SEMINAR
Facilities’ market concentration and remedies

2 April 2019
INTRODUCTION

1. This note briefly sets out the background to the purpose and objectives of the HMI hosting a seminar for stakeholders on facility concentration and interventions on the 9th of April 2019.

2. In July 2018, the HMI published its Provisional findings and recommendations report.\(^1\) Amongst the topics discussed are the existence and effects of national and local market concentration with respect to the facilities market (in Chapter 6). The report also contains provisional recommendations intended to address current and possible future effects linked to what the HMI considers to be overly concentrated facility markets (in Chapter 10, in particular paragraphs 68-83).

3. A number of stakeholders have responded in written submissions to the HMI’s provisional report with varying degrees of both support for and disagreement with the findings and proposed recommendations. The purpose of this seminar is for the views of stakeholders to be expressed, and to provide the HMI panel with inputs and clarity as to the appropriateness of the recommendations.

4. This note outlines the findings and recommendations relevant to this seminar, provides a high-level overview of the analyses which were used to reach these findings. Full submissions from stakeholders are on the HMI’s website for attendants to consult.

   [http://www.compcom.co.za/12138-2/]

HMI FINDINGS ON CONCENTRATION

5. The HMI’s analysis of market concentration focused primarily on general acute facilities with varying specialities (classified as 057 and 058) as they account for the largest share of the market based on the number of beds, admissions and expenditure. Although they provide only limited (as to a small number of specialties) and even then only asymmetric competitive constraints, the HMI nevertheless included day facilities classified as 077 in the analyses, in order to be more inclusive and arrive at conservative estimates of market concentration.\(^2\) We will revisit this discussion in the course of this document and show what happens to our concentration analysis when

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\(^1\) Available online at: http://www.compcom.co.za/provisional-findings-and-recommendations-report/

\(^2\) We refer to “general acute hospitals classified as 057 and 058” as acute facilities and “day facilities classified as 077” as day facilities.
we exclude stand-alone day hospitals from the analysis as was the approach in the UK’s recent market investigation.

6. The HMI conducted the analysis at both the national and the local level.

7. To assess private facility concentration at the national level, the HMI considered both market shares and the associated HHI concentration indices. To determine market shares and the associated HHI concentration indices, the HMI used admissions and bed data. The admissions data cover the period (2010-2014) while bed data covers the period 2016.

8. The three large hospital groups were found to have a substantial share of the national market based on both admissions (90%) and registered beds (83%), and HHIs in the range of 2500 and 2700 respectively.

9. At the local level, the HMI assessed concentration in three ways: a fascia count, HHI, and LOCI.\(^3\)

10. In order to derive local markets, catchment areas were determined. The HMI determined catchment areas using patient flow data derived from hospital admission data and medical schemes claims data (2010-2014). Although both the Lavielle algorithm and radial model (using 80% cut off ratios) were used to derive catchment areas, the HMI’s preferred method is the Lavielle algorithm which presents a more informed approach to defining catchment areas.

11. At the local level, the HMI derived a total of 195 catchment areas (clusters) throughout the country. The fascia count results show that there are a total of 28 local markets (14%) that are highly concentrated, with 12 markets (6%) facing one competitor while 16 (8%) are considered solus hospitals. Using HHI and adjusting for network membership, the results show 88 (45%) highly concentrated markets with 25 (13%) of the total local markets being served by solus hospitals. Using LOCI and adjusting for network membership, the LOCI measure shows that 114 hospitals, accounting for 58% of the total hospitals are in highly concentrated local markets. Overall, the various

\(^3\) We consider a fascia count equal to or below 1 to be indicative of a concentrated market. We consider a market to be (i) not concentrated if HHI is below 1500 (ii) moderately concentrated if HHI is between 1500 and 2500 and (iii) highly concentrated if HHI is above 2500. Based on LOCI, we consider local markets to be of potential concern if the LOCI is below 0.6.
analyses all show high levels concentration at the local level with a number of facilities that operate as solus facilities, facing no localised competitive constraints.

12. The HMI draws broadly similar conclusions from the three approaches (fascia, HHI, and LOCI). The HMI concludes that a significant number of local facility markets is highly concentrated with a notable number of solus hospitals. The HHI approach identified not less than 113 out of a total of 195 to be concentrated markets while the LOCI approach identified 114. The HMI concludes that the similar conclusions drawn from very different methodological approaches provides reassurance that the results are robust.

13. The HMI’s analysis therefore identified that the facilities market exhibits substantial levels of concentration at both national and local levels. The observed concentration in the hospital industry is also as a result of acquisitions of independent hospitals by the three large groups, Netcare, Medi-Clinic and Life Healthcare. These findings are detailed in Chapter 6 of the provisional findings report.

14. The HMI is of the opinion that the national concentration levels provide a significant strategic advantage to the three largest facility groups – both individually and as a collective - in the national bilateral negotiations. Schemes/administrators which operate nationally cannot avoid contracting any of the three big hospital groups. These hospital groups, to a significant degree, are a must-have. Medscheme, for an example, must necessarily contract with each of Life, Mediclinic and Netcare. This dynamic provides the three hospital groups, both individually and collectively, with a significant degree of bargaining power. The HMI has been informed by NHN and RH Managers that there have been instances where an acquisition of a hospital previously owned by the big three by independent hospitals would result in the facility being removed from the DSP or instant reduction in tariffs, perhaps signifying the power the big three hospitals possess against funders. The HMI has also been informed that as soon as Discovery Health acquired Bankmed, there was renegotiation with Clinix resulting in Discovery Health unilaterally terminating the Bankmed/Clinix contract and also reducing the tariffs. This possibly also shows the power that large schemes exercise.

