration of an appropriate remedy to that regulatory distortion would need to consider whether interventions other than the reintroduction of collective bargaining would remedy its concern (for example addressing the regulatory distortion) without the disadvantages of collective bargaining. Given collective bargaining’s highly interventionist nature, it seems unlikely that it would be the least intrusive effective remedy to a regulatory

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21 The Department’s submission does not provide detailed proposals as to how collective bargaining would work in practice (nor does Bestmed’s). Accordingly, we provide comments on the general practice of collective bargaining rather than on any specific structure.

22 See Chapter 2, Part A, section 4(1)(b), Competition Act 1998. More generally, agreements between parties in a horizontal relationship are prohibited if they involve any of the following “restrictive horizontal practices”: (i) directly or indirectly fixing a purchase or selling price or any other trading condition; (ii) dividing markets by allocating customers, suppliers, territories, or specific types of goods or services; or (iii) collusive tendering.

distortion. In respect of Bestmed’s submission that Regulation 8 (relating to PMBs) is potentially distortionary and that collective bargaining may help to control such costs, we observe that the UK Office of Fair Trading has previously noted that interventions that directly limit competition in the market will not, in general, be the best instruments when intervening in a market. If the Panel were to conclude that Regulation 8 were distorting competition, we respectfully submit it would need to go on to consider whether the re-introduction of collective bargaining is the appropriate remedy to the precisely identified regulatory distortion.

1.28 Fourth, we turn to the potential disadvantages of collective bargaining.24 In this respect we note that:

a. Economics suggests that the likely outcome of a collective negotiation would be one which maximises industry profits (or surplus) at the expense of consumers. Collective bargaining would also likely hinder innovation in contracting, such as the use of Alternative Reimbursement Mechanisms, as it would not allow diversity in contracting structures and would be likely to impede the development of new and innovative reimbursement mechanisms. Since collective bargaining allows coordination by the industry as a whole while the consumer is not at the negotiating table, economics suggests that consumers would not fare well from such an arrangement.

b. Economics also suggests that collective bargaining also has the potential to dampen competition. For example:

i. If collective bargaining results in a uniform hospital tariff across all medical schemes, collective bargaining would eliminate one of the major forms of competition between medical schemes – to reduce their costs and hence be able to provide more attractive offerings to their existing or potential new members.

ii. Competition authorities are typically concerned that the implementation of symmetric cost structures, as would be the case if all medical schemes faced the same tariff, may result in an increased risk of tacit coordination (here between medical schemes and between hospital groups).25

iii. Competition authorities are also often concerned about significant structural links between firms. Clearly the introduction of collective bargaining arrangements, wherein firms could collectively discuss prices of their major inputs, would be the kind of activity that most trade associations would be prohibited from engaging in and competition

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24 In so doing, we note that other forms of regulatory intervention are considered in Ms Guerin-Calvert’s response; here, we consider only interventions that would require horizontal competitors to negotiate together.

authorities would ordinarily be concerned that coordination in one area may spill-over into other areas.

iv. Relatedly, structures introduced for the purposes of collective bargaining could actually facilitate the implementation of coordinated outcomes. For example, in principle, larger medical schemes could tacitly (or explicitly) coordinate on forcing the exit or takeover of smaller schemes by initially agreeing to high tariffs; and then benefit from the resulting reduction in competition in the medical schemes market. Likewise, larger hospital groups similarly coordinate on forcing the exit or takeover of smaller hospitals by agreeing to low tariffs.

v. Similarly, collective bargaining may require significant information exchange between horizontal competitors. The Department argues that such information exchanges should be evaluated under the “rule of reason” approach, and suggests that in this case on balance the information exchange would be beneficial for customers. We submit that the evidential hurdle for showing that the types of information exchange proposed by the Department are beneficial is typically a high one. To the extent an efficiency defence can be considered under the Competition Act, the Department does not present the careful analysis of a specific proposal that would be required in such a circumstance. Nor do we believe that the Department’s suggestion that information be exchanged through an intermediary would necessarily raise fewer competition concerns and, in any event, it is not clear that the “bargaining chamber” being proposed would, in fact, limit such exchanges.

c. Finally, we note that historic experience in South Africa suggests that collective bargaining brings with it significant practical difficulties and results in regulatory distortions, with the Department’s previous attempts to determine a reference price list producing significant disagreements and ultimately failing due to a legal challenge. Collective bargaining does not mean that parties’ incentives are aligned.

1.29 In contrast, the potential advantages of collective bargaining are unclear. In particular:

a. Transaction cost savings from reductions in the number of bilateral negotiations may not materialise if collective bargaining prompts significant disagreements or prolonged negotiations. Even if such transaction cost savings were worthwhile, they may be achievable without a return to wholesale collective bargaining, for example through the use of administrators or indeed mergers.

b. Even if collective bargaining did increase countervailing buyer power of medical schemes in the manner claimed, the economic effect of increasing countervailing buyer power is ambiguous; a priori it may potentially either help or hurt consumers and cannot be presumed to be a desirable objective. A full assessment of such effects is not presented in the Department’s submission, but would be required if an efficiency defence were to be attempted.
c. The international examples cited by way of evidence in the Department’s submission do not support the imposition of collective bargaining in South Africa in the private sector, as they do not relate to negotiations between private funders and private hospitals.

**Medical Arms Race**

1.30 The Department’s submission alleges that a “medical arms race” exists, whereby hospitals spend “unnecessarily on items such as cost-enhancing technologies” in order to attract physicians and patients. We consider the merits of such a claim and the evidence presented by the Department to support its claim.

1.31 We first consider the academic literature in relation to the medical arms race. The Department cites one paper which found evidence of such a phenomenon in US community hospitals in 1972. Whilst some other literature supports this finding, more recent US literature comes to the opposite conclusion: that competition among hospitals leads to reductions in excess capacity, costs, and prices. Thus the academic literature suggests that the relationship between competition and hospital quality outcomes in the US has changed over time. In particular, with the growth of managed care in the 1990s, insurance companies developed a variety of strategies to negotiate lower prices with hospital. We submit that the latter period may be consistent with developments currently underway in South Africa, for example in the use of network options and ARMs.

1.32 We note that economic theory is ambiguous in this area, and empirical studies have found conflicting results. In short, the literature emphasises that we must turn to careful empirical work, ideally that relates to the particular circumstances of interest, in order to decide between conflicting theoretical possibilities. As a policy matter, experience strongly suggests that the right starting point for economic policy is the notion that competition is typically associated with good outcomes for consumers (in terms of lower prices, more choice, and greater innovation). Indeed, this is why governments typically establish competition agencies. The literature shows that it is not safe to assume otherwise in respect of healthcare.

1.33 Second, the Department refers to statements by hospital groups that demonstrate that they are interested in recruiting, developing, and retaining physicians at their hospitals. However, these investments are not prima facie problematic – i.e. it is not at all clear that such investments are above and beyond efficient levels of investment in physician recruiting or training – particularly in light of the shortage of physicians in South Africa.

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26 Department of Health submission, para. 206.
27 Department of Health submission para. 90.
28 For a wider list of managed care mechanisms used by schemes and administrators, see Profmed’s submission at para 6.5.2. While Profmed considers that different managed care mechanisms are used to varying degrees, it does consider at para 6.5.1 that “Medical schemes use managed care mechanisms extensively in an attempt to manage clinical and financial risks and costs”.

1.34 Third, the Department deploys game theory to argue that a medical arms race can exist. However, the example provided by the Department is a purely hypothetical exercise with no evidenced connection to private hospitals in South Africa. The Department’s use of game theory in the form of the prisoners’ dilemma therefore seems highly constructed to make a point. However, the point is not one with general validity; so the example as presented has as much potential to mislead as it does to guide. There are a number of significant concerns about applying this example to the situation in South Africa. For example: (i) the Department appears to be arguing that, in its game, hospitals should coordinate on a profit-maximising outcome – which may not be an outcome that maximises consumer welfare; and (ii) if hospital groups would be better off without the medical arms race, they would be expected to support limiting it through regulation – but Netcare does not.

1.35 Fourth, the Department presents figures which are reported to show that South Africa has a higher density of MRI and CT scanners than “similar” countries. We consider that the analysis is unreliable and may potentially be misleading since the Department’s submission does not:

a. provide a source for the South Africa private hospital figures it uses that would have allowed us to replicate and test its analysis;

b. explain why it is appropriate to compare the South African private sector to the combined public and private sectors in other countries;

c. explain why the other countries are in fact “similar” to South Africa and form appropriate comparators; or

d. explain why South Africa’s relatively high density of MRI and CT scanners is problematic as opposed to the lower density in other countries.

1.36 Moreover, inherent in this analysis is the assumption that hospitals are making investment decisions regarding MRI and CT scanners and are therefore responsible for any over-investment in this technology. However, Netcare told us that physicians purchase the MRI and CT scanners that are used in Netcare’s hospitals. If hospitals are not responsible for the investment decisions, the analysis would not obviously provide support for the Department’s claim that hospital chains are involved in a medical arms race in South Africa.

1.37 Accordingly, we do not believe that the Department’s allegation of a medical arms race leading to over-investment is convincingly supported by the evidence and argumentation in its submission.

**Competition economics and healthcare: remarks in relation to two specific concerns**

1.38 Finally, we consider two specific claims made primarily in the Department and the BHF submissions.
First, the Department contends that specialist and hospital markets inevitably tend toward “monopolistic production scenarios”\(^{29}\) and argues that price controls can reduce the associated welfare loss. We do not agree with this premise. Moreover, the book chapter used by the Department to support the imposition of price controls does not, in fact, support the position that the Department seeks to put upon it. In particular, we note that in truth Folland et al make markedly qualified remarks in relation to the desirability of price controls.

The Department and the BHF also argue that providers of healthcare face weak competitive constraints because the demand for healthcare is inelastic. However, this discussion confuses market demand with the demand faced by individual firms. Whilst patients’ demand for treatment may be inelastic, the demand faced by an individual firm or hospital is likely to be much more elastic because patient volumes switch between providers in a number of ways: through (i) “direct substitution” (via patient choice to use a different provider’s hospitals perhaps as a result of differential co-payments) and (ii) “indirect substitution” via e.g. the medical scheme channelling beneficiaries to other facilities by imposing out of pocket payments for use of a particular hospital; members switching to other medical schemes; members stopping or trading down their membership of medical schemes; or specialists switching to alternative hospitals.

Thus, we conclude on this point that the claim that healthcare providers inevitably have market power because patients will pay whatever it takes to obtain lifesaving treatment is not convincing. A far more careful analysis of the facts is required to assess whether hospitals or other providers of healthcare have a problematic degree of market power.

Second, the Department argues that hospital groups and specialists drive increases in utilisation and therefore medical expenditure. Netcare told us that medical ethics guide decisions by medical professionals and that whilst billing methods may not align incentives, professionals are required to act in the best interests of their patients.

As we have previously observed, the contention that perverse “supply side” incentives arising from current coding, billing and remunerations practices are the primary driver of increases in medical scheme expenditure is contradicted by analyses in the Discovery Health and Medscheme submissions. Those submissions instead suggest that the most significant factors driving the medical schemes’ hospital cost inflation are “demand-side” factors relating to e.g. age, prevalence of chronic conditions, and disease burden. [CONFIDENTIAL].

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\(^{29}\) Department of Health submission, Box 3, p. 23.
Section 2

About this report

2.1 This report has been prepared at the request of Netcare Limited (Netcare), through its attorneys, Nortons Inc., for submission to the Competition Commission of South Africa in its market inquiry into the private healthcare sector (the “Inquiry”).

2.2 We have been requested to comment on economic aspects of submissions made to the Inquiry.\(^{30}\) The very significant volume of submissions to the Inquiry necessarily means that this paper does not try to respond to every submission. Rather we focus on what appear to be the most relevant submissions for private hospitals; including, in particular, the submissions made by the Department of Health (the “Department”), the Board of Healthcare Funders of South Africa (the “BHF”), Discovery Health, Medscheme, Profmed and Bestmed. We have organised our comments by grouping together related arguments. In so doing, we have attempted to reference each submission in which relevant assertions are made. However, the lack of a reference to a particular submission should not be taken as our agreement with the point, or that our report does not have relevance to that submission.

2.3 Where relevant, we draw on the findings of our earlier submissions to the Inquiry regarding bargaining between Netcare and medical schemes (the “Bargaining Paper”) \(^{31}\) and also in relation to the analysis of the relationship between price and concentration (the “Price-Concentration Paper”). \(^{32}\) For brevity, we have not repeated the conclusions of those papers, which respectively provide a comprehensive examination of the bargaining process between Netcare and medical schemes and the relationship between Netcare’s tariffs and local market concentration.

\(^{30}\) These submissions were published on the Inquiry’s website on 5\(^{th}\) February 2015.

\(^{31}\) Davis, P., A. Parkinson, V. Kumar and A. Lam (2014) “Evidence on bargaining between medical schemes and Netcare in South Africa”.

\(^{32}\) Davis, P., A. Parkinson, V. Kumar and A. Lam (2014) “Evidence on the relationship between Netcare’s prices to medical schemes and local market concentration”, submission to the South Africa Competition Commission’s Health Market Enquiry.
2.4 In addition, at various points in this report we refer to the report by Ms Margaret Guerin-Calvert ("Ms Guerin-Calvert’s response")\(^{33}\) which comments on related aspects of the submissions made to the Inquiry. In writing this report, we have attempted to avoid duplication with that submission; a point omitted here but made by Ms Guerin-Calvert should not be taken to indicate disagreement.

2.5 The principal author of this report is Dr Peter Davis, an Executive Vice President at Compass Lexecon.\(^{34}\) He has extensive experience of the use and application of competition economics in competition investigations. He served as a Deputy Chairman of the UK Competition Commission from 2006 to 2011, is a former President of the Association of Competition Economics and also holds the position of Visiting Professor in the Faculty of Laws at University College London. He is co-author of a leading textbook on the development and use of empirical evidence in competition investigations.\(^{35}\) Dr Davis was assisted in the preparation of this report by Dr Heather Spang, a Vice President at Compass Lexecon; Dr Deborah Healy, Dr John Hore, and Andy Parkinson, all Senior Economists at Compass Lexecon; Dr Vikram Kumar, an Economist at Compass Lexecon; and Alyssa Lam, a Senior Analyst at Compass Lexecon.

2.6 The remainder of this report proceeds as follows:

- In Section 3, we consider the time-series evidence on the evolution of ‘price’ and concentration;
- In Section 4, we consider the arguments made in respect of bargaining power;
- In Section 5, we consider the arguments made in respect of collective bargaining;
- In Section 6, we consider the arguments in relation to whether private healthcare is properly characterized by a ‘medical arms race’; and
- In Section 7, we consider two specific concerns regarding the nature of competition in the healthcare industry.


\(^{34}\) A full CV is available at http://www.compasslexecon.com/professionals/bio?id=236.

Section 3

The time-series evidence on the evolution of ‘price’ and concentration

3.1 In this section we begin by summarising the claims made in various submissions that (i) concentration in the private hospital sector gives rise to bargaining power; and (ii) that consolidation by hospital groups has increased their bargaining power.

3.2 We then outline the evidence presented in support of these claims, and find that it primarily comprises evidence from time series which is reported to indicate that increases in hospital average expenditure over time are caused by increases in national concentration in the private hospital sector. In order to assess this evidence, we consider in turn the evidence in relation to whether:

- there has been an increase in prices;
- there has been an increase in concentration; and
- there is a causal link between the two.

3.3 We find that the evidence purporting to find a relationship between increases over time in prices charged by hospitals and hospital concentration is unreliable and potentially misleading.

3.4 Before turning to the evidence presented in the submissions, we first note that economics strongly suggests there is no necessary connection between market concentration and adverse outcomes for consumers. Accordingly, analyses which seek to demonstrate a link between the two cannot start from the presumption that such a link exists: the link must be rigorously and convincingly shown. Indeed, as discussed in Ms Guerin-Calvert’s accompanying response, in general economics suggests that prices may increase, decrease or not vary with market concentration, and empirical studies have found instances of each of these cases.  

3.5 To understand why, recall that competition economics highlights that market concentration will, in many instances, have resulted from choices made by consumers benefitting from the

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36 See Ms Guerin-Calvert’s response, Section III C.
lower prices delivered by firms (themselves benefitting from economies of scale), or as a result of more attractive products and services being offered by leading firms. Even in the simplest economic models, such as that due to Cournot (1838),37 market shares are directly related to efficiency. Even where a positive relationship is found, one must be careful to properly interpret that relationship.36 More recent authors, for example Scherer (1967),39 have found a positive relationship between innovation (measured in his case by patenting activity) and firm size while Aghion et al (2005)40 suggests that greater innovation will sometimes be associated with higher product market margins. For economists, big firms (and hence concentrated markets) are far from necessarily bad news for consumers.

3.6 In general, the submissions we have reviewed contain very little discussion about the potential efficiency causes of market concentration or a consideration of its consequences, even though it is clearly an important topic. For example, while the Department’s submission provides an indication that there may be efficiency justifications worthy of consideration,41 when it argues that cost structures and indivisibilities of care may lead to concentrated market structures, the potential connections between market concentration and efficiency are not developed in its submission.42

Claims and evidence

3.7 We start by outlining the claims made in specific submissions, as well as outlining the evidence presented.


38 The simplest analysis of the Cournot model typically emphasizes that cost-efficiency is directly related to market share. However, more generally, it is also possible to allow for simple demand-side efficiencies in the Cournot model (for example modelling that an increase in the quality of a firm’s product will shift out its demand curve) and these will similarly result in increases in market share for firms with higher quality products ceteris paribus.


41 See Department of Health submission, para. 54.

42 Instead the Department raises the issue of scale only in an attempt to motivate why it believes one might expect to see “monopolistic production scenarios” in hospital markets. See Box 3 and para. 54 of the Department of Health submission. In this respect we note that the Geographic Report suggests that local markets for most Netcare hospitals are not monopolies, while the Department of Health submission recognises that none of the hospital groups has a market share of more than 35% nationally (see para. 65).
The claim that concentration in the private hospital sector gives rise to bargaining power

3.8 The Department, the BHF, Medscheme, Metropolitan and Profmed assert that one source of bargaining power is the concentration levels in the private hospital sector, and in particular the regional and local market power or “dominance” due to concentration at the regional or local level. For example:

a. The Department states that “[t]hree hospital groups dominate the market, namely Netcare, Life Health and Medi-clinic,” and that “[w]hilst none of the hospital groups has a market share of more than 35% nationally, each is able to exercise dominant market power at the local, provincial or district level.” It goes on to state that “hospitals are able to exert their dominance through price increases and price discrimination.”

b. The BHF states “[t]he bargaining power of private hospitals is usually much greater than that of most schemes. The bargaining power of private hospitals is usually much greater than that of most schemes for a number of reasons. Consolidation of the hospital industry is one reason….” It further notes that the “regional distribution of large provider groupings […] can have the effect that in any particular region a medical scheme is effectively negotiating with only two of the big three groups….”

c. Metropolitan states that it “concurs with the view that market concentration may contribute to the market power of hospitals.”

3.9 To support its arguments the Department submission cites an OECD report, and claims that “the vast majority of studies investigating the impact of market concentration on price find that increases of at least 10 percent are attributable to mergers.” The BHF makes related claims. In doing so it primarily relies on statements made in a background document, where the

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43 Medscheme submission, p. 86.
44 Profmed submission, para. 2.20.
45 Medscheme submission, p. 86.
46 Department of Health submission, para. 65.
47 Ibid.
48 Department of Health submission, para. 80.
49 BHF submission, para. 6.4. We discuss the effect of consolidation below; we mention it here as we take BHF’s contention to be that consolidation has led to concentration.
50 BHF submission, para. 5.22.
51 Metropolitan submission, p. 8.
52 Department of Health submission, para. 67.
executive summary of an OECD report is paraphrased. This literature is discussed in Sections III C and III D of Ms Guerin-Calvert’s response.

3.10 In addition, the Department presents three graphs in support of its claim:

- Figure 3 reports the evolution of measures of national bed-shares;

- Figure 4 is reproduced from Figure 15.1 from van den Heever (2012) and shows an apparently positive relationship between hospital costs incurred by schemes and HHIs from 1996-2012; and

- The Department’s Figure 5 shows an increase in the “real per capita expenditure” over time, accompanied by an increase in the overall trend since 1998 compared to the period 1990-98.

3.11 Metropolitan Health also refers to Figure 15.1 from van den Heever (2012), but does note that other factors may also explain the cost increases shown, as they happened in tandem with the changes in concentration.

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54 Department of Health submission, p. 28-29.


56 Metropolitan submission, para. 38.
The submissions of the BHF, Medscheme, and Profmed offer no evidence to support their statements that concentration in private hospitals gives rise to bargaining power.

