

# Private healthcare remittal

Supplemental provisional  
decision on remedies

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The Competition and Markets Authority has excluded from this published version of the supplemental provisional decision on remedies information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [X].

## Contents

	<i>Page</i>
Introduction .....	2
Criteria for consideration of remedies.....	3
Further consideration of proportionality of Remedy 1 (Divestiture) .....	4
Assessment of new entry .....	5
Assessment of the proportionality of divestiture .....	9
Our current view and reasoning behind our assessment of proportionality of divestiture.....	17
Next steps .....	22
Appendix: Net present value analysis of the divestiture remedy	
Glossary	

## Introduction

1. On 11 November 2015 we published our Provisional Findings (PFs), setting out our provisional conclusion that certain features of the market for insured private healthcare services in central London are leading to an adverse effect on competition (AEC), and a Notice of Possible Remedies setting out the remedies we were considering.
2. On 22 March 2016, we published our Provisional Decision on Remedies (PDR) to address the AEC identified in the PFs.<sup>1</sup> In that document, we set out our provisional conclusion that our proposed divestiture remedy would not be proportionate. An important factor which informed this provisional conclusion was our judgement that Cleveland Clinic, a potential new entrant to the market in central London, would be likely to open a new private hospital at a site on Grosvenor Place in late 2019 to early 2020 and that, by early 2022, this would exert (together with other non-HCA hospitals) an effective competitive constraint on HCA.
3. Subsequent to publication of the PDR, we received new evidence in relation to Cleveland Clinic which has caused us to reconsider the likelihood and potential impact of its entry. In turn, this has caused us to reconsider the proportionality of the proposed divestment remedy.
4. Furthermore, our assessment of the proportionality of the divestment remedy in the PDR was informed by a net present value (NPV) analysis, which considered the costs and benefits of the proposed divestment remedy under various different assumptions. We received extensive submissions in response to the PDR concerning the assumptions used in this analysis. We have considered these submissions carefully and revised this analysis in light of the comments received.
5. This supplemental provisional decision on remedies and appendix (the Supplemental PDR) gives further consideration to the proportionality of the proposed divestment remedy taking into account both the new evidence on Cleveland Clinic and the various submissions we received on the likely costs and benefits of divestiture, and provides the opportunity for parties to comment before we take our final decision.
6. Prior to deciding what, if any, action should be taken, we will take into account all comments received in response to this Supplemental PDR as well as those previously received in response to the PDR published in March 2016 and in

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<sup>1</sup> We also published a [correction to the PDR](#) on 6 April 2016 correcting an error in the analysis. References in this document to the PDR are to the version as corrected.

response to the PFs published in November 2015. The parties to this investigation and any other interested persons are requested to provide any views in writing by **5pm on 21 July 2016**.

### **Criteria for consideration of remedies**

7. When deciding whether any remedial action should be taken and, if so, what that action should be, the Competition and Markets Authority (CMA) considers how comprehensively the possible remedy options – whether individually or as a package – address the AEC and/or its resulting detrimental effects on customers, and whether they are reasonable and practicable.<sup>2</sup> The CMA assesses the extent to which different remedy options are likely to be effective in achieving their aims, including when they are likely to have effect.<sup>3</sup> The CMA generally looks for remedies that prevent an AEC by extinguishing its causes, or that can otherwise be sustained for as long as the AEC is expected to endure. The CMA also tends to favour remedies that can be expected to show results within a relatively short time. Where we consider that the relevant competitive dynamics of a market are likely to change materially over the next few years, we consider including sunset provisions to limit the duration of certain remedies.
8. The CMA applies the principle of proportionality in ensuring that it acts reasonably in making decisions about remedies. The CMA assesses the extent to which each remedy option:
  - (a) is effective in achieving its legitimate aim;
  - (b) is no more onerous than needed to achieve its aim;
  - (c) is the least onerous if there is a choice between several effective measures; and
  - (d) does not produce disadvantages which are disproportionate to the aim.<sup>4</sup>
9. The CMA may also have regard to the effects of any remedial action on any relevant customer benefits (RCBs) arising from a feature or features of the market giving rise to the AEC. An RCB is a benefit to customers or future customers in the form of lower prices, higher quality, greater choice or greater innovation.

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<sup>2</sup> [Guidelines for market investigations: Their role, procedures, assessment and remedies \(CC3\)](#), paragraph 330.

<sup>3</sup> [CC3](#), paragraphs 327 & 330.

<sup>4</sup> [CC3](#), paragraphs 335–337.

10. In the event that the CMA reaches a final decision that there is an AEC, the circumstances in which it will decide not to take any remedial action are likely to be rare but might include situations in which no practicable remedy is available; where the cost of each practicable remedy option is disproportionate to the extent that the remedy option resolves the AEC; or where RCBs accruing from the market features are large in relation to the AEC and would be lost as a consequence of any appropriate remedy.<sup>5</sup>

### **Remedies considered so far in the remittal**

11. In the PDR, we set out our consideration of the potential design, effectiveness and proportionality of six potential remedies.<sup>6</sup> In particular, we gave very careful consideration to Remedy 1 (divestiture of one or more of HCA's hospitals and/or other facilities in central London) to remedy this AEC, but provisionally decided not to pursue this option.
12. Based on the evidence discussed in the PDR, four out of five Group members provisionally concluded that there were no remedies that would be both effective and proportionate in addressing the AEC provisionally identified in the PFs. The remaining Group member believed that divestiture was both an effective and proportionate remedy to address the AEC.
13. This Supplemental PDR gives further consideration to the proportionality of Remedy 1 in the PDR.