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4 Although both approaches identify similar numbers and broadly similar markets of potential concern, there are some disparities with certain hospitals which are identified by one approach and not by the other.

5 See chapter 6 of the HMI’s Provisional Report for greater detail on the HMI’s findings and conclusions regarding concentration and its effects on the healthcare market.

6 HMI meeting with RH Managers at HMI offices dated 14 February 2019; HMI meeting with NHN representatives at HMI offices dated 18 March 2019
against small hospitals. The HMI is of the view that where hospitals have local market power due to a lack of competition, it can negatively affect funders’ ability to negotiate significantly lower prices than the non-network prices of the same group. The HMI would like to get the funders’ views on this.

15. Stakeholders have submitted comments on the HMI’s findings and recommendations on the concentration analysis. The HMI also received stakeholder presentations as per Seminar Notices published on the 14th of December 2018. The HMI briefly presents below the stakeholder submissions on the concentration analysis and stakeholder presentations as per Seminar Notices. The HMI also presents its views on the stakeholder submissions.

STAKEHOLDER SUBMISSIONS ON CONCENTRATION ANALYSIS

16. Overall, the majority of the industry stakeholders agree with the HMI that the facility market is highly concentrated while a few disagree.

17. The HMI’s concentration analysis is criticised largely by the large hospital groups. Discovery Health, although supporting many of our findings in the concentration analyses, has added that overinvestment in local bed capacity may be even more important than (local) facility market concentration to explain rising utilisation and costs. The hospital groups have criticised our methodologies, data and findings. Also the time interval looked at by the HMI to conduct the concentration analysis was considered by some to be outdated. We discuss below, under respective thematic areas, the stakeholders’ main critiques of the HMI’s concentration analysis.

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7 Evidence from Teddy Mosomothane, P.O. Bankmed at the HMI Public Hearings in Durban in 2016.
8 Marcus submission to the Provisional Report dated 7 September 2018, pg.1.
9 NHN Submission to the Provisional Report dated 7 September 2018, pg.5.
10 SAMA Submission to the Provisional Report dated 1 October 2018, pg. 22.
12 Clinix Submission to the Provisional Report dated 7 September 2018, pg. 4.
14 Netcare’s submissions on the HMI’s Provisional Report dated 15 October 2018.
15 Mediclinic’s submissions to the HMI’s Provisional Report dated 15 October 2018.
16 Cliffe Dekker Hofmeyr, Mediclinic’s Comments on the Provisional Findings and Recommendations of the Health Market Inquiry, para 2.2 pg 2
17 Life Healthcare Group Response to Health Market Inquiry Provisional Findings and Recommendations Report 15 October 2018” see para 1.6.1 pg 6
Data and scope of the analysis and the effects on the concentration findings

18. The large hospital groups have criticised the HMI’s inclusion and exclusion of certain hospitals in the calculations, the bed numbers used by the HMI, as well as the time period over which the analysis was conducted (up to 2014). They also criticise the HMI’s inclusion of sub-acute beds and specialist beds in the analysis. The HMI is also criticised for using total registered beds and not beds in use. The three large hospital groups have offered alternative calculations which show that the market is only moderately concentrated and not highly concentrated.20, 21

19. Mediclinic argued that the HMI has excluded a large number of hospitals from the final list of 195 hospitals. The excluded facilities are mainly from the NHN and independent hospitals, which results according to Mediclinic in the market shares of the larger groups being inflated and increases their concentration measures.22 Mediclinic also argues that that the HMI has not applied any clear, objective empirical rules in excluding particular types of facilities from its facilities database.23 While Mediclinic argues for the inclusion of all facilities (including specialist hospitals and PPPs and mining hospitals) to form a broader market, Netcare argues instead that the focus should be on “full hospitals”24 (where patients stay over-night) which can be classified as 057 & 058.25

Concentration measures and thresholds

20. LHC criticizes the HMI’s use of fascia count, HHI and LOCI approaches.26 LHC criticises the thresholds applied by HMI with respect to the fascia count and HHIs as well as conclusions drawn from the approaches. LHC submits that there is no empirical evidence that locally determined competitive outcomes are poorer in areas with two

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20 Cliffe Dekker Hofmeyr, Mediclinic’s Comments on the Provisional Findings and Recommendations of the Health Market Inquiry, Figure 2 pg 5
21 Life Healthcare Group Response to Health Market Inquiry Provisional Findings and Recommendations Report 15 October 2018” see para 4.6.8.3 pg 46
22 Para 2.2.6 pg 3
23 Cliffe Dekker Hofmeyr, Mediclinic’s Comments on the Provisional Findings and Recommendations of the Health Market Inquiry, para 2.2.4 pg 2
26 Life Healthcare Group Response to Health Market Inquiry Provisional Findings and Recommendations Report 15 October 2018” see para 1.6.1 pg 6
competing hospitals than in areas with three competing hospitals. LHC also criticise the use of an HHI threshold of 2,500 and that it is not appropriate to interpret an HHI of above 2,500 as problematic, or indicative of ineffective competition, in and of itself. LHC argues against the use of the LOCI measure for assessing market concentration. LHC submit that updated information indicate that there are likely to be a number of local markets that no longer meet the threshold.