**The claim that consolidation by hospital groups has increased their bargaining power**

The submissions of the BHF, the Department and Medscheme also assert specifically that consolidation by hospital groups has increased their bargaining power. In particular:

a. The Department’s submission states that the “market concentration is largely as a result of mergers and acquisitions by these listed private hospital groups” and links this to increases in hospital costs, stating that “[a]n analysis published in a background report to the Inquiry process suggest that this market concentration is a predictor of the increases experienced in hospital costs and that ‘no other variable related to hospital costs can explain the increases [in costs] over the relevant period’.”

b. The BHF submission asserts that the consolidation of private hospital groups “greatly diminished bargaining power on the part of smaller medical schemes to negotiate good prices for their members.”

c. The Medscheme submission asserts that “hospitals consolidated into three major groups, which generated a negotiation imbalance with the less concentrated medical schemes and

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57 At pp. 26-27 of its submission BHF provides a table comparing the cost to four different funders of Caesarean sections, vaginal deliveries and the removal of cataracts at Life, Mediclinic, Netcare, NHN, and the Department’s hospitals. However, it offers no interpretation or analysis of the table and we do not interpret it as evidence supporting this point. Furthermore, at para. 6.10 of its submission the BHF claims that “[i]ncreases in market concentration have corresponded with a period of higher profitability.” Although the BHF’s objective may be to potentially link higher profitability to greater bargaining power, it offers no evidence whatsoever in this regard.

58 At para. 3.1.4, Medscheme breaks down the components driving the 10.9% average annual increase in Medscheme’s own claims expenditure over the period 2008 to 2013. It attributes the 5.5% of the 10.9% to the CPI, 2.6% to increased burden of disease, 1.2% to “anti-selective buy-down behaviour”, 0.5% to age and gender mix changes. It attributes the remaining 1.1% to many factors including “market concentration and dominance and its impact on prices and utilisation of services”, although it provides no evidence or view as to which of the many listed factors are important.

59 On p. 19 of its submission, Profmed reproduces a graph from the CMS 2013/14 Annual Report showing that the total benefits paid to private hospitals has risen from 2004 to 2013. It is not clear whether this should be considered as indicative of hospital concentration increasing bargaining power.

60 Department of Health submission, para. 65-66.

61 BHF submission, para. 6.1.
administrators. This placed the hospital groups in an oligopoly position which has largely eliminated price competition". 62

3.14 The Department relies on the claimed relationship between increases in concentration and increases in hospital costs discussed in 3.10 above. Medscheme plots “private hospital costs” using data from CMS annual reports from 2000-2012. It argues that: “In the period 2000 to 2005, hospital costs increased significantly. This period is also characterised by hospital mergers and by collective bargaining, which stopped in 2004 following a Competition Commission ruling.” The BHF does not present any supporting evidence.

Our assessment of the evidence

3.15 We now assess the evidence presented in support of these claims. We do so by grouping the evidence into three categories.

a. First, evidence on the extent of hospital tariff increases in recent years. We assess the extent to which hospital tariffs have increased, and discuss the reasons for any such increases. We show that any claim that hospital tariff increases are caused by the bargaining power of hospital groups is not supported by the evidence.

b. Second, evidence on the changes in national concentration over time. We show that different submissions present different views on trends in national concentration.

c. Third, evidence claiming to show a relationship between concentration and hospital expenditure over time. We explain that the evidence that there is a causal relationship between concentration and hospital expenditure over time is potentially misleading so that it should not be relied upon.

Evidence on the extent of hospital tariff increases in recent years

3.16 The Department’s submission claims that inflation of medical scheme contribution rates has exceeded the CPI inflation rate by roughly 4% between 2010 and 2013, and links this to “provider market power” and “lack of scheme market power to implement strategic and innovative purchasing mechanisms to reform supply-side cost drivers and improve value”. 64

3.17 In assessing this claim, it is important to note that there are a variety of reasons why medical scheme inflation could exceed the CPI inflation rate and the Department’s submission provides

62 Medscheme submission, p. 85.
63 Medscheme submission, p. 28. We discuss collective bargaining in Section 5 below.
64 Department of Health submission, para. 118 and Box 8. In this section, we focus on the relative bargaining power between Netcare and medical schemes/administrators. We discuss the use of ARMs in Section 3 of our Bargaining Paper.
no evidence that the increase in medical scheme contribution rates over and above the CPI inflation rate was caused by the presence of market power.

3.18 In particular, and in contrast to the Department’s submission and van den Heever (2012), other submissions before the Panel attempt to disentangle the impact of the various factors which may affect the evolution of expenditure rates – for example ageing or the increasing burden of disease or increased utilisation.

a. For example, Discovery Health states that between 2008 and 2013 less than 10% (8.9%) of the increase in claims costs above the rate of inflation is due to increases in tariffs. The largest driver of the increase in claims costs, accounting for 63.2% of the excess claims inflation between 2008 and 2013 is driven by demand factors which are due primarily to adverse selection.65

b. Similarly, Medscheme also attributes only a small percentage of the increase in its healthcare expenditures since 2008 on increases in prices. Medscheme calculates an average annual increase of 10.9%. Medscheme attributes a significant share of this increase to increases in CPI and changes to the “diseases burden”, age and gender profile of its patients. It attributes a small fraction of the increase to the effect of competition on prices. In particular, Figure 8 from the Medscheme submission (reproduced below) shows that at most 1.1% of the observed average 10.9% increase in claims per life per month (for the period 2008-2013) was due to “residual utilisation”. Medscheme then lists “market concentration and dominance and its impact on prices and utilisation of services” as one of 8 different factors that this 1.1% residual could be attributed to; thus, this evidence suggests the actual effect of concentration on expenditures is likely to be considerably lower.66

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65 Discovery Health submission, para. s18, s26.
66 Medscheme submission, section 3.1.4.
Figure 1: The Impact of the Burden of Disease and buy-downs on the increases in Claims per life per month (plpm)

Source: Medscheme submission, Figure 8.

c. Netcare submitted a report by Barry Childs which showed that increased expenditure on hospitals over the 2000-2013 period was driven by beneficiary growth (15.4%), price increases in line with CPI (50.8%), increased utilisation (25.6%), leaving only 8.2% to real hospital inflation above CPI over the 13 year period. In competitive markets, increased utilisation and the associated increase in volume is a beneficial, as long as it is efficient utilisation. As explained further at paragraphs 7.41-Error! Reference source not found. below, Netcare’s investigation – performed in the ordinary course of business – into levels of care and utilisation did not find evidence of the provision of a material number of unnecessary services or related price inflation.

d. In our own Bargaining Report, we examined Netcare’s prices from 2008-2012. Specifically, we constructed two different price indexes using Netcare’s patient discharge data and compared them to the CPI and a wage index. We found that although Netcare’s prices exceeded the CPI throughout the period, its price increases were consistently similar to the wage inflation and that they did not increase at a greater rate than cost increases in that period. Nursing constitutes approximately 70% of Netcare’s total costs and wages in the nursing sector have exceeded the CPI inflation rate since 2010. A potential explanation for hospital costs to be rising faster than general inflation is provided by Profmed when it states that, “it is well-known that nursing skills are in short supply in the

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67 Expert Report of Barry Childs, p.10. Moreover, Figure 60 of that report shows that the real hospital inflation (over CPI) over the 2000-2013 period was only 1.3% per annum.

68 See para. 3.36 et seq. of the Bargaining Paper.
private hospital sector. The cost of procuring nursing staff is therefore high, which contributes to the excessive private hospital costs.\textsuperscript{69}

Accordingly, we find that the simplistic link drawn by the Department and the BHF(2012) between increases in average revenues (hospital costs per beneficiary per annum) in excess of CPI and bargaining power driven by increases in concentration is not supported by reliable evidence. Any price-concentration analysis must use a meaningful measure of price and control for drivers of changes in price other than concentration where the wider evidence base suggests that they are likely to play a significant role. The Department relies on evidence which does not.

A second assertion made in certain submissions regards the effect of the end of collective bargaining.\textsuperscript{70} The submissions of the BHF, Medscheme, Bestmed, and Profmed argue that the end of collective bargaining meant that the hospital groups gained relative bargaining power over medical schemes.

a. The BHF argues that the end of collective bargaining caused a significant “spike” in the “cost of private hospital care”,\textsuperscript{71} implying that prices increased due to a loss in the schemes’ bargaining power. Further, the BHF submission presents some evidence regarding expenditure changes over the period 2003-2005. Specifically the BHF submission provides a short time series (the BHF states that it was “presented at its 2006 conference”) which reports showing that the cost of a basket of surgical procedures has increased between 2003 and 2005.\textsuperscript{72} No detail, even as to the presenter at the BHF’s 2006 conference or nature of the basket of surgical procedures, is provided and so it is not possible to meaningfully assess the BHF’s evidence. Since the evidence is dated, of uncertain origins and its conclusions apparently contrast with other evidence in front of the Panel, we would respectfully suggest the Panel should not consider it sufficiently reliable to carry evidential weight.\textsuperscript{73}

\textsuperscript{69} Profmed submission, para. 8.1.6, p. 35.

\textsuperscript{70} In this report we use 2004 as the date for the end of collective bargaining when a Consent Order was agreed between the Competition Commission and HASA and approved by the Competition Tribunal; see the April 2004 document http://www.comptrib.co.za/assets/Uploads/Case-Documents/24CRApr04.pdf. The Department also emphasizes 2004 as the end of collective bargaining. However, the Consent Order also includes a notice from Legal Watch dated 12\textsuperscript{th} January 2004 documenting HASA’s imminent entry into the Consent Order which is an indication of the legal process which we understand had been underway for some time before reaching that point.

\textsuperscript{71} BHF submission, para. 6.13.

\textsuperscript{72} BHF submission, para. 6.10.

\textsuperscript{73} At para. 6.10, the BHF states that “In 2012, R36.7 billion was spent on hospitals which constituted an 8.5\% annual increase in hospital costs after inflation. There is strong evidence of market power in the
b. Similar assertions regarding a relative increase in the bargaining power of hospital groups are made by Medscheme\textsuperscript{74}, Bestmed\textsuperscript{75} and Profmed\textsuperscript{76}.

3.21 We consider the attractiveness (or otherwise) of collective bargaining as a matter of competition policy in Section 5. However, specifically in relation to the pricing evidence we note that the Expert Report of Barry Childs, submitted as Annex 3 to Netcare’s submission, did not find any significant change in Netcare’s price inflation after the end of collective bargaining.

Evidence on the change in national concentration over time

3.22 In this section we examine the evidence on the change in national concentration over time. We make three points:

a. First, the Department focuses its attention on the period 1999-2004, stating that the “national market becomes concentrated” in that period while other authors argue that the consolidation in the private hospital sector in South Africa commenced in the second half of the 1990s.

b. Second, we note that the Department/van den Heever measure of HHI does not adjust for the period when prices were set by collective bargaining. As a result, there is a stark difference in the evolution of the van den Heever measure of HHI and one which does adjust for the impact of collective bargaining.

c. Third, we note that the post-2004 period does not appear to have been marked by increases in concentration.

3.23 Each of these points underline that any analysis which claims to relate changes in concentration to changes in price will need to take the timing of the evolution of concentration seriously. We expand on each of these points in turn.

3.24 First, the Department focuses its attention on the period 1999-2004, stating that the “national market becomes concentrated” in that period.\textsuperscript{77} Figure 2 below reproduces the Department’s Figure 3.

\textsuperscript{74} Medscheme, Section 9.1.

\textsuperscript{75} Bestmed submission, para. 5.2.

\textsuperscript{76} Profmed submission, para. 2.19.

\textsuperscript{77} See Department of Health submission, Figure 3 in Section 5.2. The Department takes this figure directly from a research brief by the CMS, which itself cites van den Heever (see footnote 55)
Figure 2: Hospital national concentration trend in acute beds from 1996 to 2006

Source: Department of Health submission, Figure 3.

3.25 In contrast, other authors – also drawing on earlier work by van den Heever – have argued that consolidation in the private hospital sector in South Africa commenced in the second half of the 1990s; for example Figure 3 below reproduces a chart from Robb (2012). If so, then it is not clear why, for example, the Department focuses its attention on the period 1999-2004 as distinct from the period from 1995 onwards.

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3.26 Second, we note that there is a stark contrast between the evolution of measures of HHI used by van den Heever (and relied upon by the Department) and the evolution of the HHI measure adopted by Econex in its Occasional Note “Market Concentration Trends in the Private Healthcare Industry”. In particular, the Econex study argues that the market concentration of private hospitals, as measured by the HHI (calculated to take account of collective bargaining), fell by over 70% at the end of the collective bargaining period (when HASA and NHN hospitals were grouped together to reflect collective bargaining) and has remained relatively constant since 2004. Figure 4 below reproduces Figure 3 from Econex’s note.

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3.27 Third, we note that Econex’s analysis indicates that national concentration in private hospitals has not significantly changed since 2004. Therefore, the claim that there have been increases in price over this period were caused by increases in national concentration must confront the fact that national concentration did not actually materially increase.

3.28 In this respect, we further note\textsuperscript{80} that Netcare’s main activity\textsuperscript{81} in terms of merger and acquisitions over the last decade was the increase in its shareholding in five hospitals operated by Community Hospital Group (Pty) Ltd from the 43.75% acquired in 2002 to 100% in 2007. As the Panel will be aware, the Competition Tribunal considered this transaction’s consistency with merger control in 2007 \textit{ab initio} and concluded:\textsuperscript{82} “We have considered carefully the various theories of harm advanced by the Commission and cannot find that on any, the merger with CHG will lead to a substantial lessening of competition.” As a result the Competition Tribunal approved the merger without conditions. In light of these facts, even if there were evidence of material increases in Netcare’s prices (when measured on an appropriately comparable basis), it would appear \textit{a priori} unlikely that these would be meaningfully attributed to Netcare’s merger or acquisition activity over the period.

3.29 Although we believe that the rather superficial approach of looking at national market shares and national concentration is not appropriate in this context, to the extent that such evidence is considered the Panel will need to take both the measure of concentration and the timing of

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\textsuperscript{80} This evidence and its applicability to South Africa are considered in Section III D of Ms Guerin-Calvert’s response.

\textsuperscript{81} For completeness, we are also aware of one further individual hospital transactions during the last decade. In particular, Netcare acquired Linkwood in 2008.

these events seriously while exploring the alleged connections between cause and effect. We discuss the issue further below.

**Evidence on the relationship between concentration and expenditure over time**

3.30 We now consider the evidence which suggests that there is a causal link between the increase in private hospital concentration and an increase in expenditure; some submissions suggest that this provides evidence of market power of the hospital groups.

3.31 The first question which must be considered is whether an analysis which aims to establish a causal link between national concentration and average expenditure is addressing the relevant question. In particular, we note that the connection between national market shares and the market power claims being made merits significant scrutiny. For example, the Department argues that “[w]hilst none of the hospital groups has a market share of more than 35% nationally, each is able to exercise dominant market power at the local, provincial or district level”. However, it is not obviously consistent to emphasise a concern with local, provincial or district level market power while measuring a correlation between national market concentration and expenditure per capita, for at least two reasons:

a. Considering a national measure of the concentration of hospital services fits uncomfortably with the fact that geographic markets for hospital services are local, as discussed in the Geographic Report.

b. In order to convincingly consider bargaining power, one must consider the outside options available in particular locations and then consider the degree to which it is convincing that any ability to exercise market power locally would translate into national bargaining power (see further paragraphs 4.4 to 4.6 below). For example, in the Bargaining Paper we discuss the topic of ‘solus hospitals’ and note that each of these hospitals is the only private full hospital in their respective towns, and are generally small hospitals with limited facilities and capacity, and so appear unlikely to be easily leveraged into a strong national bargaining position. For example, in general the Geographic Report suggests that almost all Netcare hospitals are in relatively un-concentrated markets. Indeed, the Geographic report found that most Netcare hospitals face competition from at least three hospital groups (Life, Mediclinic, NHN, or Clinix) or independents.

3.32 Moreover, any analysis must convincingly address the significant analytical challenges involved in a price-concentration analysis. Yule (1897) famously observed: “The

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83 Department of Health submission, para. 65.
84 Bargaining Paper, para. 7.13 *et seq*.
85 Geographic Report, para. 7-9. We also discuss the evidence on the link between local market concentration and prices charged at para. 5.11 of the Price-Concentration Paper.
investigation of causal relations between economic phenomena presents many problems of peculiar difficulty, and offers many opportunities for fallacious conclusions.” Thus establishing whether there is truly evidence of a causal relationship between price and concentration requires a careful investigation undertaken in the knowledge that it would be easy for an incautious investigator to reach an unjust conclusion. I note the following concerns in that regard:

a. First, we noted above that consolidation in the private hospital sector in South Africa commenced in the second half of the 1990s. It is not therefore clear why, for example, the Department focuses its attention on the period 1999-2004, stating that the “national market becomes concentrated” in that period. Any analysis which does not explain the actual specific events giving rise to the alleged effect – and corroborate the timing of those events – is unconvincing when exploring the alleged connections between cause and effect.

b. Second, in considering whether the connection between market concentration and market expenditure is convincing, it will clearly be important to take into account the role, and more specifically the timing, of the end of collective bargaining. The reasons for doing so are:

i. Since hospital chains were able to coordinate in national negotiations during the collective bargaining period, submissions alleging a connection between concentration and market power must explain why hospital chains’ local and national market positions were relevant in determining the prices being paid during the period of collective bargaining.

ii. As discussed above, there is a stark contrast between the evolution of measures of HHI used by van den Heever and the evolution of the HHI measure adopted by Econex. In particular, the Econex study argues that the market concentration of private hospitals, as measured by the HHI (calculated to take account of collective bargaining), fell by over 70% at the end of the collective bargaining period (when HASA and NHN hospitals were grouped together to reflect collective bargaining) and has remained relatively constant since 2004 (see Figure 4 above); and

iii. The Econex paper suggests that the impact of the late 1990s consolidation, if it led to increased bargaining power of hospital chains relative to medical schemes, would have led to increased prices and hence expenditure per capita only after the end of

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87 See Department of Health submission, Figure 3.

88 “Market Concentration Trends in the Private Healthcare Industry”, Econex Occasional Note, March 2014, Figure 3.
collective bargaining – whereas the observed increases in reported expenditure per capita are reported to have\(^9^9\) occurred over the period 1998-2004.\(^9^0\)

c. Third, the Econex study found that the limited consolidation that has occurred since 2004 was counterbalanced by increases in bed counts across all private healthcare suppliers, so that overall concentration remained stable. If so, then any observed increase in expenditure per capita since 2004 does not coincide with an increase of concentration since the end of collective bargaining. (Although in this respect we note that the Department’s submission suggests that after 2004, trends in real per-capita expenditure are broadly flat.\(^9^1\) Moreover, to the extent that concentration levels for private hospitals, open medical schemes, and administrators are relevant for their relative bargaining positions, since 2004 changes to their relative concentration levels have been to the disadvantage of private hospitals. Figure 5 below, reproduced from the Econex study, shows the concentration (HHI) of private hospitals, medical schemes, and administrators since 2004.\(^9^2\)

Figure 5: Market concentration (HHI) of private hospitals, medical schemes and administrators, 2004-2012

![Figure 5: Market concentration (HHI) of private hospitals, medical schemes and administrators, 2004-2012](source)

Source: Econex (2014), Figure 6.

\(^{89}\) See Department of Health submission, Figure 5.

\(^{90}\) We explained above that analyses by Discovery Health and Medscheme attributed such increases in expenditure per capita to factors driven by demand (see para. 3.18).

\(^{91}\) Supra note96.