### **Further consideration of proportionality of Remedy 1 (Divestiture)**

14. In this Supplemental PDR, we describe how evidence received since the PDR about the likelihood, timing and scope of new entry in the central London market has led us to give further consideration to the proportionality of Remedy 1 (the divestiture remedy).
15. In reassessing the proportionality of the divestiture remedy, we have also taken into account the comments made in response to the PDR about our NPV analysis and we have adjusted some of the parameters of that analysis to reflect those comments. This is described further in the Appendix to this document.
16. As set out below, while our reasoning on the proportionality of the divestment remedy has changed since the PDR, our overall provisional conclusion that such a remedy would not be proportionate remains the same. As in the PDR,

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<sup>5</sup> CC3, paragraphs 355–369.

<sup>6</sup> See PDR, Section 2, pp29–66 for more details.

one Group member dissented from this view and has provisionally decided that divestiture is both an effective and a proportionate remedy to address the AEC.

### ***Assessment of new entry***

#### *What we said in the PDR*

17. In the PDR, we discussed our assessment of the likelihood, timing and foreseeable impact of new entry into the central London market. In particular, we discussed evidence that we had received since the PFs from Cleveland Clinic concerning its plans to enter the central London market, including developed business plans, internal documents, a detailed report from Cushman & Wakefield on various available buildings and sites in central London which would satisfy Cleveland Clinic's requirements and a detailed report from Boston Consulting Group advising Cleveland Clinic on the commercial aspects of its entry into central London.
18. The information we had received from Cleveland Clinic indicated that it planned to offer a range of tertiary treatments, including cardiology, vascular, orthopaedics, urology, nephrology, neurology, plastics and dermatology. Cleveland Clinic had also told us that it did not currently have plans to offer medical oncology, although it would offer surgical oncology, but that it would adapt its services to serve the market.
19. At the time of issuing the PDR, Cleveland Clinic had already acquired<sup>7</sup> a long-term lease of a site at 33 Grosvenor Place in central London. Cleveland Clinic told us that it intended to apply for planning permission to convert the site into a hospital by the end of March 2016, and that it believed it would take three years from the grant of planning permission until it would be able to treat its first patient. [§].
20. In the light of this evidence, we were satisfied that Cleveland Clinic was a credible potential entrant, with a well thought out strategy to enter the central London market, with firm and relatively well advanced plans.
21. We considered that the principal uncertainty regarding the entry of Cleveland Clinic related to its ability to obtain planning permission to convert 33 Grosvenor Place into a hospital. Although there was uncertainty in relation to the timing and outcome of its planning application, our provisional view was that if the application were to be submitted in March 2016, it was reasonably

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<sup>7</sup> Cleveland Clinic acquired this site in October 2015.

likely that it would obtain planning permission to convert 33 Grosvenor Place from office to medical use over the course of 2016.

22. Our provisional view, expressed in the PDR, was that if the application for planning permission were to be submitted in March 2016 and granted within around six months, it was likely that Cleveland Clinic's London hospital would open in late 2019 to early 2020, although we recognised that there could be delays either in obtaining planning permission, or in converting the site (due to unforeseen circumstances).
23. Given the evidence available to us at the time of the PDR we reached the provisional view that the Cleveland Clinic entry would be sufficient (in terms of its scale and the broad range of specialisms offered), together with other (existing) non-HCA hospitals, to constrain HCA by early 2022 (ie within a period of around six years from now).
24. We therefore provisionally concluded that, on balance, this new entry, in association with existing non-HCA private hospital operators, was likely to be effective in addressing the AEC and that, while there was some uncertainty about timing, this was likely to occur by early 2022.

*Additional evidence received since the PDR*

25. Evidence received from Cleveland Clinic since the PDR has caused us to reconsider our assessment of the likelihood, timing and scope of the potential Cleveland Clinic entry.
26. The planning application was not submitted in March 2016 and, at the time of publishing this document, has not been submitted and does not appear imminent. [✂] Grosvenor Estate Belgravia told us that its and Cleveland Clinic's representative agents had met to discuss the new ground rent values. Discussions were continuing, but it could not offer any indication of timing or certainty of reaching an acceptable agreement.
27. Cleveland Clinic told us that, although it still planned to offer a wide range of specialities, medical oncology<sup>8</sup> would not be offered for 'years or decades', if at all.<sup>9</sup>

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<sup>8</sup> Chemotherapy or radiation therapy.

<sup>9</sup> Cleveland Clinic hearing summary, paragraph 13.