**Data sets (admissions and claims data)**

21. LHC and Mediclinic criticise the HMI for using admissions and claims data together in conducting the concentration analysis. It is argued that this is inconsistent in the calculation of catchment areas for the three large hospital groups as compared to NHN and independent hospitals and impacts on the quality of the geolocation data used and the results of the analysis. It is also argued that calculating market shares based on admissions may not provide a true reflection of the competitive constraint imposed by different firms because admissions represent the allocation of patients based on current prices, or tariffs.

22. LHC has reservations with the aggregation of market shares for particularly NHN and independent hospitals and argues that while it is appropriate to aggregate the market shares for hospitals that form part of the NHN, since they engage in collective negotiations with funders, it is incorrect to aggregate the market shares of other independent hospitals that negotiate with funders on an individual basis.

**Treatment of duplicates in the analysis**

23. Mediclinic raises issues with the inclusion of duplicates in the HMI analysis. This emanates from both ward days and the start and end dates for hospital admissions. Mediclinic argues that there are data entries which record zero claims and yet a
positive PMB amount paid.\textsuperscript{35} It is argued that from the inspection of the HMI data it appears that there are separate lines for each type of event (inpatient, day patient, ambulatory). For example, it is stated that a patient who visits the emergency room and is then admitted will have two separate entries. However, in the funder data a definition of an episode has been used by the HMI to group events occurring in close time proximity. For example, a patient with a visit to the emergency room and an inpatient admission will be considered as a single line. In their submission, Mediclinic consider these definitions to be inconsistent. It is argued that this will affect the calculation of the catchment areas. Mediclinic submits that, because emergency rooms and outpatient visits are likely to be drawn from a population located in close proximity to the hospital catchment area for the three larger hospital groups, this is likely to be skewed downwards relative to the other hospitals.\textsuperscript{36}

Deconcentration trend in the market

24. Mediclinic and Netcare criticise the HMI for taking a static approach to concentration analysis. It is argued that this does not allow for the impact of entry and expansion and ignores the change in competitive dynamics over time.\textsuperscript{37} It is submitted that there has been significant entry and expansion by NHN and independent hospitals over time and that the future entry and expansion based on licence applications and approvals shows that the majority of entry will be from NHN and independents. Netcare submits that most of the additional new entry and expansion in the private hospital sector will be by NHN and independents based on licence applications and approvals.\textsuperscript{38} Mediclinic submits based on their analysis that there is a substantial trend toward decreasing concentration and increasing share of NHN and independent hospitals in the private facilities market.\textsuperscript{39}

\textsuperscript{38} The Evidence on Bargaining between Funders and Facilities and Proposed Recommendations: A Response to the South African Healthcare Market Inquiry’s Provisional Report Dr Peter Davis, Dr Vikram Kumar and Mr Jerry Lin; 15 October 2018, para 43 pg 20.
Impact of concentration on competition

25. Discovery Health supports the HMI’s view that the concentration in the private hospital market provides a significant strategic advantage to the three large facility groups. Discovery Health also agrees with the HMI that the high concentration and market power of hospital groups has had a significant impact on competitive dynamics, constraining the development of effective ARMs and day clinics.40

26. Mediclinic raises concerns with the way in which the HMI used the local concentration data to prove its local theory of harm. It is argued that the HMI’s methodology of classifying a region as either unconcentrated/ moderately concentrated/ highly concentrated is flawed, as it provided a sample of regions to its experts for final analysis. Mediclinic submits that only 12% of the regions were included in the sample and used for the analysis.41

27. Mediclinic criticises the HMI’s local concentration analysis for not taking the issue of access to facilities in under-serviced or geographically disparate areas into account.42 It is submitted that concentration results should be considered together with a medical scheme population density map to better interpret the results.43 This sentiment is shared by Discovery Health. Discovery Health submits that the concern regarding high concentration in remote regions such as Thabazimbi, Barberton and Queenstown is not necessarily valid, given that the population in these areas might be considered too small to support another viable private hospital. Discovery Health argued that the introduction of a new hospital in an area may dilute concentration indices, but will come at the expense of increased cost of care in terms of both price and utilisation of hospital services.44 However, while it is acknowledged that the HMI’s concern that concentration at the local level may inhibit competition in the development of DSP networks in remote areas where they may only be one hospital to choose from, it is believed that the costs of increased utilisation from introducing a new hospital will far

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outweigh the benefits of enhancing competition by adding more hospitals. The HMI, while acknowledging that there may be valid reasons for high concentration, is concerned about lack of competition in highly concentrated markets. The HMI is more concerned that it is mainly the big three hospitals that dominate the highly concentrated markets. Population density may not justify opening of new facilities or adding more beds but innovative ways of providing care can be adopted to dilute high concentration. For example, public facilities can buy excess capacity from private facilities in highly concentrated. Provider Organisation Services (PPOS) may also be adopted in existing acute facilities where there is excess capacity.