\(^{92}\) “Market Concentration Trends in the Private Healthcare Industry”, Econex Occasional Note, March 2014, Figure 6.
d. Fourth, any analysis using changes over time to identify cause and effect must also take account of other events which occurred in that time period. As outlined above, to the extent that national concentration has not increased since 2004 consolidation during that period is unlikely to provide evidence suggesting that increased concentration has led to higher prices. We discussed above that the end of collective bargaining would have significantly changed the bargaining landscape. We also note that the Medical Schemes Act of 1998 introduced community rating, open enrolment, and PMBs, which are also potential drivers of changes in real observed expenditure over time and so their effect must be carefully considered in a convincing analysis. If such changes led to an increase in average expenditure during a period coincident with an increase in concentration, then the evidence could indicate a correlation between average expenditure and concentration even if there is no causal effect of concentration on price.\footnote{Evidence which is increasingly historic also faces the more general challenge of establishing that it is relevant to an assessment of current market conditions.}

In addition to the concerns raised above, we have some specific concerns relating to the analysis presented in van den Heever’s (2012) report and reproduced in the Department’s submission (Department’s Figure 4\footnote{Also reproduced in the Metropolitan submission at p. 9.} and Figure 5):\footnote{See also para. 132 et seq. in Ms Guerin-Calvert’s response.}

a. First, the analysis uses a measure of average expenditure rather than price and does not control for other factors affecting average expenditure (e.g. utilisation, burden of disease, input costs, change in medical technology, etc.) The analyses use the real medical scheme hospital costs/expenditure PABPA (per average beneficiary per annum). This is not a measure of \textit{price}, but a measure of average expenditure, i.e. it is affected both by the price of individual services and their usage. Average expenditure is affected by the utilisation of hospital services, linked to (for example) the incidence and severity of diseases (especially chronic conditions), the age profile of beneficiaries, and the introduction of new technology.

b. Second, the analysis does not meaningfully consider other potential causes of increased costs, for example the cost of pharmaceuticals and surgical equipment,\footnote{Discovery Health submission, Section 2.7 and Medscheme submission, p. 14.} or input cost inflation which may exceed general inflation.\footnote{Bargaining Paper, para. 3.36-3.39 and Expert Report of Barry Childs, p. 45.} van den Heever (2012) does present a short discussion which concludes that “[a]lternative variables cannot explain the cost trend”.\footnote{van den Heever, A. (2012), para. 15.5.} However, this discussion is superficial – the author selects a few variables and broadly describes their movements. Economists would more typically carefully analyse the
potential causes of changes in average expenditure and attempt to disentangle the various potential drivers of any observed change. A more convincing analysis might for example use regression analysis to examine whether controlling for other variables that could plausibly affect the measured average expenditure during the period would explain its rise.\textsuperscript{99} Alternatively, a measure which more carefully controlled for utilisation or other drivers of change in average expenditure could be used in an attempt to make the analysis more persuasive.

c. Third, relatedly, to the extent that there are increases in concentration during the period studied, the claim that average expenditure increases over time are a result of increases in concentration and cannot be explained by other factors conflicts to a significant degree with the analyses presented by both Discovery Health and Medscheme, which deconstruct increases in claims inflation into a variety of elements, ascribing much of the increase to factors such as adverse selection, the burden of disease, and new medical technologies and very little, if any, to changes in concentration or market power.\textsuperscript{100} We have already discussed evidence in other, more convincing, submissions in relation to the significant variety of potential drivers of expenditures at paragraphs 3.16 to 3.18 above.

d. Fourth, as discussed above, the analysis also ignores the other changes to the bargaining landscape throughout the period which may have affected relative bargaining power and, therefore, costs. For example:

i. Before 2003, there was collective bargaining.\textsuperscript{101} Given that the hospital groups bargained as one unit before 2003, but individually from 2003, there is no reason to expect that the relationship between hospital concentration and bargaining power is the same under collective bargaining as it is under the individual bargaining.\textsuperscript{102} Indeed, as we discuss above at paragraph 3.19, a number of submissions suggest that its removal changed the relative bargaining position of medical schemes and hospital groups.

ii. In Figure 5 of its submission the Department highlights the steeper increase in costs since 1998 (compared to previous years), when market concentration started increasing. However, the period up to 2003 was characterised by collective bargaining, and if the hospital groups were coordinating effectively then it is not at all clear why

\textsuperscript{99} And would be careful not to relate two non-stationary variables: see para. 3.33e below.

\textsuperscript{100} Discovery Health submission, Box 1 et seq. and Medscheme submission, section 3.1.4.

\textsuperscript{101} As noted in footnote 70, the end of collective bargaining is dated in this paper by using the date of the Competition Tribunal’s Consent Order between the Competition Commission and HASA from April 2004.

\textsuperscript{102} If hospital groups were able to coordinate efficiently under collective bargaining, there would be no effect of hospital concentration on bargaining power.
increases in market concentration during this period should have had an effect on their bargaining power.

e. Fifth, the analysis relates two variables which trend upward. In Figure 4 of its submission, the Department plots average expenditure against the (national) HHI of private hospitals. Thus average expenditure has risen over time, as has the concentration measure. Thus the analysis takes two variables that are both trending upwards over time. The economic and statistical literature has long cautioned that any two variables which trend upwards over time will appear to be correlated even if there is no causal relationship. The econometric literature has recognised the dangers of such an approach and uses the term spurious correlation to warn researchers that correlations between trending variables must be treated with great caution. Popular examples of spurious correlation highlight the absurdity of high correlation between evidently unrelated variables: Yule’s (1926) original example reported a correlation of 0.95 between the proportion of marriages performed by the Church of England and the mortality rate over the period 1866-1911. This, of course, does not mean that one causes the other. In this respect we note in particular that faced with common trends the economic literature has established that conventional measures of uncertainty of estimates, statistical significance and t-statistics, such as those reported by van den Heever in his Table 15.1 tend to find statistically significant relationships even where none exists.

103 The plot is from van den Heever, A. (2012). The HHIs appear to be those seen in Table 15.2 of that paper. Although the author does not provide details of how the shares used in the HHI formula are calculated, Table 15.2 appears to indicate that the HHI used is national.

104 van den Heever, A. (2012), Figure 18.1, Table 15.2.

105 More technically, the correlation coefficient actually converges towards 1 for any two time series that each have an upward trend. See Yule (1926) “Why do we sometimes get nonsense-correlations between Time-Series? – A study in sampling and the nature of time-series.” Journal of the Royal Statistical Society, pp. 1-63.

106 The field of non-stationary time-series econometrics has developed with Robert Engle and Clive Granger winning the Nobel Prize in Economics partly for their work in this area. (See http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2003/press.html) For a further discussion see: Wooldridge, Jeffrey M (2008) Introductory Econometrics: A Modern Approach Fourth Edition, Cengage Learning, p. 636. More generally, when two variables are not “stationary” i.e. when their statistical properties are not constant over time, naïve statistical testing is very likely to reveal correlation even if there is no causal relationship between the variables at all.

107 Supra note 105.

108 Granger, C. W. and P. Newbold (1977) “Spurious Regression in Econometrics.” Journal of Econometrics, Vol. 2, pp. 111-120. In particular, those authors consider whether one can safely use conventional t-tests in the presence of common trends and find to the contrary that: “Using the traditional t-test at the 5% level, the null hypothesis of no relationship between the two series would be rejected (wrongly) on approximately three-quarters of occasions.”
Summary

3.34 In this section we considered the claims that concentration in the private hospital sector gives rise to bargaining power on the part of hospital groups, and that consolidation by hospital groups (and increasing concentration in the private hospital sector) has increased hospital groups' bargaining power.

3.35 We noted first that economics suggests no necessary connection between market concentration and adverse outcomes for consumers. In that light, we reviewed the evidence presented in various submissions, principally that of the Department. We noted that the evidence primarily consists of linking changes in prices (or measures of cost) to changes in concentration over time.

3.36 We reviewed this evidence and outlined a number of concerns.

3.37 First, we noted that increases in medical scheme contributions or hospital expenditures are caused by a multitude of factors, including demand-side factors, and therefore do not reflect only or primarily increases in hospital tariffs. As the Department's analysis uses medical scheme average hospital costs, it does not actually measure changes in prices.

3.38 Second, we note that there are significant disagreements between the Department submission and other analyses regarding the timing of consolidation. Whilst the Department focusses on the period 1999-2004, other authors date the commencement of increased concentration in the private hospital sector primarily to the period 1994-1999.

3.39 Third, we noted that the measure of concentration requires careful consideration. In particular we noted that (i) the measure used by the Department was not consistent with that used by Econex who constructed its concentration measure designed to take into account the impact of the end of collective bargaining and (ii) that the analysis presented by the Department uses a national measure of concentration, which does not fit comfortably with either the local markets for hospital services nor with an analysis of how hospital groups’ and medical schemes’ respective outside options in local markets translate into their relative national bargaining positions.

3.40 Fourth, we noted that identifying a causal relationship between price and concentration is analytically challenging. In particular, we noted that:

a. any analysis seeking to relate price and concentration must be performed carefully and, where the wider evidence base suggests other changes have affected the price measure over the period, they must be controlled for. For example, the bargaining process (collective bargaining vs. bilateral bargaining), changes in the regulatory environment, or changes in utilisation driven by demand-side conditions; and

b. the Department’s analysis relates two variables which trend upward and so the economic and statistical literature caution that there is a significant potential for such an analysis to suffer from spurious correlation so that findings of large correlations are possible even where there is, in truth, no causal relationship between the variables examined.
3.41 We concluded that the time-series evidence relied upon by the Department (and others) to suggest a causal relationship between ‘price’ and concentration is unreliable and potentially misleading.
Section 4

Bargaining power

4.1 In this section we consider the arguments made in the submissions of the Department, the BHF, Discovery Health, and Medscheme and others regarding the relative bargaining power of hospital groups and medical schemes (or medical scheme administrators negotiating on behalf of medical schemes). In particular, the submissions of the Department,\(^\text{109}\) the BHF\(^\text{110}\), Discovery Health\(^\text{111}\), Metropolitan\(^\text{112}\), Medscheme\(^\text{113}\), Bestmed\(^\text{114}\) and Profmed\(^\text{115}\) contain assertions that hospital groups have bargaining power over medical schemes.

4.2 Much of the limited evidence in those submissions relates to whether or not there is a correlation in national measures of concentration and measures of hospital prices. We have discussed that evidence in Section 3 and found that the evidence is unreliable and potentially misleading so that it does not support the claims made.

4.3 In this section we consider the evidence in the submissions to the Inquiry on four specific factors which are argued to affect hospital groups’ and medical schemes’ relative bargaining positions, namely:

a. DSP networks;

b. National negotiations;

c. PMBs; and

d. The strength of the competitive constraint from independent hospitals.

\(^{109}\) Department of Health submission, Box 1, Box 8, para. 65, 80, 264.

\(^{110}\) BHF submission, para. 3.3, 5.22, 6.1, 6.4.

\(^{111}\) Discovery Health submission, para. 244, 263, 386.

\(^{112}\) Metropolitan submission, pp. 8, 22.

\(^{113}\) Medscheme submission, pp. 15, 20, 85.

\(^{114}\) Bestmed submission, para. 5.2, 5.7, 77.2, 113.

\(^{115}\) Profmed submission, para. 2.20, 2.21, 2.54, 6.3.6, 8.1.1, 8.1.2.
A robust analysis of bargaining power must consider the outside options of both sides in the negotiation

4.4 In conjunction with this response, we respectfully submit that the Panel may wish to consider the analysis of bargaining power provided in our Bargaining Paper along with supporting evidence. We do not repeat those submissions here.

4.5 We do however note that economists and competition authorities begin to analyse bargaining power by considering each party’s outside options in a negotiation. While concentration may be relevant for such an evaluation, a more granular analysis of each side’s outside options in the negotiations is required in order for the evaluation to be convincing. Certainly, one cannot only consider simple size or concentration indicators from one side of a market and expect to come to a robust view on relative bargaining positions. As stated in Inderst and Mazzarotto (2008):

[S]imple measures of size, be it absolute size or concentration measures, should not be used too mechanically. If size in itself does not affect the buyer’s or the supplier’s dependency through an impact on the respective outside options, the first response should be that it does not confer buyer power per se.

4.6 Similarly, in the UK Competition and Markets Authority’s Private Healthcare Market Investigation, it found that factors other than size (or relative size) and local concentration can be important explanations of bargaining power:


See Section 4 of the Bargaining Paper for a more detailed discussion.


[the] key factors we identified as part of our review of negotiations between the main hospital groups and PMIs [Private Medical Insurers] that are likely to most affect the outcome of those negotiations, in particular:

(a) the importance of local factors to national negotiations […]

(b) the extent to which PMIs can control where patients are treated and can switch demand to other providers (ie improve their own outside position and weaken the outside option of hospital). This includes: (i) use of networks: […] (ii) steering patients: […] (iii) service-line tenders: […]; and (iv) sponsoring new entry; and

(c) the extent to which the relative size and financial strength of parties influences the outcome of a negotiation.

Evidence relevant to the evaluation of outside options

DSP networks and medical schemes’ bargaining power

The submissions of the BHF\(^{121}\), Profmed\(^{122}\) and Bestmed\(^{123}\) argue that smaller medical schemes have little to no countervailing bargaining power. Furthermore, Profmed argues that the lower prices afforded to larger schemes result in higher prices for smaller schemes.\(^{124}\) As evidence for these statements:

a. the BHF reports two examples of a hospital group threatening schemes with large price increases unless in each case it was designated a DSP and one hospital group engaging in “bulldog tactics”.\(^{125}\)

b. Profmed’s submission simply asserts that smaller schemes are not able to use DSP networks to extract low prices. It attributes this inability to “[m]arket power of private

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\(^{121}\) BHF submission, paras. 6.1, 6.4.
\(^{122}\) Profmed submission para. 2.20.
\(^{123}\) Bestmed submission para. 5.7.
\(^{124}\) Profmed submission, para. 6.3.6.1.
\(^{125}\) BHF submission, para. 6.4: “For instance one hospital group threatened a medical scheme with a double digit price increase unless that medical scheme made them a designated service provider for the scheme. BHF can confirm that another medical scheme had a 13% increase for 2014 by this hospital group and that this was reversed after a DSP arrangement was signed. Another hospital group was described as using “bulldog tactics”. The bargaining power of private hospitals is usually much greater than that of most schemes for a number of reasons.”
hospitals and medical specialists; and guaranteed funding of PMBs at cost." It offers no evidence for its claim.

c. Bestmed identifies the underlying cause for its claim to be the following: “[t]he obligation upon medical schemes to pay for PMBs at cost is not coupled with regulation of the prices that doctors, hospitals and other suppliers of health products and services may charge.” (We consider Profmed’s and Bestmed’s argument relating to PMBs at paragraphs 4.18 et seq. below.)

4.8 We begin by noting that Discovery Health’s submission considers the role of DSP networks in bargaining between hospital groups and medical schemes. In particular, Discovery Health’s submission notes “network plans give medical schemes countervailing power to negotiate discounted tariffs for inclusion in hospital networks […]”

4.9 In this respect, Discovery Health’s submission accords with our Bargaining Paper where:

a. we explained that DSP networks improved medical schemes’ outside options;

b. we gave examples of small schemes utilising restricted DSP networks, such as Spectramed; and

c. on the basis of data giving the relative tariff that each medical scheme agreed with Netcare, we found no significant role for the size of the negotiator beyond Discovery Health and GEMS (whether medical scheme or administrator) in determining the prices paid by medical schemes to Netcare.

4.10 A first point to make therefore is that, on the basis of the limited information available, we believe that the Panel should interpret the “aggressive” negotiating tactics used by the hospital group, as described by the BHF, as being consistent with a vigorous negotiation that eventually led to a lower negotiated price for the scheme. Since hospital groups’ costs increase over time as a result of inflation, annual negotiations will often commence with the hospital group

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126 Profmed submission, para. 2.16.1, 2.16.2.
127 Bestmed submission, para. 5.6, 5.7.
128 Discovery Health submission, para. 5.56.
129 Ibid. We emphasize that Discovery Health has no obvious interest in over-stating the degree of countervailing power available to medical schemes.
130 See para. 4.27 et seq. and Annex section 7 of the Bargaining Paper.
131 Bargaining Paper, para. 7.46. The CMS annual report states that Spectramed had around 65,000 beneficiaries as at 31 December 2011.
132 See Bargaining Paper, Section 9.
proposing an increase in tariffs. In the cases described by the BHF, it appears that the hospital group also offered a zero increase in tariffs – i.e., a reduction in real terms – if a DSP was implemented. This is consistent with our review of Netcare’s evidence, reported in our Bargaining Paper that schemes with restricted DSP networks achieve lower prices, which we ascribed to effective bargaining on the part of the medical scheme. It is difficult to see why this is undesirable for medical scheme members (as implied by the BHF).

4.11 Discovery Health however raises two concerns in relation to network plans:

a. It states that although network plans give schemes bargaining power, the ability to exercise this power “is constrained by limited supply in some regions”.133 (Medscheme similarly notes that “it is difficult to eliminate any one of the largest hospital groups from a national network, as each major hospital group has a regional dominance in at least one province with little meaningful alternatives.”134)

b. It also states that “competition between open schemes […] limits the ability of schemes to switch hospitals in and out of networks.”135

4.12 In relation to the first concern, we note that:

a. The Geographic Report provided evidence that Netcare did not hold “regional dominance”. Rather, that report suggested that the majority of Netcare’s hospitals face many competitors136 and only six of Netcare’s smaller hospitals are solus.137

b. In addition, in the Bargaining Paper we provided evidence showing that Netcare’s solus hospitals were, in fact, regularly excluded from restricted DSP networks [CONFIDENTIAL].

133 Discovery Health submission, para. s56.
134 Medscheme submission, p. 15.
135 Supra note 133.
136 Geographic Report, para. 7.
137 The six solus hospitals are Netcare Kokstad Private, Kroon, Cuyler, Settlers, Port Alfred and Margate. See Bargaining Paper, para. 7.14.
c. The claim, as currently stated, is not sufficiently specific to evaluate in detail since Discovery Health’s submission does not specify where and which limitations in supply translate into limitations in medical schemes’ bargaining power.\textsuperscript{138, 139}

4.13 In relation to Discovery Health’s second argument that competition between open schemes limits their ability to switch hospitals in and out of networks, we note that this can be interpreted as a statement that an open scheme’s outside option would be improved if its consumers had different preferences, so that they were less interested in changes to the composition of the restricted network than they actually are.\textsuperscript{140} In evaluating this concern:

a. The Panel will need to be careful to evaluate consumers’ overall interests – since medical schemes’ interests are not the same as consumers’ interests. In particular, Discovery Health’s argument implies that consumers have a preference for particular providers, and may not welcome that provider’s exclusion from a network. A restriction in consumers’ ability to switch medical schemes in response to a change in network composition would accordingly potentially have the negative effect that consumers are unable to ensure they have access to their preferred provider, even if such a restriction did improve medical schemes’ bargaining power.

b. If competition between open medical schemes is inappropriately limiting the ability of schemes to switch hospitals in and out of networks, the next step is to consider whether this indicates a competition concern in the medical scheme market. On the one hand, if consumers are able to make informed choices between different medical scheme options (which may vary in coverage and contributions), then medical schemes can design products which match their customers’ needs by switching hospitals in and out of networks. There is evidence to indicate this is the case. For example as Bestmed claims in its submission, “Some schemes have opted to give members the choice to voluntarily restrict freedom of choice by offering ‘efficiency discount’ options (or sub-options) where DSPs are in place. Members can then ‘choose not to be able to choose.’”\textsuperscript{141} The presence of both networks and different medical scheme options in South Africa suggests consumers

\textsuperscript{138} The same is true, for example, for Profmed’s submission which argues (without providing sufficient detail): “A specific hospital group could also dominate a particular region or local market in certain areas, which restricts competition even further.” See Profmed submission para, 8.1.2.

\textsuperscript{139} We discussed Netcare’s internal evidence on Discovery Health’s own bargaining position in the Bargaining Paper and found that the evidence clearly indicated that Discovery Health was in a strong bargaining position in relation to Netcare. See Bargaining Paper, para 5.25 et seq.

\textsuperscript{140} Relatedly, in para. 112 of its submission, Bestmed suggests that open schemes are reluctant to enforce DSPs, because this may place the open scheme in question at a competitive disadvantage. However, the statement is at odds with the fact that Discovery’s Key Care plan – which has a restricted network – if considered independently, would be one of the largest open schemes in South Africa.

\textsuperscript{141} Bestmed submission, para. 112.
are indeed able to trade-off between coverage and price if they need to. On the other hand, Profmed’s submission argues that “Consumers are generally uninformed about the nature of medical scheme cover” and if that description of the medical scheme market were accurate (perhaps for a subset of that market), then the Panel may in the first instance wish to consider whether a lack of information for consumers in the medical scheme market is limiting or distorting competition in the medical scheme market.

c. In relation to its evaluation of the impact of consumer preferences on relative bargaining positions, we would encourage the Panel to take a rounded view of the overall bargaining position in evaluating this argument. As we described in our Bargaining Paper, it is the relative attractiveness of outside options which is important for the Panel’s overall assessment of bargaining power. For example, while we agree that it is unlikely to be entirely costless for a scheme to change the composition of its network for a restricted DSP network option, the hospital group’s outside option is significantly worse, [CONFIDENTIAL].

Evidence on the causes and consequences of national negotiations

4.14 The submissions of Discovery Health and Medscheme consider the role of national negotiations with the hospital groups.

4.15 Discovery Health argues that since hospital tariff negotiations occur on a national basis, prices “do not reflect regional variations in supply and demand, and there is limited price competition at regional level.” In relation to this submission, we note that the fact that there are national negotiations and largely national prices for a given medical scheme is consistent with our submissions in the Bargaining Paper. A question for the Panel is whether the fact that we observe institution national bargaining reflects the exercise of bargaining power whereby hospitals insist on national negotiations, or whether instead national bargaining is used because it is economically efficient. In this regard we note that:

a. Conducting negotiations at the hospital or even regional level would entail significant transaction costs – with the parties having to reach an agreement on each of those negotiations. We note for example that a number of submissions argue that with the end

142 Profmed submission, para 2.44.
143 Discovery Health submission, p. 95 and p. 108.
144 Medscheme submission, Section 3.4.2.1.
145 Discovery Health submission, para. s54.
of collective bargaining transaction costs increased significantly because each medical scheme had to reach an agreement with each hospital group.\footnote{146}

b. Contracting at the individual hospital or regional level may have the disadvantage of impeding the development of ARMs. This is because ARMs require significant patient volumes on which to base pricing (since the larger the volume, the smaller the variation in average cost of treating patients).

c. \[\text{[CONFIDENTIAL]}\].

d. As we discussed in the Bargaining Paper,\footnote{147} to the extent that medical schemes have customers that are more concentrated in particular regions, it is possible that the prices being paid may vary across locations to some extent (even with national tariffs for each individual medical scheme) because of differences in medical scheme mix.

e. Finally, we note that economics suggests that it is not clear whether or not regional or local pricing would be positive overall for medical schemes; it is likely there would be winners and losers from such a change. In particular, if national pricing leads to a (largely) uniform price across locations, a move away from national pricing should be expected to lead to some prices increasing while other prices would decrease if regional prices were introduced. Given that local market conditions may vary across South Africa (for example in labour costs) it is important to note that moving away from national pricing would likely lead to higher local prices at some hospitals.