### *How this evidence has affected our assessment*

28. Given the delays discussed above, we can no longer conclude that the Cleveland Clinic entry is likely to take place in 2019 to 2020 or, if it occurs, that it will be sufficient (in terms of the range of specialisms offered) to constrain HCA fully (together with other non-HCA hospitals) by early 2022.
29. We still consider Cleveland Clinic to be a credible entrant, with a strong interest in entering the central London market. Although there is increased uncertainty about whether and, if so, when Cleveland Clinic will enter the market, we consider that there is still the strong prospect of entry by Cleveland Clinic within the next five to ten years. Moreover, we consider that, if and when it enters the market, Cleveland Clinic is likely to exert a competitive constraint on HCA (together with other non-HCA hospitals) resulting in a significant downward pressure on HCA's prices.
30. In addition to considering the position in relation to Cleveland Clinic's market entry, we have also considered more broadly how the central London market may evolve over the foreseeable future.
31. At the time of the PDR, we did not place much weight on the possibility of entry by hospital operators other than Cleveland Clinic. At that time, we considered that such entry was less likely than entry by Cleveland Clinic and/or it was likely to be of a more specialised nature. While we remain of the view that, individually, each instance of possible entry is insufficiently certain or insufficiently broad in scope to be effective in addressing the AEC, we also consider that it is important to view the likelihood and impact of possible new entry as a whole, not just individually.
32. At the time of the Final Report in April 2014, there had been no entry of scale and virtually no entry of any size in London for over ten years. This situation was in spite of the significant growth in demand in the central London private healthcare market over this period, which LaingBuisson estimated to be 8.9% per year.<sup>10</sup> We note that the central London market has continued to grow at a similar rate in the last couple of years.<sup>11</sup> Since 2014, there has been entry by a small number of specialist operators, such as Optegra (in ophthalmology),<sup>12</sup> Fortius (orthopaedic) and Nuada (initially focused on prostate imaging),<sup>13</sup> and

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<sup>10</sup> Between 2006 and 2013, LaingBuisson estimated that the central London market grew by 8.9% per year on average. Source: LaingBuisson, Private Acute Medical Care in central London, Market Report, 2015, p12.

<sup>11</sup> LaingBuisson estimates growth of around 9% in 2014 and 2015. Source: LaingBuisson, Private Acute Medical Care in central London, Market Report, 2015, pg xviii.

<sup>12</sup> See [Launch of Optegra Eye Hospital](#) article.

<sup>13</sup> LaingBuisson report on Private Acute Medical Care in Central London (January 2016) at pp42–46 sets out a number of examples of recent and imminent entry and expansion in central London.

there are advanced entry plans from others, such as Schön Klinik (focused on orthopaedics) and Nuffield Health at the Barts private patient unit (PPU) (largely focused on cardiovascular).<sup>14,15</sup> In addition, as well as Cleveland Clinic, other hospital operators, such as VPS and Spire, have announced plans to open large-scale facilities in central London,<sup>16</sup> although they have yet to acquire suitable properties. We note that the UK's recent vote to leave the European Union may result in further delays to large investment decisions. However, in light of the increased interest and the expected continued growth in demand within central London,<sup>17</sup> we believe that there is now an increased likelihood of new entry in the future, compared with that which existed at the time of the Final Report – of both larger hospital operators (such as Cleveland Clinic) and particularly smaller, more specialised entrants (such as Schön Klinik). It is not possible for us to predict the scale or timing of this with any degree of certainty.

33. We noted above our view that, if Cleveland Clinic enters the market, it is likely to exert significant downward pressure on HCA's prices in the future. We consider that entry by other potential new entrants, if it occurs, could also result in downward pressure on HCA's prices, in particular if such entry is across a wide range of specialties.<sup>18</sup> As we set out in the PDR, if and when entry occurs, a new entrant could have an impact on prices even prior to opening,<sup>19</sup> in particular where contracts with PMIs are renegotiated after it has become clear entry could happen.
34. In contrast to the position at the time of the Final Report, we therefore find that there is a strong prospect of a combination of large-scale entry by Cleveland Clinic and entry by other large and/or smaller and more specialised providers, which can be expected to exert a competitive constraint on HCA. Although the precise impact of new entry will depend on what form it takes, if we assume that divestiture would result in HCA's prices dropping to the competitive level, we consider that new entry is likely to result in HCA's prices falling between 50% and 100% of this amount.

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<sup>14</sup> Schön Klinik applied for planning permission on 11 April 2016 to open an orthopaedic problems as well as back pain unit in Wigmore Street. Whereas at the time of the PDR (March 2016), Schön Klinik had not submitted its planning application. As a result of this progress, we now consider Schön Klinik's entry to be more likely than we did previously. Nuffield Health announced on 4 April 2016 that it was the preferred bidder for the PPU at St Bartholomew's Hospital. See Barts PPU [press article](#).

<sup>15</sup> See ['Opening soon in London' article](#).

<sup>16</sup> Spire's strategy is to open two large-scale hospitals in central London – see [financial investors reports](#).

<sup>17</sup> This growth is expected as a result of forecast population growth as well as continued growth in the level of acuity of services provided within the private healthcare sector.

<sup>18</sup> We would expect entry to exert downward pressure on prices for those specialties in which the entrant competes. Therefore, for a constraint on HCA to be fully effective, entry would need to cover a broad range of specialties. However, more limited entry could be expected to result in lower prices for some specialties, while prices for treatments in other specialties would be broadly unaffected.

<sup>19</sup> [PDR](#), paragraph 1.82.

35. On this basis, and taking into account the material uncertainties regarding both the timing and effectiveness of future entry, we consider that it is appropriate to take into account a range of potential counterfactual scenarios in assessing the proportionality of the divestiture remedy. Specifically, we have included scenarios where new entry takes place in year 5, 7 or 10 following divestiture and is either fully effective (ie it eliminates all the price benefit of divestiture) or is partially effective (ie it eliminates 50% of the price benefit of divestiture). Although we remain of the view that there is a strong prospect of new entry and that, when it occurs, it is likely to have an impact on HCA's prices, we have also included a scenario where there is no effective entry over a 20-year period following divestiture.