28. Mediclinic and LHC criticise the HMI for not conducting an analysis on the effects of local concentration. It is argued that the HMI failed to show the anti-competitive effects of the high concentration. 46 47

29. Further, the large hospital groups deny that they possess market power or have countervailing power over schemes. They submit that irrespective of their size, funders can be expected to exert countervailing power during negotiations with private hospital groups because a failure to enter into an agreement with a funder will translate into a loss in patient volumes, which any private hospital group would want to avoid. 48 49 This may result from the potential loss of specialists to competing hospitals when a hospital has been excluded from a DSP network.

30. Below, the HMI presents its views with respect to the main stakeholder submissions on concentration analysis.

HMI’S ASSESSMENT OF STAKEHOLDER INPUTS ON CONCENTRATION ANALYSIS

31. Overall, the majority of stakeholders agree with the HMI that the facility market is highly concentrated as they also agree with the recommendation to address the levels of market concentration. More importantly, the large hospital groups, while disagreeing

47 Econex/Mediclinic submission dated October 2014.
49 Annexure A – RBB Response to the PHMI’s Provisional Findings – Effectiveness of Competition page 13.
with the HMI’s finding that the facilities market is highly concentrated, published their own studies which also show that the market is concentrated.\(^{50, 51, 52}\)

32. We discuss below, under respective thematic areas, our assessment of stakeholder submissions on the HMI’s concentration analysis.

**Exclusion of certain acute facilities from the analysis**

33. The HMI disagrees with stakeholders’ criticisms on the exclusion of certain acute facilities from the analysis. The HMI had specific reasons for the exclusion of the respective acute facilities. For instance, the facilities that entered the market post-2014 were excluded as there was no claims data to enable the analysis. There were also certain acute facilities that existed prior to 2014 that the HMI excluded from the analysis for a variety of reasons as provided in Table 1 below:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Reasons for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathu(^{53})</td>
<td>There was insufficient claims data and the facility was small in terms of beds to make any material changes to the analysis.</td>
</tr>
<tr>
<td>Selby Park Hospital(^{54})</td>
<td>The facility is registered as an acute facility and classified as “057”. However, the HMI noted that this facility mainly provides physical rehabilitation, mental health and subacute medical services.</td>
</tr>
<tr>
<td>Suikerbosrand Clinic</td>
<td>There was no claims data available. While bed data was available, the HMI decided to exclude the facility to ensure consistency.</td>
</tr>
<tr>
<td>Gateway Private Hospital</td>
<td>There was insufficient claims data available. While bed data was available, the HMI decided to exclude the facility to ensure consistency.</td>
</tr>
<tr>
<td>Pelenomi</td>
<td>The facility was excluded because it is a Public–Private Partnership (PPP) facility.</td>
</tr>
<tr>
<td>Universitas Hospital</td>
<td>The facility was excluded because it is a PPP facility.</td>
</tr>
<tr>
<td>Settlers Hospital</td>
<td>The facility was excluded because it is a PPP facility.</td>
</tr>
</tbody>
</table>

\(^{51}\) Netcare’s submissions on the HMI’s Provisional Report dated 15 October 2018.  
\(^{52}\) Mediclinic’s submissions to the HMI’s Provisional Report dated 15 October 2018.  
\(^{53}\) Kathu changed ownership to Lenmed Health in March 2015.  
\(^{54}\) Selby Park Hospital is now renamed Solomon Stix Morewa.
34. The HMI also observed that certain facilities used the same practice numbers and the HMI merged such facilities as part of the data processing and cleaning. Such facilities included Mediclinic’s Gariep and Kimberly and Life Healthcare’s St Joseph’s and Entabeni.

**Inclusion of sub-acute beds and specialist beds in the analysis**

35. Regarding the criticism on the inclusion of sub-acute beds and specialist beds in the concentration analysis, the HMI’s view is that the acute facility, unlike sub-acute and specialist facilities, provides an aggregate of various types of healthcare services. As such, acute facilities comprise a composite of the different types of beds including sub-acute beds and specialist beds. Excluding sub-acute beds and specialist beds for acute facilities defeats the purpose of focusing on acute facilities. The HMI’s approach is also aligned to the approach adopted by the facility groups in earlier submissions.\(^5^5\)\(^5^6\)

55 For example Mediclinic submitted its Heart Hospital is a specialist facility, with a very high complexity and heavy case mix to be considered a general hospital.

**Total registered beds vs. beds in use**

36. The HMI considered the criticism by some of the stakeholders that it would be more appropriate to include only beds in use and not total registered beds in conducting a market share and concentration analysis. The HMI is of the view that the registered beds reflect existing capacity within facilities and are therefore the metric to use when conducting a market share and concentration analysis. Facilities’ business strategy to exclude new players from entering and expanding in the market can therefore be based on registered beds and not only beds in use. This seems to be the case with the Advance Health and Mediclinic Stellenbosch hospital license incident.\(^5^7\)

57 In 2013, both Advanced Health and Mediclinic’s applications for day beds in Stellenbosch were denied because the respective boards determined that there were ample healthcare facilities within the area for which the licence was sought. Mediclinic appealed and was subsequently granted the licence to operate which prevented entry by Advanced Health and strengthened the incumbent’s position. The existence of non-commissioned beds owned by Mediclinic was regarded as an indication that there was no need for a day hospital in the area and hence influenced the outcome of both the Advanced Health and Mediclinic’s applications.
beds in delivery rooms and emergency centre are not counted as beds.\textsuperscript{58, 59} Besides it is possible to monitor registered beds compared to beds in use which may change constantly. The HMI therefore maintains that it is appropriate to include the number of registered beds, as opposed to the number of beds in use.