4.16 Medscheme argues that the “private hospital market is overly concentrated, particularly due to regional dominance,”\footnote{148} and that “[t]he hospital provider groups are […] unwilling to […] negotiate regionally.”\footnote{149} Medscheme also states that, “Hospital reimbursement models are negotiated nationally and this dynamic removes incentives to improve specific hospitals’ performance, since the larger hospital groups’ cost efficiency overall is often near the industry average.”\footnote{150}

4.17 In relation to Medscheme’s submission:

a. We note that the Geographic Paper finds no evidence to suggest that Netcare has hospitals with regional dominance.

\footnote{Profmed submission, para. 2.19; Department of Health submission, para. 219; and Medscheme submission, p. 85.}
\footnote{See Bargaining Paper, Section 9.}
\footnote{Medscheme submission, p.15. See also the discussion at para. 4.11.}
\footnote{Ibid.}
\footnote{Medscheme submission, Section 3.4.2.1.}
b. We asked Netcare if it was aware of one or more specific incidents to which Medscheme was alluding.

i. Netcare told us that it cannot recall any instance where Medscheme has requested regionally negotiated tariffs.

ii. Netcare told us that there was one occasion when Medscheme had a medical scheme with a very highly regionalised membership; they asked for special consideration regarding tariffs. However, we understand all requests for proposals were on an all hospital basis.

iii. Netcare told us that it made proposals to Medscheme in relation to this scheme, with special rates at hospitals suitable for the member of this scheme. However, the proposal was unsuccessful.

c. [CONFIDENTIAL].

d. In relation to Medscheme’s claim that national pricing removes the incentives to improve specific hospitals’ performance, and to be efficient, we do not believe that this is the case. In particular, for any given price, profits will be higher at a given hospital if costs are lower. Thus, efficiency saving at any hospital will translate directly into an improved margin from that hospital under a national pricing arrangement, just as it would under local pricing.

**PMBs and bargaining power**

4.18 The submissions of Bestmed and Profmed state that PMBs allow healthcare providers to exploit their market power, arguing that the requirement to reimburse PMBs at cost implies that providers do not have any incentive to enter into DSP contracts with medical schemes.¹⁵¹,¹⁵²

4.19 In respect of these submissions we make the following observations.

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¹⁵¹ Bestmed submission, para. 113 and Profmed submission, para. 6.3.6.2.

¹⁵² Bestmed submission, para. 113 actually states: “PMB regulation has made contracting with providers difficult. Consider the provider perspective: if the alternative to signing is the prospect of being paid in full regardless of cost, what incentive is there for a provider to enter into an agreement? To enter into contracts, schemes generally need to offer substantially more than scheme tariff, offer additional incentives (e.g. claims being processed and paid faster than for non-contracted providers) and/or rely on lack of providers’ understanding or knowledge.” It is not clear to us whether Bestmed is directing this statement towards hospital groups or specialists and GPs. Nevertheless, for completeness, we respond to the statement assuming that it is directed at hospital groups as well.
4.20 First, Netcare does not charge different rates for PMB and non-PMB conditions. For example, Netcare’s tariffs include ward fees charged on a half daily basis and theatre fees which are charged on a per-minute basis; such charges are not dependent on whether the patient has a PMB condition. Moreover, we understand that hospital groups such as Netcare do not decide whether to admit patients; instead, that decision is in the hands of clinicians, while patients also make choices as to whether to choose a provider where co-payments would be required.

4.21 Second, in contrast to the Bestmed and Profmed claims that hospital groups have no incentives to enter into network agreements with schemes, Netcare’s documentary evidence suggests that it actively seeks inclusion into DSP networks. The BHF has stated that hospital groups aggressively seek their inclusion in DSP networks (see para. 4.7a above). One would not expect to see hospital groups aggressively seeking DSP contracts if they had no incentives to do so (as argued by Bestmed and Profmed).

4.22 Third, we note that Bestmed’s submission acknowledges that the reimbursement at cost requirement is qualified by granting medical schemes an ability to channel patients using co-payments: “Regulation 8(2)(b) permits schemes to impose co-payments on PMBs provided that the medical scheme has a Designated Service Provider (‘DSP’) network in place and a beneficiary voluntarily makes use of a non-DSP for his or her PMB treatment. ‘Voluntary/involuntary’ usage is further defined as pertaining to access to the DSP in terms of proximity, availability of services and emergency situations.”

4.23 Fourth, we showed in our Bargaining Paper that:

a. Netcare does enter into DSP contracts with medical schemes – [CONFIDENTIAL];

b. [CONFIDENTIAL];

c. That small medical schemes were able to implement restricted DSP networks;

d. That Netcare receives very few patients from medical schemes which impose a restricted DSP network excluding Netcare hospitals (and where Netcare would have to recover the out of pocket payment from the patient); and

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153 For completeness, we note that the set of conditions covered by PMBs is determined by regulation and not by Netcare.

154 See Bargaining Paper, para. 7.40 et seq.

155 Bestmed submission, para 110.

156 See also Bargaining Paper, para. 2.5.

157 See para. 4.9b above.

158 Bargaining Paper, para 7.46.
e. The ability of medical schemes to channel members to different DSPs provides hospital groups a clear incentive to enter into DSP contracts in exchange for additional patient volumes.

4.24 Fifth, we do not accept that medical schemes do not have incentives to manage their costs in respect of PMB patients, and so will accept whatever is offered to them by hospital groups. This would only be the case if there were no competition between medical schemes for members. It seems more likely that a medical scheme’s costs will affect its ability to profitably offer products with an attractive benefit-price combination to its members. Since the costs of servicing PMBs will affect both the costs of offering that product (and so whether it is offered at all) to members and also its overall profitability – since an attractive offering by an open scheme will allow it to attract or retain more members – it does not appear to be the case that medical schemes are likely, in negotiations, simply to accept whatever the hospital groups demand.

4.25 This discussion makes clear that the Panel will need to carefully consider the incentives that do and do not result from PMBs in reality, and their impact on relative bargaining power. However, we believe that the claims made by Bestmed and Profmed are overly simplistic in their analysis, and indeed are contradicted by significant pieces of evidence documenting the factual position in respect of hospitals not having incentives to engage with DSPs.

Evidence of a weak competitive constraint from other, particularly independent, hospitals

4.26 Finally we note that the BHF submission claims that “the three biggest hospital groups dominate the market” and that “although there are other smaller independent hospitals […] they cannot compete with the big three”.159 To support this claim that the independent hospitals provide a weak competitive constraint, the BHF cite a newspaper article160 from 2013, titled “Shift towards consolidation of private hospitals”.

4.27 With reference to the small independent hospitals, the article notes that “to compete effectively with the big groups they need economies of scale, which will only come through mergers or consolidation”.161 In addition, the article suggests that the major constraint facing independent hospitals is access to funding to drive the process of consolidation, not the presence of or competition with larger competitors; it cites Prakash Devchand (CEO of Lenmed Health) and Bert von Wielligh (MD of Pretoria based Cure Day Clinics) as saying “the major constraint faced by small operators is their inability to gain access to funds”.162

159 BHF submission, para. 6.2.


161 Ibid.

162 Ibid.
4.28 We make five observations.

a. First, the article emphasizes that “independent groups don’t seem eager to merge and form bigger entities”. The article does not discuss the tension between this observation and the alleged incentive to merge to benefit from economies of scale. If there were large incentives to combine, then economists would ordinarily expect that incentive would be followed by at least some smaller firms.

b. Second, the article alleges that economies of scale are important in the private hospital sector, so that an overall assessment would need to take account of efficiencies associated with scale as well as any disadvantages. However, the article does not describe the drivers of reductions in costs associated with greater hospital group scale (economists consider that efficiencies of scale are defined in terms of reductions in average costs as the scale of operation increases).

c. Third, when describing the claimed benefits from scale, the article argues that independent private hospitals “are unable to compete against the bigger hospital groups, which are able to negotiate more favourable rates from medical schemes because of their bargaining power.” Thus the article alleges (with no supporting evidence) that superior bargaining power of larger hospitals leads to higher prices from medical schemes. In this respect we note that if large firms in an industry do act to raise their prices (as alleged) it will ordinarily help, not hinder, the growth of smaller firms.

d. Fourth, the article does not allege that independent hospitals do not act as a constraint on the larger hospital groups by offering lower prices to medical schemes. Indeed, it argues the opposite – since it argues that (i) independent hospitals offer lower fee rates to medical schemes and (ii) that day hospitals “are increasingly being preferred by medical schemes, especially for patients requiring minor surgery.” Indeed, the reasons for the growth of day-clinics are described as their lower operating costs and that medical “schemes save because they don’t have to pay for patients’ overnight costs in a hospital.” The article also cites Bert von Wielligh as arguing that “the savings are between 20% and 40% compared with acute hospitals.” Thus, far from establishing that smaller hospitals do not compete with the three main hospital groups, the article appears to contain much

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163 Specifically, the article claims that independents “are unable to compete against the bigger hospital groups, **which are able to negotiate more favourable rates from medical schemes** because of their bargaining power (emphasis added).”

164 The article also claims that “SA has yet to take full advantage of the trend” and cites Hendrik Hanekom’s statement that “only 15% of surgery is done in same-day clinics in SA, which compares poorly with the international average of 70%.” The article asserts that this is because “big hospital groups make more money from keeping patients longer, though all of them have a limited number of same-day surgery facilities.” Such unsubstantiated assertions aside, it is not clear how this would discourage competition from smaller hospitals. In fact, opportunities for hospital expenditure savings, one would serve to encourage further competition from small/independent hospitals and day-clinics.
material consistent with a significant competitive constraint from independent hospitals undercutting hospital group’s prices and winning business in doing so.

e. Fifth, the barrier to expansion allegedly faced by the independent hospitals is access to funding. If the opportunities for profitable expansion and consolidation are as great as the article’s description suggests then it is not clear why there would be a difficulty for smaller independents to obtain access to funding to facilitate their growth so long as capital markets are functioning appropriately.

Summary

4.29 In this section we considered a number of arguments in relation to the relative bargaining power of hospital groups and medical schemes/administrators.

4.30 We began by explaining that economists and competition authorities begin to analyse bargaining power by considering each party’s outside options in a negotiation. While concentration may be relevant for such an evaluation, a more granular analysis of each side’s outside options in the negotiations is required in order for the evaluation to be convincing. Certainly, one cannot only consider simple size or concentration indicators from one side of a market and expect to come to a convincing view of relative bargaining positions.

4.31 We first considered the role of DSP networks (or “network options”) in influencing relative bargaining power. We explained in our Bargaining Paper that DSP networks improved medical schemes’ outside options and were used by smaller medical schemes. We considered two specific concerns in respect of network options raised by Discovery Health. We found that a concern of “limited supply in some regions” was not sufficiently specific to evaluate in detail since Discovery Health’s submission does not specify where and which limitations in supply translate into limitations in medical schemes’ bargaining power. However, we did note that as the Geographic Report showed that the majority of Netcare’s hospitals face a range of competitors. Discovery Health’s other noted concern was that competition between open medical schemes limited their freedom to alter the composition of networks. Since at least some medical scheme members are able to trade-off the price and coverage offered by medical schemes, the Panel will need to reflect carefully on the causes of any limitations to competition between open medical schemes and, for example, consider whether a lack of information for consumers in the medical scheme market is limiting or distorting competition in the medical scheme market.

4.32 Second, we considered the role of national negotiations. We found that there we some potential disadvantages to holding negotiations on a regional or local level, relating to transaction costs and potential inhibition of ARMs. We also noted that national tariff negotiations did not immediately rule out the situation that there could be elements of tariffs that vary by location (indeed we documented some such variation in our Price-Concentration Report). In addition, we noted that the economics suggests that while it is not clear whether or not regional or local pricing would be positive overall for medical schemes, it is likely that there would be winners and losers from such a change. Finally, in relation to Medscheme’s allegation that hospital groups are unwilling to negotiate regionally, Netcare told us that it could not recall any instance where Medscheme has requested regionally negotiated tariffs.
Third, we considered the role of PMBs in determining relative bargaining power. We noted that Netcare does not charge different rates for PMB and non-PMB conditions, nor does it determine admission or treatment for PMB conditions. We explained that the evidence we documented in our Bargaining Paper suggest that: (i) Netcare does have incentives to enter into DSP contracts with medical schemes, particularly given schemes’ ability to nominate DSP networks and impose co-payments for voluntary use of non-DSPs; (ii) that Netcare does enter into DSP networks with medical schemes, including small medical schemes; (iii) [CONFIDENTIAL]; and (iv) that the ability of medical schemes to channel members to DSPs provides hospital groups with a clear incentive to enter into DSP agreements and provides the medical schemes with bargaining power.

Fourth, we considered whether independent hospitals constituted a weak competitive constraint on the larger hospital groups. We did not find that the newspaper article cited by the BHF provided reliable evidence in support of the proposition that independent hospitals did not act as a competitive constraint on larger hospital groups.
Section 5

Reintroducing collective bargaining is not likely to be good policy

5.1 Collective bargaining between hospitals and medical schemes was practised in South Africa before 2004. The Competition Commission found that this was anti-competitive, holding that the practice effectively fixed prices, and prohibited it. Since then, hospital groups have negotiated separately, as do medical schemes (or their administrators).

5.2 The Department’s submission calls for the return of collective bargaining. Specifically, the Department describes that:

*Considering both international and local experiences, it is the Department’s position that it is imperative that a reinvigorated approach to pricing, including billing, reimbursement and ethical tariffs, is required. This revised methodology should involve all role players in an open and transparent process, and should be driven by the aim of understanding the true cost of health services in order to determine a fair pricing structure. It is also noted that Regulation 8 (payment in full for PMBs) was never intended to exist in a pricing vacuum.*

The Department goes on to say:

*It is proposed that a negotiation framework be established by National Department of Health, with the aim of supporting central, collective bargaining using a cost based tariff structure as the point of departure.*


Department of Health submission, para. 244.

Department of Health submission, para. 245.
The Department's submission also argues that “collective price negotiation within the private healthcare market is characterised by a fairly balanced power dynamic when properly facilitated”.\(^{168}\)

5.3 Bestmed's submission is primarily focused on distortions that arise from the regulation of medical schemes, but in that discussion it briefly touches upon collective bargaining. In particular it states that: "In order to redress imbalances arising from the state of regulation and the impact that it has as a driver of cost of private healthcare, it is recommended that the following provisions of the Medical Schemes Act and its Regulations be reconsidered.\(^{169}\) Among the list of provisions of the Medical Schemes Act that should be reconsidered, Bestmed write: "Regulation 8 – the extensive list of PMBs and the requirement that these be paid 'at cost' requires reconsideration."\(^{170}\) Bestmed then argues that linked to the issue of PMBs is the role of "collective bargaining in controlling such costs", which it describes as a topic requiring "ventilation".\(^{171}\) Thus, Bestmed's position in its submission is that there is need for a discussion of whether collective bargaining is an appropriate remedy to what it perceives as problems introduced by Regulation 8, but it stops short of actually arguing that collective bargaining should in fact be reintroduced.

5.4 Medscheme\(^{172}\) also suggests that collective bargaining has some attractive features (or had attractive features when it was practised in the past), but similarly does not actually call for the reintroduction of collective bargaining. (We discuss its actual proposal for, among other things, a reference price list in more detail at paragraph 5.16 below.)

5.5 As will become clear from our discussion in this section, we consider the Department's call for the Competition Commission to use the market inquiry to bless the reintroduction of industry wide collective bargaining to be very surprising since such an approach does not sit easily within a traditional approach to competition law and policy. We do not consider that the Department makes a convincing case for its reintroduction for (at least) the following reasons:\(^{173}\)

a. South Africa's Competition Act 1998 includes a clear prohibition against agreements between parties in a horizontal relationship if it involves a "restrictive horizontal practice" including, in particular, “directly or indirectly fixing a purchase or selling price or any other

\(^{168}\) Department of Health submission, para. 210.

\(^{169}\) Bestmed submission, para. 147.

\(^{170}\) Bestmed submission, para. 147.4.

\(^{171}\) Ibid.

\(^{172}\) Medscheme submission, pp. 84-85, Section 9.1.

\(^{173}\) The Department's submission does not provide detailed proposals as to how collective bargaining would work in practice (and neither does Bestmed's). Accordingly, we provide comments on the general practice of collective bargaining rather than on any specific structure.
trading condition.” The Competition Commission has previously found that collective bargaining for arrangements in private healthcare was anti-competitive, as the practice effectively fixed prices, and prohibited it.

b. For a competition agency to bless an arrangement that it has previously condemned as tantamount to cartel behaviour would require a complete reversal in approach, with the potential to damage the Competition Commission’s domestic and international reputation (which could in turn have real consequences in terms of its activities in other sectors – such as its reputation for cartel deterrence). When the Commission prosecuted parties for involvement in collective bargaining in 2004, it held that “collective negotiation created a platform for collusion”.

c. If, at some later stage of this process, the Panel were convinced that Regulation 8 was distortionary, then a proper consideration of an appropriate remedy to that regulatory distortion would need to consider whether interventions other than the reintroduction of collective bargaining would remedy its concern (for example addressing the regulatory distortion) without the disadvantages of collective bargaining. Given collective bargaining’s highly interventionist nature, it seems unlikely that collective bargaining would be the least intrusive effective remedy to a regulatory distortion.

d. The likely disadvantages of collective bargaining are clear, and include that:

See Chapter 2, Part A, section 4(1)(b), Competition Act 1998. More generally, agreements between parties in a horizontal relationship are prohibited if they involve any of the following ‘restrictive horizontal practices’: (i) directly or indirectly fixing a purchase or selling price or any other trading condition; (ii) dividing markets by allocating customers, suppliers, territories, or specific types of goods or services; or (iii) collusive tendering.

See Case No: 23/CR/Apr04, The Competition Commission/The South African Medical Association, para 5.4.3; Case No: 24/CR/Apr04, The Competition Commission/The Hospital Association of South Africa, para 5.6.3 and Case No: 07/CR/Feb0 5, The Competition Commission/ The Board of Healthcare Funders of Southern Africa, para. 4.2.4 3.

It is no doubt unnecessary to outline to a competition authority why competition is important – since preserving competition is the very reason a competition authority exists. Economists and most policy makers believe that competition is crucial in order for consumers to benefit from low prices, the range and quality they desire, and also to drive innovation in markets. For example, the European Union Competition Directorate has prepared a video (see http://ec.europa.eu/competition/consumers/why_en.html), entitled ‘European Commission fighting against cartels’, outlining why it considers competition is important, and why Competition Authorities would not be wise to sponsor their emergence when firms in an industry, or even government departments, encourage them to.

i. Economics suggests that price-setting via collective bargaining will restrict competition, and in so doing can lead to higher prices, less choice and less innovation.

ii. Collective bargaining would require significant information exchange, and the proposal by the Department has the potential to risk significant anti-competitive effects.

iii. Historic experience in South Africa suggests that collective bargaining brings with it significant practical difficulties and distortions.

e. In contrast, the potential advantages of collective bargaining are unclear. In particular:

i. Transaction cost savings from reductions in the number of bilateral negotiations, if worthwhile, are achievable without a return to wholesale collective bargaining.

ii. Even if collective bargaining did increase countervailing buyer power of medical schemes in the manner claimed, the economic effect of increasing countervailing buyer power is ambiguous; a priori, it may potentially either help or hurt consumers, and cannot be presumed to be a desirable objective. A full assessment of such effects is not done in the Department’s submission, but would be required.

iii. To the extent that there is documented evidence available as to the effect of collective bargaining on prices, it suggests that Netcare’s tariffs did not increase following the end of collective bargaining. (See the discussion at para 3.21 above).

f. Finally, we note that the international examples cited by way of evidence in the Department’s submission do not support the imposition of collective bargaining in South Africa in the private hospital sector. Further discussion of the international evidence is provided in para. 5.46 et seq. and in section II.F.2 of Ms Guerin-Calvert’s response.

**Competition policy in respect of collective bargaining in South Africa**

5.6 The Department’s proposal to reintroduce collective bargaining would involve an arrangement whereby firms in an industry – at multiple levels of the supply chain, including horizontal competitors at each level – would collectively agree prices. While the collective bargaining proposed by the Department involves an element of vertical agreement, between different levels of the supply chain, it would also involve very significant elements of horizontal agreement: (i) between medical schemes and (ii) between hospital groups.