### ***Assessment of the proportionality of divestiture***

#### *What we said in the PDR*

36. In the PDR we said that our view remained that a divestiture package comprising the London Bridge and Princess Grace hospitals or a package of the Wellington Hospital together with the Platinum Medical Centre would be effective in addressing the AEC. We then went on to consider whether such a remedy would be proportionate.
37. To assess the proportionality of our divestiture package, we took into account both the quantifiable costs and benefits of divestiture (through our NPV calculations) and the potential impact on the quality and range of services offered in central London.
38. In coming to a range of estimates of the likely costs and benefits of divestiture, we made an assessment of the price and, hence, revenue impact of any divestiture, the relevant time period over which any impact would be expected to last, and the extent of any loss of scale economies and transaction costs. We noted that while we have not identified detriment in the form of a lack of quality and/or innovation in the market, an increase in rivalry resulting from a divestiture remedy might be expected to increase competition on quality and range (not just on price) and, therefore, improve the quality of hospital services over time. However, while we considered that divestiture could stimulate such investment, we noted that the expected entry of Cleveland Clinic meant that any such (incremental) quality and/or innovation benefits were likely to be short-lived. On this basis, we did not place weight on such non-price benefits in our assessment of proportionality.
39. In the PDR, we found that the benefits of divestiture in addressing the AEC were likely to be short-lived, given that we expected Cleveland Clinic to

provide an effective competitive constraint, together with other non-HCA hospitals, by early 2022.

40. On a number of plausible combinations of assumptions, including our base case assumptions,<sup>20</sup> the NPV of the divestment remedy was negative or only marginally positive. Taking account also of the significant uncertainty over the elements of our NPV calculation, we could not form an expectation that the benefits of a divestiture remedy would outweigh its costs.
41. In reaching this provisional assessment, we were mindful of the fact that we could no longer place as much reliance on other aspects of our evidence base as at the time of the Final Report. In particular, as set out in our PFs and in the PDR, while we provisionally found that HCA charges higher insured prices than TLC, our revised IPA no longer allows us to conclude on the size of the price difference that is due to weak competitive constraints on HCA, as we cannot be sufficiently certain that we have adequately controlled for any differences in patient complexity between HCA and TLC.<sup>21,22</sup> This is in contrast to our findings in our Final Report, where we concluded that HCA's insured prices were [X]% higher than those of TLC and we used this as a basis for estimating the likely price impact and consumer benefits of a divestiture remedy.<sup>23</sup> As we are no longer confident about the extent of the price differential between HCA and competitors that is due to weak competitive constraints on HCA, this means that our IPA no longer allows us to estimate accurately the likely impact of a divestiture, in terms of reducing prices charged to PMIs by HCA.<sup>24</sup>
42. As a result, in our assessment of proportionality in the PDR, we used our profitability analysis to estimate the extent to which the prices charged by HCA exceeded the level at which HCA would have earned a 'normal' return on capital employed, and therefore, indirectly, the maximum extent to which a divestiture might be expected to reduce HCA's prices. Our price benefit analysis in the Appendix to the PDR indicated that HCA's prices to UK patients (in 2015) exceeded the level where it would have earned its weighted average cost of capital (WACC) (of 10%) by between [X]% and [X]%.<sup>25</sup> As explained in paragraph 18 in the PDR Appendix, we have placed more weight

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<sup>20</sup> [PDR](#), Table 2.1.

<sup>21</sup> [PDR](#), paragraph 2.32.

<sup>22</sup> [PFs](#), paragraph 8.150.

<sup>23</sup> [Final Report](#), paragraph 11.201.

<sup>24</sup> As set out in detail in the [PFs](#), HCA argued that its patients were more complex, that the IPA did not adequately control for these differences, and that, when additional variables were included in the IPA, the price difference between HCA and TLC appeared to be much lower than the CMA's original results. See Section 8, in particular paragraphs 8.149 and 8.150, and paragraphs 11.29–11.33.

<sup>25</sup> [PDR Appendix](#), paragraph 24.

on the KPMG 2 scenario,<sup>26</sup> which gives a range of between [X] % and [X] % price detriment. We explained that this approach required us to make a number of additional assumptions,<sup>27</sup> including:

- (a) apportioning HCA's profits in excess of its cost of capital between UK and overseas patients, through an allocation of overhead costs and capital between customer types; and
- (b) assessing the extent to which HCA might lose economies of scale in its operations as the result of a divestiture remedy and reflecting these in our assessment of the extent to which prices might fall following a divestiture.<sup>28</sup>

43. We noted in the PDR that this use of our profitability analysis introduced further assumptions into our overall assessment of the proportionality of the divestiture remedy.

#### *Additional evidence and submissions received since the PDR*

- 44. As described earlier, we have received evidence since the PDR which changes our view of the likelihood and timing of Cleveland Clinic entering the central London market and the extent of the competitive constraint it would provide on HCA, and hence the duration of the AEC identified.
- 45. In addition, we received extensive submissions concerning the assumptions and parameters used in our NPV analysis, in particular concerning the treatment of lost economies of scale following divestment, time period for entry and assumed impact on prices, transaction and reorganisation costs, general methodology of the NPV analysis and the WACC used in the profitability analysis (which was used to estimate the price impact of divestment). These submissions are discussed more fully in the Appendix, and have led us to reconsider some of the assumptions we have used in assessing the proportionality of divestiture as a remedy. We summarise the main points here.

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<sup>26</sup> This profitability scenario (a) uses buildings valuations estimated by KPMG (based on residential alternative use) in coming to a view on the level of capital employed by HCA, and (b) excludes the (unrealised) impact on profits of capital gains made as a result of growth in buildings values over the relevant period. See [PDR Appendix](#), paragraph 18.

<sup>27</sup> These assumptions were in addition to those included in the original profitability analysis, as set out in our Final Report.