**Inclusion/Exclusion of inclusion of specialised facilities, PPPs, mining hospitals and day facilities from the analysis**

37. The HMI excluded specialised facilities, PPPs mining hospitals and day facilities other than 077 classified day facilities, on the basis that these facilities both from a demand and supply substitution standpoint do not pose any real competitive constraint to the multidisciplinary acute facilities, most certainly not across the full spectrum of the specialties offered by general acute hospitals. As stated in the provisional findings report, even 077 classified day facilities only partially discipline general acute hospitals. Nevertheless, in order to be as inclusive as possible, the HMI has included these day hospitals in the original analyses.

38. The HMI notes that stakeholders have varied views on which facilities to include in the analysis. While some stakeholders argue for the inclusion of all facilities, others argue for the inclusion of acute facilities only.\textsuperscript{60, 61} Including all other facilities into a concentration analyses aimed at analysing possible market power of general acute hospitals clearly makes not much sense. These hospitals are not a competitive threat to general acute hospitals, therefore do not discipline general acute hospitals for they do not compete across a full or meaningful range of service offerings with general acute hospitals.

39. The HMI has however, following the inputs of Netcare in this respect and similar to the approach taken by the UK authorities recently in their market investigation, conducted an analysis (scenario 2 analysis) which focuses exclusively on acute facilities. The HMI considered this approach an appropriate and informative one, because it focuses on facilities that offer an almost similar product range and also account for the bulk of

\textsuperscript{58} Netcare/Compass Lexecon submission dated 30 October 2014, pg. 31.
\textsuperscript{59} Cliffe Dekker Hofmeyr/Mediclinic submission to the HMI dated 26 May 2016.
\textsuperscript{60} Cliffe Dekker Hofmeyr, Mediclinic’s Comments on the Provisional Findings and Recommendations of the Health Market Inquiry, para 2.2.4 pg 2.
\textsuperscript{61} Compass Lexecon Submission “Market Definition and Relevant Markets: Assessment of Competitive Alternatives” dated 30 October 2014, Pg. 31.
private facilities market. Moreover this been the approach in the matters considered by the Competition Tribunal.62

40. The methodologies applied for scenario 2 concentration analysis is the same as that applied for scenario 1 analysis (acute facilities and some day facilities) except that the day facilities were excluded from the calculations. Further, the HMI took into account the criticisms from some of the stakeholders that we ignored duplicates in our analysis.63 64 65 66 Noting the criticisms on the inclusion of duplicates, the HMI excluded the duplicates in the second scenario analysis. It is important to note that even after taking out duplicates (de-duplicate), the results remain largely the same. Table 2 to table 4 below present comparative HHI and LOCI results of scenario 1 and scenario 2 analyses respectively.

Table 2: Comparative fascia results for the respective local markets including day facilities (scenario 1) and excluding day facilities (scenario 2) adjusted for network membership

<table>
<thead>
<tr>
<th></th>
<th>Acute and day facilities</th>
<th>Acute facilities only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of local markets with fascia count =/&lt; 1</td>
<td>10%</td>
<td>16%</td>
</tr>
<tr>
<td>Proportion of local markets that are solus hospitals</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Proportion of local markets with 1 competitor</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 3: Comparative HHI results (cluster overlaps) for the respective local markets including day facilities (scenario 1) and excluding day facilities (scenario 2) adjusted for network membership

<table>
<thead>
<tr>
<th>HHI ranges</th>
<th>Acute and day facilities</th>
<th>Acute facilities (excluding day facilities)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of hospitals</td>
<td>Proportion of hospital groups</td>
</tr>
<tr>
<td>&lt;1500</td>
<td>69</td>
<td>35%</td>
</tr>
</tbody>
</table>

62 See Mediclinic/IGH merger, case number 2018May0041.
64 Lenmed Submission dated 29 September 2016, pg. 32.
65 Life Healthcare Submission dated 16 August 2016, pg. 31.
Table 4: Comparative LOCI results for the respective local markets including day facilities (scenario 1) and excluding day facilities (scenario 2) adjusted for network membership

<table>
<thead>
<tr>
<th>LOCI ranges</th>
<th>Acute and day facilities</th>
<th>Acute facilities (excluding day facilities)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of hospitals</td>
<td>Proportion of hospital groups</td>
</tr>
<tr>
<td>&lt;= 0.1</td>
<td>8</td>
<td>4%</td>
</tr>
<tr>
<td>&gt;0.1-0.2</td>
<td>17</td>
<td>9%</td>
</tr>
<tr>
<td>&gt;0.2-0.4</td>
<td>32</td>
<td>16%</td>
</tr>
<tr>
<td>&gt;0.4-0.6</td>
<td>57</td>
<td>29%</td>
</tr>
<tr>
<td>&gt;0.6</td>
<td>81</td>
<td>42%</td>
</tr>
<tr>
<td>Total</td>
<td>195</td>
<td>100%</td>
</tr>
<tr>
<td>Total less 0.6</td>
<td>114</td>
<td>58%</td>
</tr>
</tbody>
</table>