5.7 South Africa’s Competition Act 1998 includes a clear prohibition against agreements between parties in a horizontal relationship if it involves any ‘restrictive horizontal practices’ including in particular “directly or indirectly fixing a purchase or selling price or any other trading

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178 Department of Health submission, para. 206.
Moreover, while there are both horizontal and vertical aspects to the proposed collective bargaining arrangement, not all horizontal or vertical agreements are prohibited under the Competition Act.

Thus the Competition Act embodies a policy decision by the South African legislature to: (i) unambiguously prohibit horizontal competitors agreeing to directly or indirectly fix prices; and (ii) include an efficiency defence for some, but not all, other horizontal agreements (that do not fall under Section 4(1)(a)), and also all vertical agreements – albeit with the burden of proof on the parties to the agreement.

Without in any way wishing to suggest the Competition Commission would do otherwise, we note for completeness that if the Competition Commission were for good reason persuaded that parliament should expand the scope for an efficiencies defence in the Competition Act 1998, in assessing horizontal agreements to fix prices (perhaps because it believes the currently available mechanisms do not sufficiently allow for an efficiency defence to be taken into account – for example in respect of price agreements), the appropriate course of action would presumably be to seek to revisit the Competition Act in Parliament.

The Competition Commission has previously found that such arrangements were anti-competitive, holding that the practice effectively fixed prices, and prohibited it. For a competition agency to bless an arrangement that it has previously condemned as tantamount to cartel behaviour would require a complete reversal in approach. Unless there was a very clear and compelling rationale for such a reversal, there would likely be a risk of damage to the Competition Commission’s domestic and international reputation. Clearly any competition agency would need to consider very carefully and deliberately whether to introduce remedies in a specific market during a market investigation which would – on the face of it – appear

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180 In particular, we note that the prohibition against horizontal agreements to directly or indirectly fix prices is embodied in South Africa’s Competition Act 1998, as such agreements are within the category of ‘restrictive horizontal practices’. (See Chapter 2, Part A, section 4(1)(b), Competition Act 1998.) Specifically, horizontal agreements are prohibited if they involve any of the following restrictive horizontal practices: (i) directly or indirectly fixing a purchase, or selling price, or any other trading condition; (ii) dividing markets by allocating customers, suppliers, territories, or specific types of goods or services; or (iii) collusive tendering. However, beyond the category of restrictive horizontal practices, the stance in the Competition Act is different. Specifically, a horizontal agreement between parties in a horizontal relationship is prohibited if “it has the effect of substantially preventing, or lessening, competition in a market, unless a party to the agreement [...] can prove that any technological, efficiency or other pro-competitive gain resulting from it outweighs that effect [...]” (emphasis added). This caveat is also contained in the language used in the Competition Act in respect of an agreement between parties in a vertical relationship.

contrary to past decisions taken under the main piece of primary legislation under which that competition agency operates.

5.11 For these reasons – as well as others we discuss below – it seems a priori very unlikely that the Competition Commission would wish to reverse its existing approach to industry wide collective bargaining in private healthcare.

**Considerations relevant to choosing a remedy to a regulatory distortion**

5.12 Bestmed's submission is primarily focussed on distortions that arise from the regulation of medical schemes, but in that discussion it touches upon collective bargaining briefly. In particular it states that, “[i]n order to redress imbalances arising from the state of regulation and the impact that it has as a driver of cost of private healthcare, it is recommended that the following provisions of the Medical Schemes Act and its Regulations be reconsidered”.\(^{182}\) Then, among the list of provisions of the Medical Schemes Act that should be reconsidered, Bestmed writes “Regulation 8 – the extensive list of PMBs and the requirement that these be paid ‘at cost’ requires reconsideration.”\(^{183}\) Bestmed then argues that linked to the issue of PMBs is the role of “collective bargaining in controlling such costs”, which it describes as a topic which requires “ventilation”.\(^{184}\)

5.13 Thus, Bestmed's position in its submission appears to be that there is need for a discussion of whether collective bargaining is an appropriate remedy to what it perceives as problems introduced by Regulation 8. While Bestmed does not call for the reintroduction of collective bargaining, it does argue that: “Previously, when medical schemes engaged in collective bargaining with healthcare service provider, some of the bargaining power enjoyed by the healthcare service providers could be off-set, but, in light of the Commission's position on collective bargaining in the healthcare industry, medical schemes cannot counter the bargaining power of the providers in question.”\(^{185}\)

5.14 We discussed the evidence of the impact of PMBs on hospital groups’ relative bargaining power in paragraphs 4.18 to 4.25 above. We note that if the Panel were to conclude that Regulation 8 were distorting competition, it would need to go on to consider whether the reintroduction of collective bargaining is the appropriate remedy to the precisely identified regulatory distortion. In this respect we believe that the Panel may wish to consider the following advice from the UK’s Office of Fair Trading (now part of the CMA):\(^{186}\)

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\(^{182}\) Bestmed submission, para. 147.4.

\(^{183}\) Bestmed submission, para. 147.4.

\(^{184}\) Bestmed submission, para. 147.4.1.

\(^{185}\) Bestmed submission, para. 5.2.

Government frequently has a choice between traditional instruments and market-based approaches. There are pros and cons associated with all types of Government intervention. Many, if not most, intervention can have unforeseen consequences. Failure to address indirect costs and possible spill-overs can result in a less effective policy and impose unnecessary economic costs.

Government intervention can also inadvertently benefit regulated industry rather than the wider public (regulatory capture), promote inefficiency because of restricted competition or underplay the role of consumers by concentrating purely on the supply-side of the market.

In general, measures that directly limit competition in the market will not be the best instruments. Regulation of, for example, price, entry and exit, or allowing anti-competitive mergers and agreements between firms, are generally rather blunt measures and can be less transparent than other measures such as setting product standards or introducing taxes or subsidies. While these may also have effects on competition, they can typically be designed in a more focused and transparent way.

5.15 The use of collective bargaining would seem to fall squarely in the category of government interventions that “directly limit competition in the market”, and therefore will not generally “be the best [instrument].” Indeed, it is of the form of “agreements between firms”, that “are generally rather blunt measures” and less desirable than others, that “can typically be designed in a more focussed and transparent way.”

5.16 Before considering the merits of the economic arguments, we note that here we are considering only wholesale collective bargaining, and not other forms of regulatory intervention such as mandated reference price lists. For example, we note that Medscheme does not call for collective bargaining to be reintroduced in order to set prices. Instead, it calls for the re-introduction of a minimum reference price list (MRPL), to be set by the State, and also a maximum ethical tariff guideline – “to be determined by the relevant hospital and healthcare professional regulatory bodies.” It further takes the view that: “Ideally there should be a significant range between the minimum rate MRPL and the [maximum] ethical rate to allow for flexibility and competition”. These concepts are distinct: regulatory interventions (such as an RPL) can be set without collective bargaining (although they may require some degree of information exchange, perhaps with an independent regulator rather than across firms in the industry). The prevalence, role and advantages and, in particular, disadvantages of price regulation, and other related forms of regulatory intervention in prices such as RPLs, are considered in Section II F of Ms Guerin-Calvert’s response.

187 Medscheme submission, pp. 84-88.
Collective bargaining is likely to have adverse effects

**The economics of collective bargaining suggest it is not in consumers’ interests**

5.17 Economic theory suggests that the likely outcome of a collective negotiation between payers and providers would not necessarily lead to good outcomes for patients for the following reasons.

5.18 When two parties bargain with each other, economic theory suggests that the outcome will be one which *maximizes their joint profits* – irrespective of how those joint profits are split between the two parties.188 To take a simple textbook example, if two parties bargain over how to divide $1, then we would expect them to agree a split which does not “leave any money on the table”, i.e. allocates the full $1 between them. Under collective bargaining competition authorities have sound reason to be concerned that each side has the incentive to attempt to *maximise the industry-wide profits*, and then the only place for negotiation becomes over how best to share the resulting profits.

5.19 There is in principle the rejoinder that, in the present context, medical schemes are not for profit. In that regard, it is important to note that the logic of the example will follow through if medical schemes take a wider view of their interests. In particular, the concern raised by the economic analysis relies primarily on consumers not being at the negotiating table, whatever the private objectives of the medical schemes and private hospital groups.189

5.20 While in practice there are likely to be practical constraints, imperfections and a variety of distortions arising from collective bargaining arrangements, the economics clearly suggests that a return to collective bargaining should be expected to result in undesirable outcomes for patients. Competition via confidential bilateral negotiations provides the shield against collective self-interest resulting in a state-sponsored conspiracy against those not at the negotiating table.

5.21 Next we discuss a number of likely tangible disadvantages of collective bargaining in private healthcare.

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188 Specifically, as long as entities representing hospitals and schemes bargain under complete information and have the ability to make transfers to each other, “we expect them to reach an agreement that maximizes their joint payoff, regardless of their respective bargaining powers and positions affect the split of this joint payoff.” – Whinston, M. D. (2008) Lectures on antitrust economics. MIT Press Books, pp. 138-139.

189 There is also the possibility that other industry actors (such as administrators) may appropriate medical schemes’ profits; or we may talk more generally in terms of “surplus” – for example medical schemes may become less efficient or use such surplus to pay higher salaries or provide non-pecuniary benefits to management.
Collective bargaining is likely to have adverse effects such as reducing innovation in contracting

5.22 Aside from the general undesirability of setting prices using collective bargaining, the coordination required to implement collective bargaining has the potential to harm competition and innovation at various levels of the supply chain.190

5.23 Industry wide collective bargaining is likely to adversely affect new and innovative forms of contracts between medical schemes (or medical scheme administrators) and hospital groups:

a. [CONFIDENTIAL]. We explained in the Bargaining Paper that ARMs have certain benefits in terms of risk-sharing and efficiency incentives.191

i. The existing diversity in the form of ARMs is likely to be beneficial, and further new and innovative or bespoke contract structures may emerge over time. Under collective bargaining, all participants would have to agree to a new contract structure. We understand that Netcare considers it highly improbable that ARM structures could be designed on a collective basis given the need to pool data from disparate systems.

ii. In addition, Netcare told us that certain ARMs (such as the one that was used in the Discovery CPE discussed in our Bargaining Paper192) require sophisticated data handling capabilities on both sides. If collective bargaining were to imply that all industry participants should use the same reimbursement mechanism, then it is unclear whether such ARMs could be implemented, since some industry participants may lack the required data handling capabilities.

b. Netcare has agreed network options193 with a number of medical schemes. We explained in the Bargaining Paper that the balance of bargaining power in respect of network options lies with medical schemes, and that network options generally achieve lower tariffs than non-network options.194 Network options also enable medical schemes to offer a lower-cost option to consumers and thereby expand coverage.195 It is unclear how the variety of restricted network options currently supported could persist under collective bargaining.

Discovery Health makes similar points at p. 297 and pp. 322-324. Discovery Health also submits that there would be harm to competition between medical scheme administrators.

This is particularly pertinent in the context of the Department’s concerns regarding volume maximisation due to fee-for-service reimbursement. See Department of Health submission, para. 260-261.

Bargaining Paper, para. 3.42 et seq.

[CONFIDENTIAL].

Bargaining Paper, para. 1.36, 1.45.

Bargaining Paper para. 9.9-9.18; and Discovery Health, para. 653.
The risk of collective bargaining dampening competition

5.24 To the extent that competition would be ruled out under collective bargaining, there is a significant risk that it may harm competition, either between hospital groups or between medical schemes, in areas beyond tariffs. In general, competition authorities consider that such coordination – even when state sponsored – can spill over into other areas, leading to less pressure on costs and less pressure to introduce innovative forms of service delivery.196

5.25 For example, collective bargaining could affect competition between medical schemes in at least the following ways:

a. If collective bargaining results in a uniform hospital tariff across all medical schemes, medical schemes are less likely to compete on the basis of reducing their input costs in order to obtain a competitive advantage in the downstream market (as against the current situation where a scheme which is able to secure a lower tariff from hospitals and use it to gain a competitive advantage). Thus, collective bargaining would eliminate one of the major forms of competition between medical schemes – to reduce their costs and hence be able to provide more attractive offerings to their existing or potential new members.

b. Relatedly, there is the potential for a free-rider problem in negotiations which may lead to worse outcomes for consumers. If all medical schemes benefit from investments that are made in establishing the true costs of, say, a given medical procedure/service, an individual medical scheme’s incentive to make such investments will be limited. To put it simply, an individual negotiator (medical scheme or administrator) would have less incentive to invest in making sure tariff increases were truly cost reflective if the resulting saving equally benefited its rivals. Under collective bargaining, such investments would not pay off since they would not allow an individual medical scheme to improve its offerings relative to rivals, and thereby improve its margins197 or attract new members.

c. Competition authorities are typically concerned that the implementation of symmetric cost structures, as would be the case if all medical schemes faced the same tariff, may result in an increased risk of tacit coordination (here between medical schemes and between hospital groups).198 Specifically, competition agencies typically consider whether market characteristics are conducive to tacit coordination; and whether cost symmetry can, in the


197 Industry wide cost reductions will tend to be passed on to consumers in competitive markets.

language of the UK Merger Assessment Guidelines, make it easier for firms to be able to reach the ‘terms of coordination’ – since in order for coordination to emerge, the firms involved need to be able to reach a common understanding about their objectives (for example, a price below which they would not sell).

d. Competition authorities are also concerned about significant structural links between firms. Clearly the introduction of collective bargaining arrangements, wherein firms could collectively discuss prices of their major inputs, would amount to the kind of activity that most trade associations would be prohibited from engaging in. Indeed, the BHF, SAMA and HASA were specifically prohibited from engaging in collective bargaining by the competition authorities.

e. Relatedly, structures introduced for the purposes of collective bargaining could actually facilitate the implementation of coordinated outcomes. For example, in principle, larger medical schemes could tacitly (or explicitly) coordinate on forcing the exit or takeover of smaller schemes by initially agreeing to high tariffs; and then benefit from the resulting reduction in competition in the medical schemes market. Likewise, larger hospital groups similarly coordinate on forcing the exit or takeover of smaller hospitals by agreeing to low tariffs.

5.26 If collective bargaining would dampen competition, then the Competition Commission may not be surprised to find some industry participants, perhaps those with the most to lose/least to gain from competition, supporting – or at least not resisting – suggestions that it should be reintroduced. A number of medical scheme submissions emphasize the challenges that arise when more mobile members are attracted away to competing funds, since those movements may expose funds to challenges of adverse selection when riskier members remain. We agree that adverse selection can certainly be an important concern. However, in assessing such factors, it is important (i) to note that there are a variety of market and regulatory mechanisms, which will affect the extent to which funds are impacted by adverse selection; and (ii) not to lose sight of the fact that competition will deliver better prices and more innovative products. Thus, while dampening competition certainly does not guarantee the elimination of adverse selection (i.e. that healthy patients will stay in the market) if prices rise or service worsens, if collective bargaining introduces homogeneity in cost bases, removal of ARM arrangements and a reduction in the use of networks, it will reduce the range of the choices offered to consumers.

Collective bargaining would require significant exchange of information with consequent risks of facilitating coordination

5.27 The Department argues that a centralised price negotiation through the “establishment of a bargaining chamber or semi-autonomous pricing authority is central to [a] successful pricing process.” It also acknowledges that such an arrangement would likely involve a significant degree of information exchange (i.e., the exchange of market/product related information amongst firms in an industry.)

5.28 The Department argues that, in general, exchange of information can have both pro- and anti-competitive effects stating at paragraph 208 that: “The OECD report points out that in general terms, information exchanges are examined under the “rule of reason,” approach, a method of antitrust analysis that distinguishes legitimate information exchanges from illegal ones by balancing the information exchanges’ anti-competitive effects with their potential procompetitive benefits.”

5.29 Effectively, the Department appears to be arguing that the information exchange required to facilitate collective bargaining is likely to be beneficial for consumers, rather than resulting in anti-competitive outcomes. That is, it seeks to argue that an efficiency defence should apply in respect of the collective bargaining and/or, in particular, any required agreements to exchange information. In this respect, while we agree that there certainly are circumstances when there can be net consumer benefits from exchanges of information, we respectfully submit that competition authorities would mainly take the view that the evidential hurdle (for a party who wished to argue that industry-wide sharing of significant amounts of disaggregate commercially sensitive information for the purposes of colluding to set prices) would typically be a very substantial one.

5.30 In relation to the Department’s submission in this respect we make a number of remarks:

a. There is nothing healthcare-specific in the general approach to a competition law consideration of information exchange being described in this observation. In particular

200 Department of Health submission, para. 207.


the ‘rule of reason’ approach described in the OECD report is the general approach to a
competition law evaluation of the legality of agreements in the European Union. In
particular the prohibition under Article 101(1) that applies as a result of an anti-competitive
object or effect can, in principle and sometimes even in practice, be overwhelmed by
consideration of the pro-competitive effects under Article 101(3).203 (We note that, as
described more fully in paragraphs 5.7-5.8 above, the South African Competition Act
incorporates an outright prohibition for certain types of horizontal agreement, including
direct or indirect fixing of prices, without the possibility of an efficiency defence.)

b. Assuming for the moment that an efficiency defence can be considered, simply stating the
position in respect of the text of the legal framework does not constitute an argument that
a given exchange of information is not prohibited under a given country's competition laws.
To consider such a proposition, a careful, forensic analysis would be required, and it would
clearly need to consider a much more specific proposal than is offered in the Department’s
submission – and also evidence as to its likely effect.

c. As a practical matter, since interests within medical schemes (or hospital groups) will not
always be aligned, a meaningful collective negotiation would presumably require
reasoning and evidence to be developed – first to develop each side's negotiating position
and then subsequently to bolster each side to the negotiation’s collective position. It is not
clear how such evidence and reasoning could be developed without discussing negotiating
strategies, negotiating mandates and ultimately the drivers of both costs and revenues.

203 Specifically, we note that Article 101(1) of the Treaty on the Functioning of the European Union (TFEU)
prohibits, in particular, agreements between undertakings “which may affect trade between member
states and which have as their object or effect the prevention, distortion or restriction of competition within
the internal market, and in particular those which (a) directly or indirectly fix purchase or selling prices or
any other trading conditions […]” Article 101(1) TFEU is subject to a general exception described in
Article 101(3) that, in particular, the prohibition in Article 101(1) “may, however, be declared inapplicable
in the case of any agreement […] between undertakings […] which contributes to improving the
production or distribution of goods or to promoting technical or economic progress, while allowing
consumers a fair share of the resulting benefit, and which does not (a) impose on the undertakings
concerned restrictions which are not indispensable to the attainment of these objectives and (b) afford
such undertakings the possibility of eliminating competition in respect of a substantial part of the products
in question.” Since Article 101(3) TFEU can potentially apply to any agreement, an efficiency defence is
technically potentially available more widely than under South Africa's Competition Act 1998 (since no
efficiency defence is available in respect of restrictive horizontal agreements in South Africa). In practice
however, since horizontal agreements to fix prices and share markets are not the most likely to succeed
in establishing that 101(3) applies, the distinction may not be as significant as it as first appears. For the
text of Articles 101 and 102, see: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12008E101:EN:HTML.
The Department hints at a more specific proposal when it argues that “[i]f [information] exchange is through an intermediary, it raises less competition concerns than if it were a direct exchange between competitors.” In this respect, we agree that this could, in principle, be the case – for instance if information were not, in fact, exchanged across competitors but rested solely within a regulatory agency. However:

a. there are also a variety of exchanges of information through an intermediary which would raise very serious competition concerns. For example, it is clearly not the case that trade associations would be allowed – in most jurisdictions – to act as a clearing house for the exchange of confidential information required to support a cartel; and

b. it is not at all clear that the kind of ‘bargaining chamber’ being proposed would, in fact, prevent or limit information exchange, and therefore its potential harmful effects. For example, the Department emphasises the importance of negotiations being “conducted in a transparent manner”; and further to our remarks at paragraph 5.30c, it seems likely that information exchange could not solely be between the parties and a third party.

More generally, the Department’s submission does not develop any particular evidence base, in relation to a specific set of proposals, of the form that would be required to seriously consider an efficiency defence to an industry-wide collective bargaining arrangement.

The Department’s submission does refer to a report which it calls “the OECD report”. We first note that this is an OECD Working Paper which expresses the views of its authors and not of the OECD or its member countries; accordingly we refer to it as Kumar et al (2014).

Kumar et al (2014) consider, at a general level, the potential for price regulation to play a role in public, not private, healthcare. As a result, it is not obviously directly relevant for a

Department of Health submission, para. 209.

Department of Health submission, para. 207. As an aside, we note that the paragraph also introduces the potential for the government agency, or bargaining chamber, to have objectives other than economic efficiency; which are also very likely to move the outcome of the bargaining process away from competitive outcomes in a manner which may not be desired by current or future consumers of private healthcare.