<sup>28</sup> Since the profitability of a firm is the outcome of both the prices charged and the costs incurred, we reasoned that a change in the cost base of HCA and/or the divested hospital(s) following the imposition of a divestiture remedy could result in only some proportion of the 'economic profits' identified in our analysis being returned to customers as a price reduction, ie to the extent that divestiture increased the cost base of one or more operators in the industry, this could increase the 'competitive' level of prices. On this basis, our current view is that the potential loss of economies of scale should be taken into account in estimating the NPV of a divestiture remedy.

### *Loss of economies of scale*

46. HCA submitted revised estimates of its expected loss of economies of scale resulting from a divestiture remedy. Depending on whether the divestiture package comprised one hospital (ie the Wellington) or two hospitals (ie London Bridge and Princess Grace), HCA estimated that the loss of economies of scale could be £[~~30~~] million or £[~~30~~] million, respectively. In addition, HCA told us that, in modelling the loss of economies of scale, we should take into account the fact that such losses would be incurred over the whole period of our analysis and not only over the period prior to entry.<sup>29</sup> Bupa submitted that any economies of scale available to HCA should not be treated as an RCB since no benefit – notably in the form of lower prices – was passed on to consumers as a result of such economies. Therefore, we should exclude them from the NPV analysis.
47. We agree with HCA that, in modelling the impact of divestiture, we should take into account the costs (including, in this context, for the reasons set out below, any loss of economies of scale) and benefits over the full period, which we have taken to be 20 years for the purposes of this analysis, since the costs and benefits associated with the remedy may continue following entry. Therefore, in our analysis we have considered all costs and benefits over a 20-year period, rather than truncating the analysis after 3, 5 or 7 years, as we did in the PDR.
48. With respect to Bupa’s submission on whether economies of scale should be included within our analysis, we note that we consider a loss of scale economies to be relevant in this context because it may lessen the price impact of a divestiture and, thereby, the benefit to customers, by increasing HCA’s cost base.<sup>30</sup> This is why this is relevant to our proportionality assessment, not because this loss of scale economies constitutes an RCB, which we do not consider to be the case.<sup>31</sup> We have, therefore, taken into account the potential loss of economies of scale for HCA in the central estimate of our NPV analysis. However, although we do not consider the scenario to be particularly likely, we have also considered a sensitivity (the ‘upside’ case) in which there is no loss of economies of scale. This reflects a situation in which either HCA is able to adjust its central cost base proportionately following divestiture, or the situation in which a purchaser of the divested hospital(s) is able to recreate fully HCA’s scale economies (see paragraphs 67 and 68 and the Appendix for further details).

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<sup>29</sup> [HCA response to the PDR](#), paragraph 7.7.

<sup>30</sup> See paragraph 68 for further discussion.

<sup>31</sup> We discuss the potential impact of a loss of economies of scale further in paragraphs 19–24 of the Appendix.

49. Next, we considered HCA's submissions on a revised level of economies of scale that would be lost in the case of divestiture. Our full analysis of HCA's submission is set out in the Appendix. We concluded that HCA was likely to lose economies of scale of around £[~~xxx~~] million per year. This figure is based on updated data provided by HCA, to which we have made some adjustments, and is higher than the previous £[~~xxx~~] million figure in the 'base case' used in the NPV analysis in the remittal PDR. We have included this figure as an ongoing cost of divestiture in our central estimate. We have also considered scenarios in which HCA loses economies of scale of zero (in our 'upside case') and £[~~xxx~~] million per year (in our 'downside case'). The 'downside' case is based on the figures provided by HCA, without any adjustment. Given that our adjustments to HCA's figures are based on certain assumptions over which there is a degree of uncertainty, we consider it reasonable to include the 'downside' case as an additional sensitivity.

*Time period for entry and assumed impact on prices*

50. In light of the new evidence that we have received regarding the entry plans of Cleveland Clinic and our revised assessment of the likelihood and timing of entry more generally (as set out in paragraphs 28 to 35), we now consider scenarios in which new entry occurs in year 5, year 7 or year 10 following divestiture, and also consider the impact of no entry over a 20-year period.<sup>32</sup> We previously assumed in the PDR that entry could occur in years 3, 5 or 7 following divestiture.
51. What impact new entry has will depend on what form it takes. Although there is increased uncertainty about the likelihood and timing of entry by Cleveland Clinic, we consider that there is still a strong prospect that it will enter the central London market and, if and when this occurs, Cleveland Clinic, together with the existing competitive constraints, is likely to result in significant downward pressure on HCA's prices reflecting the broad range of specialities it will offer. New entry by other potential entrants would also, in our view, result in downward pressure on HCA's prices, in particular if it is across a wide range of specialties. To reflect the various different plausible outcomes, we have considered a range of scenarios in this Supplemental PDR. We have continued to include scenarios where the benefit of divestiture would be fully removed following entry (which may take place in years 5, 7 or 10 following divestiture in our revised analysis). We have also considered a scenario in which entry takes place (in years 5, 7 or 10) but only reduces the benefits of divestiture by 50%, ie entry does not fully address the AEC. This assumption reflects a situation in which any new entrants offer a more limited range of

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<sup>32</sup> This scenario would also cover the situation where there is new entry, but it has no impact on prices.



specialisms, thereby constraining HCA across part of the range of services but not across the full range of services. As noted above, whilst noting the uncertainty, we consider that new entry is likely to have an impact somewhere within the 50-100% range. Even if the new entry is not across all specialties, our view is that entry in some specialties is likely to increase the competitive constraints on HCA overall. As insured prices are negotiated across the bundle of services that PMIs require from HCA, a strong market position in one or a small number of specialties would allow HCA to exert market power, which is likely to be spread across the prices it charges for different services. Post-entry, even if there are some specialties where HCA retains a strong position (eg in oncology), greater competition in other services will reduce its overall bargaining position and so we would expect the total revenue paid to HCA to fall. We do not accept the argument that maintaining a strong market position in one specialty (eg oncology) means that increased competition in others will have no effect on HCA's overall prices.