41. Table 2 to table 4 show that the exclusion of the day facilities from the analysis resulted in increased concentration levels, both in terms of fascia counts, HHI’s and LOCI’s. The percentage of local markets with HHI’s equal to and greater than 2,500 changed from 58% to 60% while the percentage of local markets with LOCI’s less than 0.6 changed from 58% to 63%. So the effect of excluding all day hospitals, though marginal, is not irrelevant and as was to be expected it increased overall concentration levels observed. The HMI therefore reaches the same conclusion that the facilities market is highly concentrated. As shown in tables 2 to table 4 above, the proportion of hospitals considered concentrated is slightly more after the exclusion of day facilities.
### Appropriateness of the aggregation of market shares of other independent hospitals

42. The HMI notes the submissions by some stakeholders that the aggregation of the market shares of other independent hospitals is inappropriate. The HMI aggregated independent hospitals considering that there are many independent hospitals which individually have small market shares. The HMI considered the fact that aggregating independent hospitals’ market shares would not have any impact on the market shares of LHC, Mediclinic and Netcare and hence it does not affect the overall findings of the analysis.

### Concentration measures and thresholds

43. The HMI also notes criticisms by some of the stakeholders on the thresholds of the fascia counts and the HHI and also on the use of the LOCI measure. The conclusion, of moderate concentration by some stakeholders is a result of the adopted thresholds. As to the HHI thresholds, the HMI relied on the HHI thresholds stipulated by the US Department of Justice (DOJ) and Federal Trade Commission (FTC), as outlined in the HMI Methodology paper. Our main reason for this approach is that the DOJ and FTC thresholds generate more conservative estimates of market concentration compared to the International Competition Network (ICN) thresholds. Furthermore, the ICN threshold introduces a dynamic element in pre and post-merger analysis which is not possible in a market inquiry. However, applying both the absolute elements in the thresholds (leaving out the deltas), we find that the markets are highly concentrated. Therefore even if the HMI was to adopt the HHIs in the ranges suggested by some stakeholders in their response to the HMI Provisional report, it would not allay the HMI’s concerns on the levels of concentration in the facilities market at the national level.

44. The use of the fascia count, HHI and LOCI and the thresholds thereof was detailed in the HMI methodology published for comments. In the Provisional report, the HMI also responded in detail to the issues raised by some stakeholders with respect to the use of the three concentration measures. Cognisant of the shortcomings of the respective measures, the HMI took a decision to use all the measures in order to triangulate the results. The HMI also acknowledged upfront the shortcomings and strength of the respective measures. The HMI is of the view that it is more robust to use the various measures in conducting the analysis considering the varying degrees of strengths and

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67. According to the US merger guidelines, a market is considered to be (i) not concentrated if HHI is below 1500 (ii) moderately concentrated if HHI is between 1500 and 2500 and (iii) highly concentrated if HHI is above 2500

68. HMI methodology paper for the facilities.
weaknesses of the respective methodologies. As highlighted earlier, we draw broadly similar conclusions from the three approaches.

**Population density and high concentration**

45. The HMI acknowledges the valid point raised by some stakeholders, particularly Discovery Health that in some highly concentrated markets there is no scope for new entrants or additional beds due to low population density. While we acknowledge that this may be valid – particularly in sparsely populated remote areas - the HMI remains concerned about the lack of competition in these markets as well including anticompetitive conduct such as lack of cost-effectiveness, innovativeness and patient-centredness. The HMI is of the view that in such highly concentrated markets with low population density, competition may be enhanced through the implementation of innovative ways of providing care such as private partnerships or public-private partnerships (PPPs) through long term contracting on existing beds. The HMI discussed some of these innovative strategies in the Provisional Findings Report.\(^69\)

The HMI would like to hear the views of funders, facilities and innovative small players that have tried to enter the markets and wanted to contract bed capacity from solus hospitals.

**Deconcentration trend in the market**

46. The HMI considered the submissions by some stakeholders that there is a substantial trend toward decreasing concentration and increasing share of NHN and independent hospitals and that most of the additional new entry and expansion in the private hospital sector will be by NHN and independents based on license applications and approvals. The HMI analysed the market share and HHI trends based on registered beds for the period 2010-17 and the analysis seems to be contrary to the assertions by the stakeholders.\(^70\) The results of the HMI market share and HHI trend analysis for the period 2010-17 are presented in figures 1 and 2 below.

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70 The HMI constructed the dataset as outlined in the report titled “Hospital Database Methodology” dated April 2018. The HMI relied on the dataset because it was not provided with the dataset by the industry. Some stakeholders have referenced the HASA dataset as the credible data to use. However, the HMI notes that even the HASA dataset has limitations as HASA indicated that the dataset was incomplete and unclear.
Figures 1 and 2 show that overall, there was a very marginal change in market shares and HHIs during the period of the analysis. The market share and HHI trends display a generally static trend between 2010 and 2017. This suggests that, in contrast to
some stakeholder submissions, the NHN has made insignificant strides in terms of gaining market share particularly in general acute. The market has remained highly concentrated with entrenched market position of the three largest facility groups. Further, the HMI understands that NHN largely owns sub-acute and specialist facilities. However, the HMI acknowledges that NHN have also increased their share in general acute facilities but the big three hospitals still account for the larger proportion of that market share.