An OECD working paper is described by the Department as the “OECD report” or the “OECD 2013 Report.” In respect of this paper, we first note that although the Department refers to a 2013 version of the report, in its “List of References” section it cites the following 2014 version. More importantly, we note that the front matter of the paper makes clear that: “OECD Working Papers should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author(s).” (Our emphasis). See Kumar, A., G. de Lagasnerie, F. Maiorano, A. Forti (2014) “Pricing and competition in Specialist Medical Services: An Overview for South Africa.” OECD Health Working Papers, No. 70, OECD Publishing. Available at http://dx.doi.org/10.1787/5jz2ipxcrhd5-en. Accessed on 19th February 2015.
consideration of the desirability, or otherwise, of exchange of information between private healthcare providers in South Africa. The evidence in that submission is further considered at paragraphs 5.50 et seq. below and also in Section II E of Ms Guerin-Calvert’s response.

5.35 Beyond the Kumar et al (2014) submission, the Department’s remarks in this regard (at paragraphs 206-210) amounts to little more than a statement that in other countries there are general efficiency defences that can sometimes be invoked to allow exchanges of information under competition law. This is true, but also insufficient since such an observation could be made in respect of any exchange of information in any industry; whereas the Competition Act seeks to prohibit some forms of agreements, whether horizontal or vertical.

5.36 In summary, we do not believe that a general literature review on the role of government in setting prices in public healthcare, and a general statement regarding the potential availability of an efficiency defence in other countries (and for some types of agreements in South Africa under its Competition Act), is sufficient to make a convincing efficiency defence for collective bargaining, or its required related agreements to exchange information on an industry-wide basis. 207

South Africa’s experience of collective bargaining suggests it was fraught with difficulty

5.37 The Department advocates the adoption of a collective bargaining process. However, its description of the experience in South Africa over the past twenty years strongly suggests that a process of seeking to agree or even recommend prices is fraught with difficulty. For example:

a. The “multitude of price lists” from RAMS (now BHF), SAMA and HASA between 1994 and 2002 “resulted in a situation where stakeholders were confused regarding which source represented an ‘industry standard’, and which should guide billing, or reimbursement.” 208

b. After the decision of the Competition Commission to prohibit collective bargaining in 2004, the CMS established the National Health Reference Price List (NHRPL). However,

i. The ambition of the NHRPL to be “based on a systematic cost-based methodology […] was not fully realised, and the NHRPL was largely derived by using the existing BHF tariff guide, adjusted for Consumer Price Inflation.” 209

207 To the extent that the Department’s submission aims to make a case for price regulation of private healthcare – as distinct from a case for a return to collective bargaining - this proposal is considered in Section II F of Ms Guerin-Calvert’s response.

208 Department of Health submission, para. 215.

209 Department of Health submission, para. 222.
ii. The NHRPL was not linked to the billed price charged by providers, resulting in members being billed for the ‘balance’ between the NHRPL and the billed prices.\textsuperscript{210}

c. In 2006-2010 the Department undertook a process of determining an RPL and invited submissions on costs and activity times, aimed at using a cost-based methodology for determining a national guideline tariff.\textsuperscript{211}

i. The Department notes a number of disagreements regarding methodology in hospital costing, relating to the calculation of return on equity; desired occupancy rates; and staffing norms and ratios, which were not resolved in this process.\textsuperscript{212}

ii. The RPL was ultimately never published as a legal challenge to the regulations underlying the RPL succeeded.\textsuperscript{213} In fact, in its decision\textsuperscript{214} the court criticised the Department on several fronts. Specifically, it criticised the Department for:

- the ineffective and unreasonable nature of the RPL (for not being grounded in underlying costs),\textsuperscript{215} and

\textsuperscript{210} Department of Health submission, para. 223

\textsuperscript{211} Department of Health submission, para. 224-226 and para. 228.

\textsuperscript{212} Department of Health submission, para. 230

\textsuperscript{213} Department of Health submission, para. 228

\textsuperscript{214} Hospital Association of South Africa Ltd v Minister of Health , ER24 EMS (Proprietary) Ltd v Minister of Health , South African Private Practitioners Forum v Director-General of Health (37377/09, 37505/09, 21352/09). Available at http://www.saflii.org/za/cases/ZAGPPHC/2010/69.html. Accessed on 10\textsuperscript{th} April 2015.

\textsuperscript{215} For instance, according para. 120 of the judgement, "It was […] incumbent upon the Director-General to produce an effective RPL which set rates at an appropriate, reasonable level that was grounded in the reality of the costs or operating private medical practices. Regrettably, this did not occur and the 2009 RPL fell well short of the statutory requirement." Furthermore, para. 118 of the judgement states, "[…] the 2009 RPL to some extent de facto determined levels of reimbursement and fees in the health care industry. The fact that the 2009 RPL reflected rates that were unreasonably low meant that private health care providers would continue to struggle to cover their costs (let alone make a reasonable return on investment) – a burden many of them have already carried for a number of years. Ultimately, there was the real risk that the effect of the RPL Decision would play out on patients who may face the burden of a declining number of doctors within the country, and who may be confronted with general and specialist practitioners who, in an attempt to make ends meet, would be forced to focus on high-volume turnover of patients at the expense of quality provision of medical services."
its careless and procedurally deficient implementation of the RPL.\textsuperscript{216} specifically, (i) its disregard for the views and inputs of the major stakeholders and (ii) for reaching beyond its mandate as defined by the National Health Act of 2003.\textsuperscript{217}

5.38 It is unclear how the Department proposes to overcome such issues in the process that it currently advocates, particularly surrounding costing if using a cost-based methodology. Quite aside from the significant competition concerns associated with such a proposal, South Africa’s past experience strongly suggests that a return of collective bargaining would involve a return to a wide range of regulatory distortions which fundamentally arise because of the gap between individual firms’ incentives and the negotiated price settlement. The implication for the Panel’s consideration of this matter is that the appropriate benchmark for evaluating such a proposal must account for the distortions that would be introduced by collective bargaining.

The alleged advantages of collective bargaining are uncertain

5.39 We have argued that collective bargaining (and agreements to exchange information in support of a collective bargaining arrangement) has the potential to have significant anti-competitive effects. In this section we briefly consider three possible sources of efficiency benefits that, if an efficiency defence were deemed available in this context under the South Africa Competition Act, might potentially be considered in a rule-of-reason assessment of otherwise anti-competitive agreements. In particular, in this section we discuss some – but no doubt not all – of the challenges that would be faced by a party which sought to make such arguments.

Transaction cost savings and collective bargaining

5.40 We agree there is a legitimate argument that transaction cost savings could potentially be made by not requiring every possible pair of bilateral negotiations to occur. However, that does not suggest that a form of industry wide collective bargaining would be justified. In particular we note the following:

a. The history of collective bargaining in South Africa does not suggest that collective bargaining would have low transaction costs. We discussed the history of collective bargaining and its many challenges and frictions at paragraphs 5.37 to 5.38 above. In particular, collective bargaining can involve difficult and potentially prolonged negotiations as internal conflicts of interest may arise within negotiating groups.

\textsuperscript{216} For example, according to para. 116 of the judgment, “\textquote{After inordinate delays and deficient procedural steps, the Director-General published a 2009 RPL which effectively defaulted to a RPL which provided an across-the-board 10.7\% increase for all health care disciplines in the private sector, with no material variations across disciplines, and no change to the structure of the 2008 RPL […]}”

\textsuperscript{217} For example, according to para. 50 of the judgment, “Reliance on the one subsection for purposes of informing the reference price list published under the other subsection is ultra vires the powers of the Minister as they were delegated by the legislature.”
b. Other economic institutions in the industry serve to reduce transaction costs. In particular, the role of the administrator is presumably, at least in part, to serve to reduce transaction costs in negotiations when they negotiate on behalf of multiple medical schemes.

c. To the extent that transaction cost savings are not achievable by separate medical schemes, in making its overall assessment of this potential justification of collective bargaining, the Competition Commission should consider whether they could instead be achieved by merger or acquisition activity. To the extent that transaction cost savings are desirable and are achieved by reducing the number of bilateral negotiations required, those savings can be achieved in ways other than via industry wide collective bargaining. In that regard we note that the Competition Commission can consider the potential synergies achievable from mergers in any competition assessment.218

d. The concern that transaction costs are of such significance that a single national negotiation is required is in tension with the concern, for example in Discovery Health's submission that prices for a single hospital group do not currently reflect regional variations in supply and demand conditions.219

5.41 While the above concerns do not immediately rule out all possibility of success of an efficiency rationale, it is clear that a party to the (collective bargaining) agreement would face evidential challenges in order to prove that “the technological, efficiency or other pro-competitive gain resulting from an agreement outweighs that [substantial preventing or lessening of competition] effect”.220 Given the clear lessening of competition envisioned and the considerably less clear-cut possible overall advantage in terms of reduced transaction costs, the evidential challenges faced by the party are likely to be significant.

The effects on consumer welfare of increasing countervailing buyer power is uncertain

5.42 In its submission, the Department states that221

“[…] collective price negotiation within the private healthcare market is characterised by a fairly balanced power dynamic when properly facilitated. That is, in the presence of relevant information (e.g. costs and

218 See Competition Act 1998, Chapter 3, Section 12A(1) and in particular 12A(1)(a)(i), where if a merger appears likely to substantially prevent or lessen competition then the Competition Commission must determine “whether or not the merger is likely to result in any technological, efficiency or other pro-competitive gain which will be greater than, and off-set, the effects of any prevention or lessening of competition, that may result or is likely to result from the merger, and would not likely be obtained if the merger is prevented”.

219 See Discovery Health submission, p. 95, Box 2.


quality) the oligopoly position of service providers is counterbalanced by the oligopsony position of payers. This balance prevents the process from resulting in excessive upward price movement, as well as downward price pressure below marginal cost, thus protecting the financial sustainability of all parties”.

5.43 Although it is not positioned explicitly as an efficiency defence, economically this argument can be seen as one. However, in relation to this submission we note that the Department’s treatment of the effects of introducing countervailing buyer power through the introduction of oligopsony is (i) incomplete and (ii) supported by neither economic theory nor empirical evidence.

5.44 The Department’s analysis is incomplete because the relevant metric to consider is the effect on consumer welfare of the supposed increase in countervailing buyer power through the introduction of collective bargaining. Creating a more “balanced” bargaining environment will be counterproductive if it reduces consumer welfare. In this respect we first note that there is no general result in economic theory which shows that consumer welfare will either unambiguously increase or decrease when one of the bargaining parties’ countervailing power is increased. Rather, the economic literature suggests that the effect is potentially ambiguous and so a careful case-by-case analysis is required. For instance, Inderst and Mazzarotto (2008) conclude that “[…] it would be important to investigate whether the presence of market power at both the upstream and downstream level of the supply chain could be particularly harmful. Put more generally, does buyer power in the presence of seller power exert a “countervailing” force, working to the benefits of consumers, or does it lead more towards “coalescing market power?”222 Moreover, although collective bargaining may increase countervailing buyer power, we also note it could:

a. force the exit or merger of existing independent hospitals due to lower margins, thereby dampening competition between service providers; 223

b. due to lower hospital margins, discourage entry, the introduction of new hospital services or expansion of hospital chains. 224

5.45 Thus an overall case by case assessment, informed by evidence, is required. It is, in particular, not sufficient simply to say that a more ‘balanced’ bargaining environment would be created.


223 See discussion in the context of retail markets in Inderst and Mazzarotto (2008); see p.14 of pre-publication version available at the internet link in footnote 116.

224 See discussion in the context of retail markets in Inderst and Mazzarotto (2008); see p.19 of pre-publication version available at the internet link in footnote 116.
In respect of the evidence, we note in particular that, to the limited extent that there is documented empirical evidence available in this case, it does not appear to support the idea that collective bargaining kept prices down. In particular, we note the evidence from Barry Childs, submitted as Annex 3 to Netcare’s submission, did not find any significant change in Netcare’s price inflation after the end of collective bargaining.

The international examples cited by the Department do not support its position on collective bargaining

5.46 The Department claims that countries regulate prices through either “centrally administered pricing” or a “negotiation process”. 225

5.47 To outline the price-setting methodology used by various countries, in Table 4 of its submission the Department summarizes Table 3 of Kumar et al (2014), which relates to the “Regulation of prices/fees of specialists’ services” paid for basic primary health coverage. The first point to make is that this is clearly not applicable to hospital services.

5.48 Further, the Department also claims that in most cases the “price determination involves collective negotiation among associations of doctors, hospitals or health insurers.” 226 It supports this claim by referring to the following excerpt from Kumar et al (2014): 227

> It is generally accepted across OECD countries that governments or public authorities play a proactive role in fostering the setting of prices in order to reach policy objectives […]

5.49 However, the role of collective bargaining across the OECD countries is applicable predominantly to the public sector. While the Kumar et al paper recognises that “price setting is a common feature of public health care systems”, 228 it also emphasises that: 229

> Countries with a similar role for private health insurance such as that in South Africa do not prescribe prices in the private sector but they also tend to have much larger public health care systems. None of the eight countries where private health insurance plays a similar role to that in South Africa (Australia, Finland, Ireland, Italy, New Zealand, Portugal, Spain and the

225 Department of Health submission, para. 205.
226 Department of Health submission, para. 206.
United Kingdom) directly intervened to regulate prices of medical services settled between private health insurers and private hospitals.

5.50 Ms Guerin-Calvert’s report explains that the Department mischaracterises and overstates the extent to which price regulation or collective negotiation is used in the private healthcare.230

5.51 In summary, the Department’s claim that collective bargaining is widespread in the OECD seems relevant only for the public health system and as such, is not relevant to this investigation of private healthcare.

Summary

5.52 In this section, we considered the merits of collective bargaining between private hospitals and medical schemes. We found that the Department’s call for the Competition Commission to use the market inquiry to bless the reintroduction of industry wide collective bargaining did not sit easily within a traditional approach to competition law and policy. We did not consider that the Department sets out a convincing case for collective bargaining.

5.53 South Africa’s Competition Act 1998 includes a clear prohibition against horizontal price-fixing agreements and does not allow an “efficiency defence” for such agreements. The collective bargaining previously practiced in South Africa between hospitals and medical schemes was found to contravene the Competition Act. We caution that unless there were a clear and compelling evidenced based rationale for a reversal in approach, any blessing of a collective bargaining arrangement could risk damage to the Competition Commission’s domestic and international reputation.

5.54 In respect of Bestmed’s submission that Regulation 8 (relating to PMBs) is potentially distortionary and that collective bargaining may help to control such costs, we observed that the UK Office of Fair Trading has previously noted that interventions that directly limit competition in the market will not, in general, be the best instruments when intervening in a market. Instead, if the Panel were to conclude that Regulation were distorting competition, it would need to go on to consider whether the re-introduction of collective bargaining is the appropriate remedy to the precisely identified regulatory distortion.

5.55 We then turned to the likely effects of collective bargaining.

a. Economics suggests that the likely outcome of a collective negotiation would be one which maximises industry profits (or surplus) at the expense of those not at the negotiating table, namely consumers. Competition protects consumers from such collective conspiracies. Collective bargaining would also likely hinder innovation in contracting, such as the use of Alternative Reimbursement Mechanisms, as it would not allow diversity in contracting

230 See Ms Guerin-Calvert’s response, section II.E.1.
structures and impede the development of new and innovative reimbursement mechanisms.

b. Collective bargaining may also dampen competition, since it risks providing a platform for collusion in other areas. In general, competition authorities consider that such coordination can spill over into other areas. The collective bargaining process would, for example, reduce incentives for medical schemes to achieve low input costs (as all other schemes would share in such success), and the resulting symmetric cost structures may increase the risk of tacit coordination. Competition authorities are also typically concerned about structural links between competitors and so limit the kinds of exchanges between competitors which may be facilitated by introducing collective bargaining.

c. Relatedly, collective bargaining may require significant information exchange between horizontal competitors. The Department argues that such information exchanges should be evaluated under the "rule of reason" approach, and suggests that in this case on balance the information exchange would be beneficial for customers. We submitted that the evidential hurdle for showing that the types of information exchange proposed by the Department are beneficial is ordinarily a high one. To the extent an efficiency defence can be considered under the Competition Act, the Department does not present the careful analysis of a specific proposal that would be required in such a circumstance. In addition we note that the Department's suggestion that information exchange through an intermediary would raise less competition concerns is not obviously true; a variety of information exchanges through an intermediary would raise serious competition concerns, and, in any event, it is not clear that the type of "bargaining chamber" being proposed would, in fact, limit such exchanges.

d. Finally, we noted that historic experience in South Africa suggests that collective bargaining brings with it significant practical difficulties and distortions, with the Department's previous attempts to determine a reference price list producing significant disagreements and ultimately failing due to a legal challenge.

5.56 In contrast, we explained that the potential advantages of collective bargaining are unclear. In particular:

a. Transaction cost savings from reductions in the number of bilateral negotiations may not materialise if collective bargaining prompts significant disagreements or prolonged negotiations. Even where such transaction cost savings are worthwhile, they are likely to be achievable to a significant degree without a return to wholesale collective bargaining, for example through the use of administrators or indeed, where appropriate, mergers.

b. Even if collective bargaining did increase countervailing buyer power of medical schemes in the manner claimed, the economic effect of increasing countervailing buyer power is ambiguous; a priori it may potentially either help or hurt consumers and cannot be presumed to be a desirable objective. A full assessment of such effects is not presented in the Department's submission, but would be required.
c. The international examples cited by way of evidence in the Department’s submission do not support the imposition of collective bargaining in South Africa in the private sector, as they do not relate to negotiations between private funders and private hospitals.
Section 6

Medical Arms Race

6.1 The Department argues that hospitals are currently engaging in excessive competition for health practitioners, and term this the "Medical Arms Race". In this section we review and comment on this alleged phenomenon.\(^{231}\)

The Department's submission

6.2 The Department argues that because hospitals cannot employ health practitioners they must compete for their patronage by offering the best facilities with the most sought after technology. The Department describes this “medical arms race” hypothesis as “the scenario where hospitals spend unnecessarily on items such as cost-enhancing technologies in order to attract more physicians, and patients”.\(^{232}\) The Department accepts that “[i]nvestments in technology and infrastructure can have significant benefits for patients, and cost-saving technologies result in efficiency gains.” However, it argues that “excessive competition based on investment in cost-increasing infrastructure and technology has a negative impact on efficiency.”\(^{233}\)

6.3 The Department explains the relevance of this hypothesis as “hospitals are not permitted to employ health practitioners, but face strong incentives to compete to attain their patronage. This creates a conundrum, and results in hospital groups generating various types of ‘contracts’ in order to incentivise health care practitioners to guarantee their availability (to meet licensing criteria) as well as their referrals (to secure patient flow). Practitioners are susceptible to these contracts since they require medical rooms, operating theatres and access to medical equipment in order to practice.”\(^{234}\)

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\(^{231}\) Metropolitan also discusses the medical arms race phenomenon (Metropolitan submission, para. 44-46). However, it offers no supporting evidence. In Section 4.2 of its submission Metropolitan presents “a crude analysis of the costs experienced in two hospitals with significant shareholding by specialists.” However, the analysis in Section 4.1 and a subsequent section containing a proposal for a more in-depth study are more in relation to “over-treatment” by specialists rather than medical arms race per se.

\(^{232}\) Department of Health submission, para. 90.

\(^{233}\) Department of Health submission, para. 98.

\(^{234}\) Department of Health submission, para. 89.
The evidence presented by the Department

6.4 In support of its claims regarding the medical arms race phenomenon, the Department makes the following observations:

a. It states that “Medi-Clinic and Netcare were quoted as openly investing in infrastructure and technology to satisfy the doctors and specialists operating within their hospitals”. More precisely, the Department states that Netcare (2014) stated “its strategic intent with respect to physicians in 2013 was to partner with the best doctors, develop doctor networks and assist doctors in their professional development.”

b. It reports that “Medi-clinic’s Sustainable Development Report (2014) states that more than 476 continuous professional development functions for doctors were held by Medi-clinic in Southern Africa and attended by more than 5 000 doctors and ‘these functions serve as valuable training opportunities aimed at keeping the group’s associated specialists and referring general practitioners abreast of the latest developments in the medical field.’”

c. It argues that firms seek to get practitioners to have an interest in their hospitals and cites the evidence that: “Life Health (2014:55) states that doctors have a consultative role in the operation of its hospitals, through their participation in the medical advisory committees and/or hospital boards. Life Health also encourages doctors to hold equity in local operating subsidiaries and doctors already have an interest in 33 of its group hospitals.”

d. It uses the example of the prisoners’ dilemma to illustrate the negative consequence on hospital profits of two hospitals both buying a new piece of equipment.

e. It presents two cross-country analyses of the density of equipment that it believes evidences the presence of a medical arms race between private hospital groups in South Africa. The analyses examine the number of MRI and CT scanners per million people in the OECD countries and South Africa as of 2004. It purports to show that the private health

Further, some parties argue that the medical arms race blocks entry into the hospital market, with hospitals “growing their practises through mergers and acquisitions by targeting start-up laboratories nationally, pathologists or Medical Scientists/Technologists laboratories alike.” See Emmanuel Diagnostic Laboratories, email dated 30 October 2014 to the Health Inquiry Panel, Submission 2. Available at: http://www.healthinquiry.net/Public%20Submissions/Forms/Emanuel%20Diagnostic%20Laboratories.aspx. Accessed on 28th April 2015.
care system in South Africa has a disproportionately high number of MRI and CT scanners per million private insured South Africans. Referring to these figures the Department states that, “[A]n 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.”