#### *Transaction and reorganisation costs*

52. HCA submitted revised estimates of the expected transaction costs associated with divestiture of between £[redacted] million and £[redacted] million.<sup>33</sup> We reviewed these costs carefully (see the Appendix, paragraphs 34 to 44) and concluded that HCA was likely to incur total transaction costs of £[redacted] million in the first year (this figure has increased from the previous £[redacted] million in the remittal PDR NPV analysis). In addition, we have continued to assume that HCA would incur reorganisation costs of £[redacted] million split equally across the first two years following divestiture (50% in year 1 and 50% in year 2, which is unchanged from the PDR NPV analysis). This gives total one-off costs of divestiture of approximately £[redacted] million for HCA.

#### *Weighted average cost of capital*

53. On 12 April 2016, we published a revised working paper setting out our view on the WACC for a typical private hospital operator in the UK. This assessment indicated a range of 7.6% to 10.5% for the WACC. In the PDR, we used an estimate of 10.0% in our NPV analysis. Bupa told us that the CMA had presented no evidence in the working paper explaining why it believed a WACC of 10.0% – towards the top end of the CMA's range – was appropriate as the preferred point estimate.<sup>34</sup> Bupa said that the WACC was

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<sup>33</sup> [HCA response to remittal provisional decision on remedies](#), p56, paragraph 7.47.

<sup>34</sup> [Bupa response to WACC working paper](#), p2, paragraph 1.3.



therefore more likely to be around the midpoint (9.0%) than at the more extreme point estimate of 10.0%.<sup>35</sup>

54. Recalculating the extent to which HCA's prices exceed the competitive level (as set out in the Appendix to the PDR) using the WACC midpoint of 9% gives a range of estimates of [x] % to [x] % (compared with [x] % to [x] %, when a WACC of 10% is used). We agreed with Bupa that the use of a WACC of 10% was conservative given that this was above the midpoint of our range, although we also noted that there was considerable uncertainty about the correct figure and it therefore made sense to include a downside scenario, as well as a midpoint estimate. Therefore, in our revised NPV analysis, we show a range of potential price benefits of divestiture of between [x] % and [x] %. This range encompasses a WACC of between 9% and 10%.

#### *Other assumptions*

55. Bupa and AXA PPP submitted that the price fall due to divestiture should be applied to outpatient revenues, not just to inpatient and day case revenues (see the Appendix, paragraphs 45(c) to 46(b)). We agree with this. Given that our estimate of the potential price benefits that may be realised following divestiture (of between [x] % and [x] % in the PDR) was calculated on the basis of total revenues from UK patients, it is consistent to apply the price reduction to year-end 2015 HCA revenues for UK patients (both insured and self-pay) across inpatient, outpatient and day-case treatments.<sup>36</sup> Paragraph 50 of the Appendix to this Supplemental PDR explains our reasoning in more detail.
56. Both Bupa and AXA PPP submitted that we should take into account future expected growth in the central London market in our NPV analysis. We agree that the central London market is likely to continue to grow in the future. We have, therefore, assumed market growth of 3.5% a year in real terms post 2015. This is a change from the previous NPV calculation in the PDR, in which we did not assume any market growth. Paragraph 51 of the Appendix to this Supplemental PDR sets out our reasoning in more detail.
57. In response to a submission by Bupa, we have changed the treatment of self-pay benefits since the PDR. We have assumed that self-pay benefits will occur immediately after divestiture since these patients negotiate prices as

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<sup>35</sup> [Bupa response to WACC working paper](#), p3, paragraphs 2.1–2.6.

<sup>36</sup> We note that this approach does not make any assumption regarding whether HCA is able to earn economic profits on outpatient treatments. In effect, in our profitability analysis, we estimated the total level of economic profits earned by HCA in 2015. We then divided this by HCA's total revenues from UK patients to give the range of 3% to 6%. To the extent that such profits were only earned on inpatient and/or day-case treatments, we note that a larger price reduction should be applied to these revenues. Alternatively, as we set out here, we could apply the 3% to 6% range to total UK revenues.

they seek treatment, whereas the benefit to insured patients will lag by 18 months (on average), as prices for these patients are determined by contracts between insurers and HCA, which are negotiated approximately every three years. Previously, we assumed that all benefits will lag by 18 months.

58. We have used a discount rate of 3.5%, in line with the HM Treasury Green Book<sup>37</sup> approach. This remains unchanged from the PDR.
59. These assumptions (and the reasons for any changes made since the PDR) are discussed into more detail in the Appendix to this Supplemental PDR, alongside the various NPV scenarios considered.