**Recent developments in mergers and acquisitions**

48. The HMI’s analysis is supported by the developments in mergers and acquisitions in the facilities market over time as detailed in the Provisional Findings Report (pages 197-203). The bulk of the acquisitions in the facilities market have been conducted by the three largest facility groups as detailed in table 6.7 of the Provisional Findings Report. Based on this evidence, the HMI does not agree with some stakeholders that there is a substantial trend toward decreasing concentration and increasing share of NHN and independent hospitals. This is not the case with respect to general acute hospitals in SA, which are the main subject in this concentration analysis. The recent Tribunal decision on the Mediclinic/Matlosana and Netcare/Akeso merger\(^71\) also supports the HMI’s position on the levels of concentration in the private facilities market and the need for remedial measures. This is also aligned to the draft Competition Amendment Bill\(^72\) acknowledging the need to address creeping mergers and the phenomenon of creeping concentration.

**STAKEHOLDER SUBMISSIONS ON RECOMMENDATIONS**

49. In the Provisional Findings Report, the HMI proposed recommendations aimed at addressing the high concentration levels and the oversupply of beds in the facilities market. Specifically, the HMI recommends the following:\(^73\)

49.1 The formulation of a national licensing policy framework with standardised criteria across all regions in SA, however retaining the role of implementation of the issuing of licences at the Provincial level;

\(^71\) Case Number: 2016Sep0508.
\(^72\) See [https://www.parliament.gov.za/storage/app/media/Docs/bill/123743eb-a1bf-40b7-9492-a4ddcf4d5a0c.pdf](https://www.parliament.gov.za/storage/app/media/Docs/bill/123743eb-a1bf-40b7-9492-a4ddcf4d5a0c.pdf)
\(^73\) These recommendations are only briefly addressed here. See chapter 10 of the HMI’s Provisional Report for a more in depth discussion of the proposed recommendations.
licences be issued to facilities certified by the Office of Health Standards Compliance (OHSC) in collaboration with the proposed Supply Side Regulator for Health (SSRH);

licensing to take into account capacity and capacity needs (number of beds per risk adjusted capita) in both the private and the public sectors hence the need to apply the appropriate regulations for the granting of the certificate of need (CON) in line with a centralised national licensing framework for all health establishments;

to adopt strict reporting requirements for licence renewals, penalties for non-compliance and regular monitoring, inspection and reporting;

to notify the sale of licences to the Competition Commission, SSRH and the provincial departments of health (PDoH);

competition authorities to take measures to prohibit creeping mergers in the facilities market; and

discuss the appropriateness, proportionality and effectiveness of possible divestiture and moratorium measures on issuing licences to the three large hospital groups (Netcare, Life and MediClinic) until such time as the national market share of each of the big three hospital groups, by number of beds, is no more than 20%.

The HMI’s recommendations seek to improve coordination in the licensing regime. Specifically, that the Certificates of Need provisions of the National Health Act are granted in line with a centralised national licensing framework. This national framework should take into account public and private capacities, diversity of ownership, access, and prioritising innovative care. In addition, licences should come with mandatory reporting conditions in order to address the lack of a reliable and consistent health facility database.

The licensing framework is a forward looking measure but one which does not address the immediate concentration concerns. The first intervention proposed to address this concern is a moratorium on licences to the three largest groups, until such time as the national market share, by bed numbers, is no more than 20%. The recommendations also table divestiture as a possible means to address immediate concentration concerns, and proposes to discuss with stakeholders the proportionality and effectiveness of these interventions.
52. However, the HMI is mindful that the measures will need to be proportionate to the harm identified and needs to consider whether less interventionist means may achieve similar outcomes. Proposals in this respect are welcomed.

53. In response to the findings and recommendations outlined above, the HMI has received substantial feedback from stakeholders in the form of written submissions. These submissions are available online and participants to the seminar are encouraged to consider the views contained therein.\textsuperscript{74}

54. The majority of stakeholders support the HMI's recommendations to address high levels of concentration in the facilities market. The majority of stakeholders support mechanisms that stimulate competition in the facilities market including recommendations such as an enhanced hospital licensing process based on regional demographic need, development of ARMs and new healthcare delivery approaches facilitated by the abolition of HPCSA employment rules and the development of industry quality metrics.\textsuperscript{75}

55. There are some stakeholders opposed to the HMI's recommendations. Particularly the large hospital groups consider the recommendations on the moratorium on licences and divestiture to be inappropriate. Some stakeholder are also of the view that the best way is to incentivise facilities and practitioners to service underserviced areas rather than denying or placing a moratorium on the issuing of licenses.\textsuperscript{76} While some stakeholders disagree with the HMI’s recommendations, the concentration in the facilities market, both currently and moving forward, are likely to remain a concern. We acknowledge that there may be existing structures provided in the Act to address licensing issues. For instance, the Act sets the structure for the issuance of licences at the national level through the Director General. While the Act makes such provisions, the current structure seems incoherent and less effective. It is against this background that our recommendation on the new licensing framework seeks to address the incoherencies in the system and make it more effective. We are interested to engage with the stakeholders on their opinions on the remedies put forward to address the overly concentrated markets in SA. We are interested in devising remedies that perform a balancing act of addressing the problem of high concentration in the market.