In the remainder of this section, we comment on the Department’s contentions. We explain that:

a. the Department’s discussion of the economic literature is incomplete and ignores more recent research which suggests that there is no medical arms race occurring in private hospital markets; more recent economic literature finds that there is an ambiguous relationship between competition and quality;

b. the examples given by the Department, of investment in infrastructure and training, are not prima facie problematic. Indeed, they may be what is expected if hospitals and specialists are complementary;

c. the Department’s use of game theory to illustrate the alleged problem is a purely hypothetical exercise with no reference to actual evidence from the South African hospital markets; the Department sets up the game to give its desired result (i.e. its assumptions drive its findings) and presents no evidence that its assumptions hold in practice. Moreover, if they did, then the private hospitals would be encouraging an end to the medical arms race since the Department’s prediction is that doing so would increase their profits; and

d. evidence on the density of MRI and CT scanners in South Africa does not support the Department’s conclusions, since the evidence is dated; it is unclear that the comparator countries are appropriate; and, in any event, the fact is that in South Africa physicians rather than hospitals purchase MRI and CT scanners and so even if the Panel were convinced there were a high density of MRI and CT scanners in South Africa -- and that was a bad thing rather than a good thing -- it cannot in any event constitute evidence of over-investment by hospital groups.

\[240\]Department of Health submission, para. 97.
The Department’s discussion of the economic literature on medical arms race is one-sided

6.6 In support of its argument that hospitals engage in excessive competition for health practitioners and their patients, the Department refers to Robinson and Luft (1985)\textsuperscript{241} on the hospital market in the United States. The Department states that the paper identified the medical arms race problem, “and its resultant efficiency losses, when hospitals in the same market area are forced to compete in order to attract specialists and patients.”\textsuperscript{242} In particular, those authors studied the impact of market structure on inpatient admissions, outpatient visits, length of stay, and average costs for US community hospitals in 1972. They found that, within hospital care markets with a cost-based mode of reimbursement, greater competition between hospitals was associated with higher average costs.

6.7 However, the Department’s citation of just one early article from the economic literature on the medical arms race and the impact of competition on hospital quality and outcomes is misleading in that it paints a one-sided picture of a literature which is, in truth, far less supportive of the Department’s submissions.

6.8 On the one hand, there are other academic articles that supported the Robinson and Luft thesis. Such papers typically also use US hospital data from the 1970s and 1980s and so relate to a particular set of US market conditions. For example, Dranove et al (1992) used California hospital data from 1983 to show that there was greater adoption of technology in less concentrated markets.\textsuperscript{243} Joskow (1980) used excess capacity as a proxy for quality and examined its relationship to the HHI for all US hospitals in 1976. He found that less concentrated markets had greater excess capacity, supporting the theory that non-price competition was occurring.\textsuperscript{244} Noether (1988) examined price and expense data for US hospitals in 1977 and 1978 and found that during those years in the US less concentrated markets had lower prices but also higher expenses.\textsuperscript{245} Generally, these papers found a negative relationship between market concentration and a measure of input use or cost.


\textsuperscript{242} Department of Health submission, para. 90.

\textsuperscript{243} Dranove, D., M. Shanley and C. Simon (1992), “Is Hospital Competition Wasteful?” \textit{Rand Journal of Economics}, Vol. 23, pp. 247-262. Note that the authors state that they find “minimal support for the medical arms race hypothesis” (p. 247), and that medical arms race “has a small economic effect” (p. 248).


suggesting that when competition occurred between hospitals, it resulted in non-price competition.\textsuperscript{246}

6.9 On the other hand, the Department’s submission does not consider the more recent research that uses US data after the advent of managed care. Academic studies using US hospital data after 1990 do not typically find evidence of a medical arms race in the U.S hospital markets. For example, Kessler and McClellan (2000) studied the impact of hospital competition on heart attack care using data from 1985 to 1994 and found that hospital competition improved social welfare.\textsuperscript{247} They argue that, “research based on data from prior to the mid-1980s finds that competition among hospitals leads to increases in excess capacity, costs, and prices […] and research based on more recent data generally finds that competition among hospitals leads to reductions in excess capacity, costs, and prices.”\textsuperscript{248}

6.10 Thus the academic literature suggests that the relationship between competition and hospital quality outcomes has changed over time and, in particular, that with the growth in managed care in the US in the 1990s, insurance companies developed a variety of strategies to negotiate lower prices with hospitals. For example, they created selective hospital and physician networks to steer volume, which allowed them to negotiate lower prices with preferred providers. Insurers also began reviewing utilization and refusing to reimburse providers who ordered unnecessary tests or visits as another way of reducing overall health care costs.

6.11 The literature examining US outcomes after 1990 describes a situation consistent with developments currently underway in the private sector in South Africa. For example, we understand that medical schemes are increasingly using many of the same strategies mentioned above to negotiate with hospitals. In particular, in the Bargaining Paper we


documented Netcare's participation in DSP networks.249 Similarly, alternative reimbursement methods (ARMs) are being used to move away from fee for service (FFS) payments. ARMs divide the risk differently between hospital and scheme and they change the incentives for cost management.250 [CONFIDENTIAL]. Such measures would help directly address the concern that a medical arms race would result in too much hospital utilisation and reduced social welfare.

6.12 The US President Harry Truman is famously reported to have asked for a 'one handed economist'.251 Sadly, the fact is that in many instances economic theory provides us with only ambiguous results. However, the economic theory can still be useful since it often provides an indication of the kinds of circumstances when we would expect to see one outcome versus another. In addition, economists use empirical evidence to help distinguish one situation from the other. In terms of the question of when we expect to see over-investment in markets, the economic theory suggests the following:

a. That when goods are homogenous, theoretically, there can be socially excessive entry or more generally socially excessive investment252 because the main effect of entry or investment is to “steal” business from other firms (since, by assumption, the products are identical). Accordingly, entry or investment can be more desirable to the entrant than it is to society.253

b. However, when competition is for heterogeneous (differentiated) products or services, economic theory suggests that additional entry or incremental investment can instead increase consumer surplus, because new entrants can offer a product which is preferred by some consumers to those currently on offer. For example, the closest MRI or CT scanner may be in a closer or more convenient hospital as investments are added to make those services available more widely.

6.13 In addition, we also note: (i) that the Department emphasizes in its submission that asymmetric information can be a significant concern in healthcare markets;254 and (ii) that the economics

249 For example, Figure 2 and Annex D of the Bargaining Paper.
250 See Section 3 of the Bargaining Paper for a more detailed discussion of ARMs and their use and impact in South Africa.
251 Reportedly, because President Truman was fed-up with his economic advisors saying “on the one hand […] but on the other […]”
252 The analogy can be extended to investment which enables a firm to offer new products.
254 Department of Health submission, para. 48-52.
literature, following Akerlof (1967),\textsuperscript{255} has emphasized that in situations of asymmetric information competition can result in \textit{inefficient}-investment in quality.

6.14 Thus the economic literature provides us with \textit{a priori} ambiguity, but also helps to distinguish when we are more likely to see competition providing socially desirable market outcomes. The Department is right that in theory it is possible to get over-investment and excess entry – but we note that this will only occur when competition between providers is too intense and resulting in services being added that do not add sufficient value for medical schemes and their members.

6.15 The concern of a medical arms race can be considered to be a concern that competition will lead to an over-investment in quality. The more recent health economics literature on the impact of competition on quality has emphasized that in markets where firms choose both price and quality (as in the private sector of South Africa), the impact of competition on quality is theoretically ambiguous. And the empirical literature examining markets where prices and quality are set by hospitals also provides evidence that there is no single easy answer available: There are a number of empirical studies evaluating the impact hospital competition has on hospital quality that find increases in quality occurring with increases in competition,\textsuperscript{256} and a number of empirical studies finding reductions in quality occurring with increasing competition.\textsuperscript{257} Another study finds no impact of competition on quality.\textsuperscript{258} Competition may lead to more or less investment in quality improving technology.\textsuperscript{259} By extension, the impact of competition on social welfare is similarly theoretically ambiguous.

6.16 The starting point to begin to resolve such theoretical ambiguity is the observation that private hospitals offer a wide variety of differentiated services. They are differentiated not only by the services they offer, but also by geography and waiting times and by those complementary products and services that are offered by hospital providers; cancer treatment experienced with caring and supportive staff in a convenient location is not the same service as cancer treatment without that care and support. Because hospitals are heterogeneous and services


can vary along many dimensions, investments have potential to increase consumer welfare, even if those investments are simply increasing access to a facility, perhaps by reducing waiting times, increasing geographic accessibility or otherwise adding value for medical scheme members. There can therefore be no presumption that the business-stealing effects from entry and investments will result in too much competition and hence a medical arms race.

6.17 In short, the literature emphasises that we must turn to careful empirical work, ideally that relates to the particular circumstances of interest – private healthcare in South Africa, in order to decide between the competing theoretical possibilities; a general appeal to the literature will not suffice. Given the ambiguity of the economic literature in this area it is clearly not correct to assert, as the Department does, that competition necessarily drives increases in hospital quality to excessive levels, let alone the more general claim that social welfare would be improved by a movement away from competition.

6.18 As a final remark, we note that despite the potential for theoretical ambiguities, as a policy matter governments typically establish competition agencies. This is because experience strongly suggests that the right starting point for economic policy is that competition is typically associated with good outcomes for consumers due to lower prices, more choice and greater innovation. The economic literature unambiguously shows that it is certainly not safe to assume that healthcare is different in this regard.

**Competition for specialist physicians**

6.19 The Department refers to statements from Mediclinic, Netcare and Life Healthcare that demonstrate that the entities were interested in recruiting, developing and retaining physicians at their hospitals. They put forth these statements as evidence that hospitals are engaging in inefficient, non-price competition for physicians.

6.20 Information presented by Econex at the HASA 2014 conference shows a shortage of specialists in South Africa, particularly in the areas of neurosurgery, gynaecology, anaesthetics, cardiology and general surgery. The country’s ratio of specialists per 100,000 of the population is one of the lowest in the world.\(^{260}\)

6.21 The investments made in facilities and training by hospital groups are not prima facie problematic. The Department has provided no evidence that the behaviour of hospitals is beyond efficient levels of investment in physician recruiting. Further, given the shortage of physicians (particularly specialists) in South Africa, this type of engagement, development and support from hospitals has clear potential to have advantages in terms of making the best of the limited available resources.

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\(^{260}\) Econex presentation at HASA 2014 Conference, slides 22-29, WHO and Eurostat Statistics.
**Game Theory and the Medical Arms Race**

6.22 The Department submission puts forth an example from game theory that it believes demonstrates the problem with a hospital medical arms race. The game is one where two hospitals decide whether to buy equipment and the resulting choices of both hospitals determine their profits. “The ‘prisoners’ dilemma’ involves four combinations of strategies, where the outcome of a collaborative decision is in the best interest of both firms, but where game theory predicts a solution in which each firm adopts the strategy of individual gain, at the cost of the joint outcomes.” The Department sets up the game so that both hospitals will enjoy higher profits if neither hospital buys the equipment. However, if only one hospital purchases the equipment, the purchasing hospital will earn much higher profits than the non-purchasing hospital. The equilibrium in this game is where both hospitals purchase the equipment and earn lower profits.

6.23 We make the following observations:

- a. The Department appears to be advocating coordination between hospitals to maximise joint profits, not necessarily maximising consumer welfare. The relevant question should be whether investment in hospital equipment enhances consumer welfare and whether additional equipment would lead to an improvement in overall health outcomes.

- b. If, as this example suggests, hospital providers would be better off without the medical arms race they should be expected to support ending it through regulation. To the extent they do not, this would be evidence which runs counter to the hypothesis.

- c. The Department’s use of the prisoners’ dilemma game is a hypothetical exercise with no evidenced connection to the South African private hospital market. In essence, the model assumes that the equilibrium is one where both firms buy the equipment and the result is lower profits for both hospitals compared to the situation where neither purchased the equipment. Of course, implicit in the construction is a presumption that the purchase of additional equipment by hospitals is unnecessary and will not serve patients’ interests. Such a proposition cannot generally be true or else it would lead to the absurd conclusion that hospitals should not invest in equipment.

- d. If instead, the payoffs were altered so that profits were greater when hospitals did not purchase the equipment, the resulting equilibrium would be one in which neither hospital invests in the equipment. The conclusion in that case would be that there is no medical arms race and perhaps that there is under-investment.

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261 Department of Health submission, para. 94.
262 Department of Health submission, para. 95-96.
6.24 The Department’s use of game theory and the prisoners’ dilemma therefore seems highly constructed to make a point, which it does. However the point is not one with general validity and so the example as presented has as much potential to mislead as it does to guide.

The Department’s analysis of MRI and CT scanner density is unreliable and potentially misleading

6.25 The Department presents two figures that, in its view, indicate the presence of a ‘medical arms race’ between private hospital groups in South Africa. In Figure 18 of its submission it shows the “density” of MRI scanners (number of scanners per one million people) in the OECD countries and the private sector in South Africa as of 2004. In Figure 19 it shows the analogous bar chart showing the density of CT scanners in those countries in 2004. Referring to these figures the Department states that: “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.”

6.26 We consider the Department’s analysis to be unreliable and potentially misleading for the following reasons:

   a. The Department does not provide a source for the scanner density numbers used for South Africa’s private sector hospitals in Figures 18 and 19 beyond the descriptor “OECD Health data” and we have been unable to find OECD data corresponding to South Africa’s private hospitals and so have not been able to replicate the Department’s analyses. As a result, we are unable to verify and test its claims; as the Competition Commission states in its Guideline for Submissions of Technical Data and Analysis, in order “to understand how conclusions are reached it must be possible to replicate the results of the analysis using the methods employed and the data used.”

   b. The Department figures suggest that the density numbers for South Africa are limited to the private insurance providers and the privately insured population. However, this limitation was not imposed on any of the comparison countries. For example, for Italy the “data on equipment in hospitals refer to both public and private hospitals” and for New Zealand CT scanners “the figures provided include all health care facilities, both public and private providers”. This type of “apples-to-oranges” comparison is unreliable and, if that

263 Department of Health submission, para. 97.
264 Competition Commission, Guideline for Submissions of Technical Data and Analysis, 1 August 2014, para. 1.2.1.
266 Ibid.
is the basis on which the numbers are constructed, would not provide a cross-country comparison which could be relied upon.

c. Although the Department argues that South Africa’s scanner density is far greater than “that of countries with similar economic and health profiles,” 267 it does not attempt to explain why the countries in figures 18 and 19 would be considered similar to South Africa in terms of these attributes. Nor does it attempt to explain why the proper interpretation is that South Africa has too many rather than other countries too few scanners of each type.

d. Inherent in these analyses is the assumption that hospitals are making investment decision regarding MRI and CT scanners and are therefore responsible for any over-investment in this technology. However, Netcare told us that physicians purchase the MRI and CT scanners that are used in hospitals such as Netcare. If hospitals are not responsible for the investment decisions these analyses would not appear to support the Department’s claim that hospital chains are involved in a medical arms race in South Africa.

6.27 Finally, we note that Bestmed in its submission acknowledges that “PMB regulations […] limit the utilisation of new technology to devices and procedures which are available in state hospitals.” 268 This type of limit on the use of technology is not obviously consistent with a concern that there is a medical arms race in South Africa where we understand that the state hospitals suffer from significant resourcing constraints.

Summary

6.28 In this section we considered the alleged presence of a medical arms race between private hospital groups in South Africa. We explained that the Department’s allegations were flawed in a number of respects.

6.29 First, the Department’s discussion of the economic literature on medical arms race is incomplete, one sided and decidedly dated. Specifically, it considers just one article that was published in 1985, using data from 1972, and does not consider more recent research that contradicts the older findings. Whilst some other US literature supports this finding, more recent US literature comes to the opposite conclusion: that competition among hospitals leads to reductions in excess capacity, costs, and prices. The academic literature suggests that the relationship between competition and hospital quality outcomes in the US has changed over time; in particular with the growth of managed care in the 1990s, insurance companies developed a variety of strategies to negotiate lower prices with hospital. We submit that this is consistent with developments currently underway in South Africa, for example in the use of network options and ARMs.

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267 Department of Health submission, para. 97.
268 Bestmed submission, para 86.
6.30 A number of features of healthcare markets may lead us to expect that competition would not lead to an over-investment in quality. Given that the empirical work in this area is ambiguous, it is not correct to provide strong assertions on the basis of a general appeal to the literature; careful empirical work ideally relating directly to private healthcare in South Africa is required to justify such assertions. We note that as a policy matter, experience strongly suggests that the right starting point for economic policy is that competition is typically associated with good outcomes for consumers in terms of lower prices, more choice, and greater innovation; and this is why governments typically establish competition agencies. The literature shows that it is not safe to assume otherwise in respect of healthcare.

6.31 Second, the Department provides no evidence in its submission that investments by hospital groups – to recruit, support and train physicians – are beyond efficient levels; while such activities have a clear potential to be economically desirable investments.

6.32 Third, the Department deploys game theory to argue that a medical arms race can exist. However, the example provided by the Department is a purely hypothetical exercise with no evidenced connection to private hospitals in South Africa. The Department’s use of game theory in the form of the prisoners’ dilemma therefore seems highly constructed to make a point. However the point is not one with general validity and so the example as presented has as much potential to mislead as it does to guide. There are a number of significant concerns about applying this example to the situation in South Africa. For example: (i) the Department appears to be arguing that, in its game, hospitals should coordinate on a profit-maximising outcome – which is not an outcome that maximises consumer welfare; and (ii) if hospital groups would be better off without the medical arms race, they would be expected to support limiting it through regulation – but Netcare does not.

6.33 Fourth, the Department presents figures which are reported to show that South Africa has a higher density of MRI and CT scanners than “similar” countries. We consider that the analysis is unreliable and may potentially be misleading since the Department’s submission does not:

a. Provide a source for the South Africa private hospital figures used that would have allowed us to replicate and test its analysis;

b. Explain why it is appropriate to compare the South African private sector to the combined public and private sectors in other countries;

c. Explain why the other countries are in fact “similar” to South Africa and form appropriate comparators; or

d. Explain why South Africa’s relatively high density of MRI and CT scanners is problematic as opposed to the lower density in other countries.

6.34 Moreover, inherent in this analysis is the assumption that hospitals are making investment decisions regarding MRI and CT scanners and are therefore responsible for any over-investment in this technology. However, we understand that physicians purchase the MRI and CT scanners that are used in hospitals such as Netcare. If hospitals are not responsible for
the investment decisions, the analysis would not obviously provide support for the Department’s claim that hospital chains are involved in a medical arms race in South Africa.

6.35 Accordingly, we do not believe that the Department’s allegation of a medical arms race leading to over-investment is convincingly supported by the evidence and argumentation in its submission.
Section 7

Competition economics and healthcare: remarks in relation to two specific concerns

7.1 In this section we consider aspects of two specific arguments put forward by parties to the investigation in support of the idea that competition in the private healthcare market is failing to deliver good outcomes for patients and, in respect of the Department, that price controls would deliver superior outcomes. Specifically:

a. The argument that price controls are a remedy that is required to counter the inevitable market power that arises from inelastic demand for healthcare; and

b. The argument that hospital groups are driving utilisation and so are a significant cause of cost increases.

7.2 We consider each of these arguments in turn below.

The argument that price controls are a suitable remedy to counter “monopolistic production”

7.3 In this section we consider the BHF and Department submissions and in particular discuss:

a. The literature (textbook chapter) cited by the Department in support of the proposition.

b. The proposition that market power is inevitable in healthcare because patients will pay whatever is required in order to benefit from lifesaving healthcare interventions.

The literature cited in support of the need for price controls to counter “monopolistic production”

7.4 In a section describing the broad market failures of the health care market, the Department states that

269 Department of Health submission, p. 23, Box 3.
Monopolistic production scenarios are expected in specialist and hospital services in light of necessary regulatory barriers to entry and economic factors relating to complexity of services and subsequent indivisibility of goods. In these cases price controls can reduce the welfare loss associated with monopolistic markets (Folland et al.) [sic].

7.5 We begin our discussion of this topic by noting that the book chapter cited by the Department (Folland et al) does not support the position the Department seeks to put upon it. In particular, we note that in truth Folland et al make markedly qualified remarks in relation to price controls, when they say: "in the simplest case and in the absence of government failure, price controls can theoretically reduce the welfare loss caused by a monopoly".270 And the authors urge consideration that "a typical hospital or physician provider may produce many different services", they note that "demand and technology change constantly", and that "it may be difficult to monitor quality", leading to a conclusion that "price regulation under such circumstances becomes far more difficult".271 Moreover, Folland et al’s textbook goes on to observe: "some have argued that direct intervention through public provision or price controls could worsen the situation because of government failure".272 Contrary to the general tenor of the Department’s submission there is no general view in either the economic literature as a whole, or Folland et al in particular, that price controls will provide an easy route to remedying market power in practical settings.