#### *How this evidence has affected our assessment*

60. Our revised NPV analysis is a tool for considering the costs and benefits of the proposed divestiture remedy. Given the assumptions that underlie the NPV analysis (some of which are based on further assumptions), there is accordingly significant uncertainty about the results of the NPV analysis. We have sought to address this uncertainty, to some extent, by taking into account a range of scenarios, reflecting different plausible assumptions. However, because of the uncertainty in the underlying assumptions, caution should be exercised in placing significant weight on any one particular scenario. The results of the revised NPV analysis are set out in the Appendix. These show a wide range of NPVs obtained, ranging from –£266 million to £686 million. Our central estimate, set out in Table 1, gives a range of NPV estimates of between –£157 million to £500 million. (See the Appendix for full details of the assumptions made and the alternative scenarios considered). Under this central estimate, in around half of the scenarios divestiture will result in a net benefit, while in the other half of the scenarios, divestiture will result in a net cost (that is, negative NPV).

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<sup>37</sup> HM Treasury [Green Book](#) provides guidance for public sector bodies on how to appraise programmes or projects.



caution in its analysis of the problem ... and of the remedy it assesses is required.

65. As regards the impact of divestiture on prices, as stated in the PDR<sup>39</sup> we can no longer use our revised IPA to estimate the likely impact on prices. This is because the revised IPA no longer allows us to conclude on the extent of the price difference that is due to weak competitive constraints, as we cannot be sufficiently certain that we have adequately controlled for differences in patient complexity between HCA and TLC. Hence, we are no longer confident about the size of the price differential between HCA and TLC that is due to weak competitive constraints.
66. Given the limitations of the revised IPA, we have had to rely on our profitability analysis, an indirect measure, in order to assess the extent to which HCA's prices exceed the competitive level. The profitability analysis provides evidence that HCA has earned super-normal profits (ie profits in excess of its WACC) over a sustained period. In order to estimate what proportion of these excess profits is attributable to HCA's UK business, we have had to make a number of assumptions. As of 2015, we estimated the extent to which prices (to UK patients) were above the competitive level to be between [X]% and [Y]% of revenues.<sup>40</sup> Given the assumptions we have to make in order to derive this range, these figures should be treated with a degree of caution.
67. The profitability analysis estimates the economic profits currently being made by HCA and, thereby, the upper bound of the extent to which prices might be expected to fall if HCA's market power were to be removed, for example by a divestiture remedy. However, we do not believe that in practice prices would fall by this amount. This is because, as a large operator (the only operator in central London with more than one hospital), HCA is likely to benefit from economies of scale. In other words, some of HCA's excess profits may reflect these sorts of efficiencies.
68. In a bargaining context, where multiple PMIs negotiate with multiple hospital operators, we would expect a divestiture to increase the competitive market constraints on HCA, as it provides PMIs with an additional hospital operator (or an existing operator with additional hospitals) with whom they can agree a contract. As such, we would expect insured prices to fall, even if the extent of the decrease may vary for different hospital operators and PMIs. For example, different hospital operator(s) may be relevant for different PMIs. The profitability analysis suggests that HCA could cut its prices by [X]% to [Y]%

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<sup>39</sup> PDR, paragraph 2.32.

<sup>40</sup> This latter figure is higher than the [X]% used in the PDR reflecting a WACC of 9%, the midpoint of our range. [Y]% reflects a WACC of 10%.

(using KPMG 2 scenario and a WACC range of 9% to 10%) and still make a return equal to its WACC. Post divestment its unit costs would increase, as a consequence of loss of economies of scale, so there would be less scope for it to cut prices. Our best estimate is that, due to these economies of scale, the potential decrease in prices as a consequence of divestment is at least 2 percentage points less than HCA's excess profits might otherwise imply.<sup>41</sup> However, for the reasons given earlier, we cannot be sure that HCA's prices post-divestment would fall all the way to the point where its returns were equal to its WACC.

69. In addition, as we set out in our Final Report, we consider that the hospital performance (or quality) information remedy imposed after the original investigation is expected to reduce prices, irrespective of whether there is a divestment. While it is not possible to estimate the precise impact of such remedies with any certainty, we took the view at the time of the Final Report that it was reasonable to assume a reduction in prices of 1%.<sup>42</sup> While we have not made any adjustment for the effect of such remedies in our revised NPV analysis, given the uncertainty about the precise impact of such remedies, we note that the exclusion of this effect means that our estimates of net benefit resulting from a divestiture remedy are likely to be overstated.
70. Taking these factors into account, we estimate that the price benefit of a divestment would be in the range of [X]% to [X]% (a 2 to 3 percentage point reduction to our [X]% to [X]% range discussed above), based on our profitability analysis.<sup>43</sup> We note that these figures are low both in absolute terms (the range includes zero) and low compared with the expected impacts that were estimated in the original Final Report (which began with a [X]% expected price reduction for insured revenues).<sup>44</sup>
71. We have also considered other areas where there is uncertainty. For example, there is mixed evidence on the extent of spare capacity in the central London market. Analysis provided to us by HCA suggests there is spare capacity on some dimensions (such as overall bed numbers and

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<sup>41</sup> 2% equates to having a constant loss of economies of scale of £[X] a year for the next 20 years. The £[X] a year is derived as discussed in Table 3 and Table 4 of the Appendix to this Supplemental PDR. For the avoidance of doubt, the results of the NPV analysis set out in Tables 3 and 4 of the Appendix already incorporate these economies of scale.

<sup>42</sup> See [Final Report](#), paragraph 11.234: '... we tentatively estimated that the remedy may have an (eventual) impact on price of around 1 per cent. While we thought that there was likely to be a significant delay in achieving this price effect, we reasoned that it would be appropriate to take this into account when estimating the incremental impact of our divestiture remedies.'