\textsuperscript{74} Available online at: http://www.compcom.co.za/healthcare-inquiry/
\textsuperscript{75} Discovery Health Submission on the Provisional Report of Findings of The Health Market Inquiry of 5 July 2018, 15 October 2018 page 14
\textsuperscript{76} SAMA.
and at the same time being mindful of the excess beds which may drive utilisation in the market.

IMPACT OF LOCAL MARKET CONCENTRATION ON COMPETITIVE OUTCOMES

56. The HMI is of the view that irrespective of the criticisms raised with respect to the methodologies and the bed numbers, the facilities market is highly concentrated at both the national and local levels. The HMI acknowledges that the existence of high concentration in the facilities market may not necessarily lead to the exercise of market power or to perverse outcomes in the market. However, the inquiry remains concerned that highly concentrated markets have the potential to be conducive to collusion and abuse of power – now and in future. As the provisional report has discussed, the absence of supernormal profit levels may not be interpreted as prove of the non-existence of market power.

57. The HMI’s view is that competition at the local level can be enhanced by ARMS and provider networks. Ideally, funders are able to negotiate competitive prices when facilities compete to be included in provider networks. However, the HMI is of the view in highly concentrated markets, participation in provider networks can be limited thereby denying consumers the possible benefits derived from provider networks. We are of the view that participation in provider networks in highly concentrated markets may be limited mainly because providers have less incentives to be on networks because they face limited competition. It may also be limited because funders have limited countervailing power on the providers.

58. The HMI is of the view that high concentration in local facilities’ markets may impact how local stakeholders behave. In the Provisional Findings report we conducted a preliminary analysis on the effects of high concentration on expenditure in hospitals in selected local markets.\textsuperscript{77} We haven’t been able to conduct an in-depth study on how local market concentration affects other competition dynamics such as utilisation and DSP negotiations. While DSPs are negotiated at the national level, they are implemented locally. We would welcome qualitative information on this imperative. Discovery Health made submissions on how utilisation and DSPs are related to concentration.\textsuperscript{78} However, we have not received submissions on this from other

\textsuperscript{77} See Provisional findings report pages 237-240.

\textsuperscript{78} Discovery Health Submission dated August 2018 titled The Financial Impact of New Private Hospitals on Medical Schemes.
funders and in this regard, we look forward to engagements with the funders on the matter.

59. An important question for the seminar is whether provider networks are managing to reverse ‘perverse’ outcomes of competition at the local level. Are we beginning to see more orthodox and positive results of competition where lower levels of concentration and intensified competition lead to facilities accepting lower prices? And is this leading to less inefficiency, more consumer-orientation and innovation? Although networks have been seen to be becoming a more common feature in the market, the unrivalled ability for network options to foster greater price competition amongst facility groups begs the question as to why it is not a ubiquitous feature amongst schemes. This latter point will be discussed at the Funder concentration seminar.

60. Alongside networks, concerns have also been raised regarding how national and local concentration provides facility groups with the ability to frustrate the effective implementation of ARMs. The HMI notes that the hospital groups have not been responsive enough to the call for meaningful ARMs. Hospital groups dispute this by claiming ARMs account for a substantial proportion of revenues. However ARMs are a broad category. The question is whether substantial risk transfer already occurs in the ARM models currently applied in the South African context. It appears that carve-outs tend to invalidate a substantial portion of the risk transfer. Further, it is claimed that schemes have countervailing power to opt in or out of ARMs. Anecdotal evidence disputes this and shows that the overall costs of hospital driven ARMs, in some circumstances, is greater than the FFS model equivalent. The HMI is aware that a number of factors are influencing the development of meaningful ARM, amongst them the position of practitioners, the possible effects of ethical guidelines, and the absence of outcome measures. While acknowledging these factors, the HMI also seeks more deliberations on the impact of high concentration on the development of effective ARMs.

SUMMARY DISCUSSION POINTS

61. The concentration in the facilities market, both currently and moving forward is of concern. The HMI seeks stakeholder views on the provisional report recommendations, i.e. what can and should be done to protect the interest of consumers. The seminar seeks to deliberate on the following:
61.1 What is the impact of concentration on negotiations? Does high concentration provide strategic advantage to the three large hospital groups in tariff negotiations? Where hospitals have local market power due to a lack of competition, can that negatively affect funders’ ability to negotiate significantly lower prices than the non-network prices of the same group?

61.2 What is the impact of high concentration and market possible power of hospital groups on the development of effective ARMs?

61.3 What is the impact of concentration at the local level on the development of DSP networks particularly in remote areas?

61.4 Are provider networks in some of the local South African markets managing to reverse ‘perverse’ outcomes of competition at the local level?

61.5 What are the funders’ views on the removal of hospitals acquired by the independent players from DSPs and on tariff negotiations?

61.6 What are the funders’ views on hospital utilisation in concentrated markets?

61.7 How do we simultaneously address the problems of high concentration levels and the excess beds in the facility market?

61.8 What can and should be done to protect the interest of consumers?

CONCLUSION

62. The HMI is aware that stakeholder buy-in is an important facet in ensuring recommendations are effective in both implementation and in achieving the intended purpose. As such, the HMI welcomes this opportunity to engage with all stakeholders affected by the proposed recommendations around facility market concentration.