7.6 Indeed, perhaps the most directly relevant recent consideration of this topic was by the UK CMA which considered whether a price control would be an effective and proportionate remedy in their investigation into private healthcare. They found to the contrary that "[…] a price control would create potentially damaging distortions to the market, particularly with regard to quality and range, as well as being very costly to implement, monitor and enforce."273 As a result of such concerns the CMA decided not to impose a price control on private hospitals in the UK.

7.7 More generally the CMA’s Market Investigation Guidelines outline its approach to the evaluation of effective and proportionate remedies to competition problems they identify. In particular, the CMA considers generally that:274 “measures to control outcomes [such as price

271 Ibid.
272 Ibid.
controls] are not likely, by their nature, to provide a solution to the underlying problem and may give rise to distortion risks, if retained over a long period. For these reasons [...] remedial action to control outcomes will not generally be preferred as a long-term solution."

Economics does not support the argument that if the demand for healthcare is inelastic then there will inevitably be a lack of competition

7.8 An important element of the BHF and the Department submissions (and also others such as Metropolitan) is the contention that healthcare demand is inelastic and consequently, providers do not need to compete. For example, the BHF’s submission states:

_There is no price elasticity in healthcare. Competition does not lead to lower prices in this sector. Competition in the health sector is about who can charge the highest price thanks to information asymmetry, the health care consumer is always in a weaker position than the health care provider and is rarely if ever in a position to vote with his feet._

7.9 By way of evidence for its argument regarding inelastic demand the BHF quotes Ringel et al (2002)_276_ who state:_277_

_Despite a wide variety of empirical methods and data sources, the demand for health care is consistently found to be price inelastic [...] Although the range of [...] estimates is relatively wide, it tends to centre on –0.17 [...] In addition, the studies consistently find lower levels of demand elasticity at lower levels of cost-sharing._

7.10 Relatedly, Metropolitan states that,_278_

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275 BHF submission, p. 8.


277 BHF submission, para. 13.6. We note that Ringel et al (2002) does not consider the South African healthcare system (rather their findings are based on U.S. data). In interpreting such evidence, factors such as the particular market context is likely to be important. For example, the market context at the time of this study was different from the current situation in the US: most notably it relates to a time when we understand that employer provided health insurance was more generous, with lower premiums, and before high deductibles, and relatively higher co-insurance and co-payments became the norm.

278 Metropolitan submission, p. 8.
hospitals typically serve populations in close proximity to the hospital, provide services in relation to perceived emergencies and high need which results in inelastic demand.

7.11 As evidence for its argument, Metropolitan relies on a quote from a business journal that states: 279

"The demand for healthcare is inelastic. If someone needs medicine or a hospital service, it can’t be delayed or postponed. Hospitals and pharmaceutical companies have the pricing power because of this but it is also the reason why this sector is the most regulated."

7.12 The Department states in its submission that: 280

"The market power displayed by both hospitals and providers means that they are price setters within the private health care environment. The inelastic nature of demand for most hospital and specialist services serves to augment this market power. Profit-maximising specialists and hospitals are able to exert their dominance through price increases and price discrimination with relative impunity and have no need to compete on either price or quality in order to attract patients." [emphasis removed]

7.13 The Department further argues that: 281

"The demand for hospital services is deemed ‘inelastic’ because regardless of the price, people will demand the same amount. This is because it is usually life-saving treatment."

7.14 We begin our consideration of these arguments by first noting that none of the above statements distinguish, as clearly as they should, between the market elasticity of demand for healthcare (which can sometimes be inelastic) and the demand for healthcare from an individual firm, provider, or hospital (which can be more elastic).

7.15 Undergraduate economics textbooks draw out the importance of the distinction between the market elasticity of demand for a product or service and the elasticity of demand for that product or service from a single provider. For example, Professor Varian states in his Intermediate Economics textbook, "[it] is important to understand the difference between the


280 Department of Health submission, para. 80.

281 Department of Health submission, p. 35, footnote i
‘demand curve facing a firm’ and the ‘market demand curve’. The market demand curve measures the relationship between the market price and the total amount of output sold. The demand curve facing a firm measures the relationship between the market price and the output of that particular firm. [...] The market demand curve depends on consumers’ behaviour. The demand curve facing a firm not only depends on consumers’ behaviour, but it also depends on the behaviour of other firms.”

7.16 A good textbook will moreover note in particular that an individual firm can face a highly elastic demand even while the market demand is inelastic. When there is only one firm, a monopolist, the market and firm elasticity are the same. However, as Pindyck and Rubinfeld’s textbook states:

when several firms compete with one another; then the elasticity of market demand sets a lower limit on the magnitude of the elasticity of demand for each firm. [...] no matter how they compete, the elasticity of demand for each firm can never be smaller in magnitude.” [emphasis added]

7.17 Carlton and Perloff provide an empirical example in their textbook where they estimate the market elasticity for dry onions (and other commodities) at -0.16, but the elasticity for an individual onion producer at -52.284 While this is perhaps an extreme example, the point being made is a very important and general one; the demand elasticity for any one provider can be higher and more elastic than for the market as a whole because of competition among providers.

7.18 The economics textbooks help illustrate that the relevant demand elasticity for assessing whether competition is actively working is the firm (in this case the provider) level price elasticity of demand. This is because the firm is more constrained in its ability to raise prices the more its customers are responsive to price changes i.e. the more elastic is firm demand.

7.19 Having established a general economic principle, we now turn to the facts. In relation to the demand elasticity for an individual provider, we note that when a hospital increases the price it charges to a particular medical scheme, the change in demand for its services from beneficiaries of that scheme will be determined by:

a. “Direct substitution” – via patient choice to use a different provider’s hospitals; and

b. “Indirect substitution” – via, for example,

i. the medical scheme channelling beneficiaries to cheaper facilities by imposing out of pocket payments for use of that particular hospital; or

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283 Pindyck, R.S. and D.L. Rubinfeld, (2005), Microeconomics, Sixth Edition, p. 357.
ii. members switching to a different medical scheme if the scheme’s higher costs are reflected in higher prices to members (or employers changing their staff’s scheme); or

iii. members stopping or trading down their purchase of medical scheme membership because of the price rise (or analogously employers reducing or no longer providing private medical benefits because of the increased costs); or

iv. specialists switching to alternative hospitals, since “higher priced” hospitals may be less attractive for specialists to work for all else equal.285

7.20 The role of direct substitution is most relevant when patients face out of pocket payments at hospitals. In our Bargaining Paper we provided examples involving NIMAS and Sizwe where the medical schemes imposed out of pocket payments on their members. The result in both cases was a significant loss in patient volumes for Netcare, suggesting that the hospital level demand elasticity in relation to out of pocket payments is significant.286

7.21 The role of indirect substitution is evident from the significant growth in the number of lives covered by Discovery Health.287 This is partly a result of the lower contributions Discovery Health has required, which in turn is a result of, among other factors, the lower tariffs it negotiates with hospital groups.288

7.22 A key driver of indirect substitution is patient channelling. Discovery Health discusses the role of network options,289 patient channelling, and the resultant bargaining power in its submission to the Inquiry. Discovery Health notes that: “[h]ospital network plans play an important role in managing hospital costs and reducing scheme premium inflation.”290 While Discovery Health states that there are limitations to its use of hospital network plans, it further states that “[t]he use of network plans by some medical schemes does provide important elements of price competition between hospital groups [...].”291

We provide a detailed analysis of these concepts and their impact on the relative bargaining power of hospital groups and medical schemes in Section 4 and Annex C of our Bargaining Paper. If hospital services and specialists are complementary products/services then raising the price of one will be unattractive for the other all else equal.

285 See Bargaining Paper para. 8.12 et seq.

286 See Bargaining Paper, Figure 8.

287 See Discovery Health submission, para. s13. Further, Discovery Health states that it is able to control healthcare expenditure through innovative reimbursement mechanisms and by offering network plans comprising of efficient hospitals (Discovery Health submission, para. s60-s61).

289 Also referred to as Designated Service Provider (“DSP”) networks.

290 Discovery Health submission, p. 95.

291 Discovery Health submission, p. 102.
7.23 Furthermore, several academic studies confirm the hypothesis that managed care firms can channel patients successfully to in-network providers and that this ability confers bargaining power vis a vis providers. For example, Town and Vistnes (2001), study the impact of an insurer’s ability to use an alternative hospital network on hospital prices. They find that the more credible the insurer’s threat to use an alternative hospital, the lower the hospital prices’ charged to that insurer. Gaynor (2012) also argues that the ability of insurers to selectively contract with health care providers, has “allowed insurers to engage in serious price negotiations with hospitals, leading to substantially tougher price competition.”

7.24 Finally we note that in South Africa the ability of medical schemes to successfully channel patients to DSP hospitals relies on patients having a degree of price sensitivity; even if their demand for a hospital service (for example, a hip replacement or chemotherapy) is entirely inelastic, their demand with respect to any single hospital is more elastic. An academic study Gowrisankaran, Nevo, and Town (2015) investigates the impact of co-insurance rates on patient choice of hospitals in the US. They find that demand is sensitive to price and that consumers do respond to higher co-insurance rates and are steered towards cheaper hospitals. Subsequently, the authors find that higher co-insurance increases the insurer’s bargaining power and reduces hospital prices.

7.25 In summary, this subsection has considered two aspects relevant to the Panel’s consideration of whether the arguments put forward by the Department and the BHF in favour of a price control remedy are well founded. We find that (i) there can be no simplistic presumption in favour of a price control remedy even if the Panel were to conclude that providers benefitted from market power and (ii) that the claim that healthcare providers inevitably have market power because patients will pay whatever it takes to obtain lifesaving treatment is not convincing; a far more careful analysis of the facts is required to assess whether hospitals or other providers of healthcare have a problematic degree of market power.

**Does the evidence support claims that hospital providers are responsible for utilization increases?**

7.26 In this section we consider two specific arguments in relation to the argument that hospital providers are responsible for utilization increases.

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292 We note by way of caveat that these studies relating to conditions in countries other than South Africa and that further research on South Africa may be desirable.


a. First, we consider evidence in relation to the claim that hospital groups drive utilization and therefore cost increases; and

b. Second, we consider Netcare’s documentary evidence relevant to the claim that there are perverse incentives arising from the current coding, billing and remunerations practices.

7.27 We find that, contrary to the Department’s submission that hospital (and specialist) groups are the genesis of the current increase in medical expenditure, the evidence from Discovery Health’s and Medscheme’s submissions suggests that current growth in observed medical expenditure is primarily a result of demand-side, not supply side, factors. The demand side factors driving expenditure are found to include adverse selection and an increased disease profile. Consistent with this evidence, we found that Netcare’s internal evaluation efforts do not support the supply side argument that perverse incentives arising from current coding, billing and remunerations practices are causing the observed increase in utilization.

The claim that hospital groups drive utilisation and therefore cost increases

7.28 In its submission the Department states,

“Expenditure is a function of utilisation and price or cost. The following section reviews the private health care provider market, considering factors that contribute to price increases, and increases in utilisation. Given the trends in expenditure on hospital and specialist services, these two provider categories will receive specific attention. The profit-maximising relationship between these provider groups forms the genesis from which the current medical expenditure inflation grows” [emphasis removed].

7.29 The Department thus argues that hospitals groups (and specialists) are responsible for increases in utilisation and therefore medical expenditure. In this section, we contrast the Department’s submission, which focusses on an allegation of supply-induced increases in utilisation, with the submissions from Discovery Health and Medscheme which suggest that other drivers of utilisation are much more significant.

Drivers of utilisation according to Discovery Health

7.30 Discovery Health states that the increase in medical claims exceeded average CPI by 4.6% per year between 2008 and 2013, on average. Moreover, Discovery Health breaks the 4.6% into three components: (i) 2.9% is attributed (63% of the 4.6% excess) to “demand side”

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296 Department of Health submission, para. 64, p. 28.
297 Discovery Health submission, para. s18.
factors; (ii) 1.3% is attributed (28% of the 4.6% excess) to “supply side” factors; and (iii) only 0.4% is attributed (9% of the 4.6% excess) to tariff or price increases.\textsuperscript{298}

7.31 Discovery Health explains that: “Demand side factors reflect the extent to which members of medical schemes demand more healthcare services from year to year. They are the main reason for volume increases, and hence for excess claims inflation.”\textsuperscript{299}

7.32 Discovery Health explains supply side factors as those that “lead to increased consumption of healthcare goods and services for a given level of disease burden in the population”.\textsuperscript{300} It further states that, “[t]he supply side impact is significantly smaller than the demand side impact […]”.\textsuperscript{301}

7.33 The main demand-side factors Discovery Health discusses are: (i) age\textsuperscript{302}, (iii) prevalence of chronic conditions\textsuperscript{303} and (iii) “disease burden”\textsuperscript{304} (the severity and number of conditions per patient).

\textsuperscript{298} Ibid.
\textsuperscript{299} Discovery Health submission, para. s24.
\textsuperscript{300} Discovery Health submission, para. 108. In para. s32 Discovery Health lists as supply side factors the following: (i) increases in the hospital admission rate; (ii) changes in clinical decisions made by health professionals (iii) new medical technologies; (iv) increased usage of pathology and radiology services; and (v) changes in coding and billing patterns over time.
\textsuperscript{301} Discovery Health submission, para. s31.
\textsuperscript{302} Discovery Health shows that for Discovery Health Medical Scheme’s (DHMS) Classic Saver and Classic Comprehensive options members aged 60-64 have more than 3 times the claims costs of a member aged 20-24 (Discovery Health submission, para. 74). It then uses (i) Council for Medical Schemes (CMS) data to show that the average age per insured life increased more for open schemes than for closed schemes (Discovery Health submission, p. 33, Fig 2-15) and (ii) DHMS data to show that it “now has a higher proportion of lives at the older ages relative to 2005, with fewer young adults, more young children and fewer older children (Discovery Health submission, para. 79).
\textsuperscript{303} Discovery Health shows that for DHMHS’ Classic Saver and Classic Comprehensive options “members with a chronic condition within the same age band and option cost significantly more than members without chronic conditions, and that these members typically claim more than their premiums, even in the younger age groups.” See Discovery Health submission, para. 82.
\textsuperscript{304} Discovery Health states that “[i]n addition to age and chronic disease status, there are also other demand side factors which are more difficult to measure and to quantify. For example, within the group of chronic lives in a medical scheme, the severity of chronic conditions, as well as the number of chronic conditions per member […]” See Discovery Health submission, para. 86.
Discovery Health’s submission then proceeds to discuss the worsening risk profile (in terms of the above factors) of its administered options due to “adverse selection”. Discovery Health argues that the worsening risk profiles in turn lead to greater claims.

Drivers of utilisation according to Medscheme

In respect of utilisation, Medscheme argues that:

“[t]he average increase in claims expenditure (expressed per scheme member per month) has been 10.9% p.a. for all Medscheme client schemes since 2008. Of this average increase:

• [...] 

• 0.5% is explained by ageing (also due to lack of young healthy entrants in the non-mandatory environment [...]).

• 2.6% is explained by an increased burden of disease (partly related to the ageing as well as lack of health seeking behaviour) [...].

• An additional 1.2% is due to buy-down behaviour, i.e. decision to purchase a more affordable medical scheme option with less benefits [...].”

Like Discovery Health, Medscheme then discusses how a given scheme or option’s utilisation may increase as a result of adverse selection / “anti-selection” (wherein patients buy more...

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305 Defined by Discovery Health as “the process whereby proportionally more high risk, sicker individuals tend to remain in medical schemes”. Discovery Health submission, para. s26.

306 Discovery Health offers a range of evidence that suggests that adverse selection is prevalent. For instance, (i) it states that “large proportions of members who claim for conditions such as Multiple Sclerosis (for which biologic medicines cost R120,000 per year), or Breast Cancer (biologic medicines cost R180,000 per year) and Rheumatoid Arthritis (R97,000 per year for biologics), claim within the first year of joining DHMS” (Discovery Health submission, para. s28); (ii) It states that “people who upgrade to options with richer benefits claim 35% more than other members on those options” (Discovery Health submission, para. s29) and (iii) “[…] over a 5 year period, age and plan mix adjusted chronic disease prevalence in DHMS has increased by 27.3%, or 4.9% per annum” (Discovery Health submission, para. 84). Discovery Health also offers as evidence the fact that “[t]here is a significantly higher proportion of females of child-bearing ages in DHMS (and in the industry), where at other ages, the proportion of females follow national averages (Discovery Health submission, para. s28).”

generous option when they need expensive treatment and revert to less generous options after receiving treatment).\(^{308}\)

7.37 Thus, these submissions suggest that the most significant factors driving the observed increase in utilisation are demand-side. The Department’s submission therefore runs counter to the evidence provided by Discovery Health and Medscheme when it seeks to suggest that current medical inflation arises as a result of hospital group (and specialist) conduct.

**The supply side argument that there are perverse incentives arising from current coding, billing and remunerations practices is not supported by Netcare’s internal evaluation**

7.38 The Department’s submissions argues that

> although most health professionals seek to act in the best interests of patients, the current coding, billing and remuneration system creates an environment that supports profit-maximisation through perverse incentives, including the provision of unnecessary services and upward price inflation.\(^{309}\)

7.39 It also argues that

> in the context of Fee-for Service remuneration, providers will increase volumes so as to reach a pre-determined target income. This results in supply-induced demand and unnecessary utilisation.\(^{310}\)

7.40 In respect of this argument, Netcare told us that medical ethics guides decisions by medical professionals and that whilst billing methods may not align incentives, professionals act in the best interests of their patients. We have previously noted that not all of Netcare’s contracts are Fee-for Service.

7.41 We asked Netcare whether it had sought to evaluate the significance of such concerns. Netcare told us that the results of a strategic program implemented by all Netcare hospitals to monitor the effective utilisation of care levels supported this conclusion. [CONFIDENTIAL]:

- [CONFIDENTIAL].

\(^{308}\) Medscheme offers evidence of adverse selection based on two case studies involving its schemes. Using patient age “as a proxy for expected claims impact”, in the first case study Medscheme shows that members joining a scheme on January 1\(^{\text{st}}\) each year result in an increase in claims costs. In the second case study it shows that members who joined a scheme after it “waived all underwriting for a period of 6 months” were more likely to be admitted to hospitals. See Medscheme submission, pp. 42-43.

\(^{309}\) Department of Health submission, p. 2, Executive Summary.

\(^{310}\) Department of Health submission, p. 44, Section 5. Discovery Health also makes similar arguments at para. 111.
7.42 [CONFIDENTIAL].

Summary

7.43 In this section, we considered two specific claims made primarily in the Department and the BHF submissions.

7.44 First, the Department contends that specialist and hospital markets inevitably tend toward “monopolistic production scenarios” and argues that price controls can reduce the associated welfare loss. We do not agree with this premise, and moreover, the book chapter used by the Department to support the imposition of price controls does not, in fact, support the position the Department seeks to put upon it. In particular, we note that in truth Folland et al make markedly qualified remarks in relation to the desirability of price controls.

7.45 The Department and the BHF also argue that providers of healthcare face weak competitive constraints because the demand for healthcare is inelastic. However, this discussion confuses market demand with the demand faced by individual firms: whilst patients’ demand for treatment may be inelastic, the demand faced by an individual firm or hospital is likely to be more elastic because patient volumes switch between providers in a number of ways both through “direct substitution” (via patient choice to use a different provider’s hospitals perhaps as a result of differential co-payments) and also via “indirect substitution”, for example via the medical scheme channelling beneficiaries to other facilities by imposing out of pocket payments for use of a particular hospital; members switching to other medical schemes; members stopping or trading down their membership of medical schemes; or specialists switching to alternative hospitals.

7.46 Thus, we conclude on this point that the claim that healthcare providers inevitably have market power because patients will pay whatever it takes to obtain lifesaving treatment is not convincing; a far more careful analysis of the facts is required to assess whether hospitals or other providers of healthcare have a problematic degree of market power.

7.47 Second, the Department argues that hospital groups and specialists drive increases in utilisation and therefore medical expenditure. Netcare told us that medical ethics guide decisions by medical professionals and that whilst billing methods may not align incentives, professionals act in the best interests of their patients.

7.48 As we have previously observed, the contention that perverse “supply side” incentives arising from current coding, billing and remunerations practices are the primary driver of increases in medical scheme expenditure is contradicted by analyses of medical scheme hospital cost inflation submitted by Discovery Health and Medscheme. Those analyses instead suggest that the most significant factors driving the observed increase in utilisation are demand-side factors, for example those relating to age, prevalence of chronic conditions, and disease burden. Moreover, we note that the supply side argument is not supported by Netcare’s internal documentary evidence produced in the ordinary course of business. Specifically, we understand that Netcare’s “Transition of Care” initiative aimed to monitor whether specialists
were using appropriate levels of care and found that was the case for over 98% of patients assessed.
Annex A

Netcare “Transition of Care Review, 2012”

Annex A - Transition of Care Review.pdf