<sup>43</sup> We note that a very small positive effect based on profitability numbers alone is unlikely to be enough to justify a divestiture, given that these numbers are an imperfect measurement of market power. The CMA's market investigation guidelines (CC3) state (paragraph 123) 'Moreover, as with other forms of analysis, the CMA's interpretation of profitability analysis may be affected by the quality of the data available (see section on the gathering and analysis of evidence, paragraphs 35 to 41).'

<sup>44</sup> [Final Report](#), Table 11.9, paragraphs 11.219 & 11.222.

modelled theatre capacity), while views (and actions) of parties and internal documents suggest there is a lack of effective capacity in other dimensions, for example theatre capacity at peak times and available ITU beds. We note that the analysis covered overall bed numbers and modelled theatre capacity but not all relevant factors – in particular, it does not consider the availability of consultants and their teams, nor other specialist staff and equipment or the times when patients are willing to be seen. On balance, our view is that there are some constraints on overall effective capacity, which is determined by a range of factors beyond overall bed numbers, and these constraints may be localised or specific to certain specialties or types of inputs rather than being driven purely by the availability of general beds and operating theatres. These uncertainties feed into how confident we can be about the likely price impact of any divestment remedy (and could also mean that a divestiture remedy is not fully effective).

72. In contrast, we noted that our NPV analysis does not take into account any quality or innovation benefits arising from divestiture, since these are not amenable to quantification. Our reduced certainty regarding the likelihood and timing of new entry means that such benefits may be expected to persist for a greater period than envisaged in our PDR. While we have not identified detriment in the form of a lack of quality and/or innovation in the market, we continue to believe that divestiture would be likely to bring benefits of this form. As a result, our NPV analysis will understate the benefits of divestiture. In light of our provisional finding that there is no quality/innovation detriment arising from HCA's market power,<sup>45</sup> we do not consider that such benefits are likely to be significant.
73. As discussed above, there is also uncertainty about the likelihood and impact of new entry. Although the position is now less certain than at the time of the PDR, our view is that there is still a strong prospect of entry by Cleveland Clinic and that, if and when Cleveland Clinic enters the market, it is likely to result in significant downward pressure on HCA's prices. There is also credible interest from other larger operators such as VPS and Spire and firm plans for entry by smaller-scale specialist operators, such as by Schön Klinik in Wigmore Street, and Nuffield Health plans to open the Barts PPU in 2018. We would expect such entry, if and when it occurs, to exert downward pressure on HCA's prices, in particular if it covers a range of specialities. This would also reduce the potential gains from any divestiture.
74. As described earlier, we used our NPV model to compare potential benefits against the cost of divestiture under a range of plausible scenarios. Given the

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<sup>45</sup> PFS, paragraph 11.42.

uncertainties, particularly around the expected scale of the price effect and the timing of effective entry, the range of plausible outcomes was broad and encompassed strongly positive and strongly negative outcomes. In particular, the NPV is negative in the following plausible scenarios:

- (a) lost economies of scale of £[x] million (central estimate) and new entry in years 5 or 7 which is fully effective;
- (b) lost economies of scale of £[x] million (central estimate), new entry in year 10 which is fully effective and the price impact of divestiture is at the lower end of the range (ie less than [x] %);
- (c) lost economies of scale of £[x] million (central estimate), new entry in year 5 or 7 which is partially effective and the price impact of divestiture is at the bottom end of the range (ie less than [x] %);
- (d) lost economies of scale of £[x] million (downside case) and new entry in year 5, 7 or 10 which is fully effective;
- (e) lost economies of scale of £[x] million (downside case), new entry in years 5, 7 or 10 which is partially effective and the price impact of divestiture is at the lower end of the range (i.e. less than [x] % in the case of entry in year 10 or less than [x] % in the case of entry in years 5 or 7);  
or
- (f) lost economies of scale of £[x] million (downside case), no new entry within 20 years following divestiture (or there is new entry, but it has no impact on prices) and the price impact of divestiture is at the bottom end of the range (ie less than [x] %).

75. In light of this, and giving due consideration to the uncertainties as to the price impact of divestiture and the likely changes to the market over the next 20 years, as well as the intrusive nature of the divestment remedy, we were unable to form an expectation that the benefits of such a remedy in addressing the AEC would outweigh its costs. We therefore provisionally conclude that the proposed divestiture package for HCA does not meet our criteria for a proportionate remedy.

76. As at the time of the PDR, one of the five group members does not agree with this provisional conclusion. In particular, the group member concerned considers that significant new entry is unlikely in the next ten years and in any event is not likely to be an effective constraint on HCA such as to address the AEC (in contrast to the divestiture remedy). In light of this conclusion, the member believes that the most plausible scenarios are those which assume no effective entry within 20 years. In the vast majority of these scenarios, the

price benefits of divestiture would outweigh the costs of divestments significantly. On this basis, the member concerned considers that divestiture would be both fully effective and proportionate.

### **Next steps**

77. The parties to this investigation and any other interested persons are requested to provide any views in writing by **5pm on 21 July 2016** either by email to [Private-Healthcare@cma.gsi.gov.uk](mailto:Private-Healthcare@cma.gsi.gov.uk) or in writing to:

Lesley Moore  
Project Director  
Competition and Markets Authority  
Victoria House  
Southampton Row  
London WC1B 4AD



## Net present value analysis of the divestiture remedy

1. The purpose of this document is to explain how the assumptions behind the NPV analysis have been revised since publication of the PDR, correction to the PDR<sup>1</sup> and working paper on the WACC and to allow parties to comment on the updated analysis being considered by the Group in its assessment of the proportionality of the divestiture remedy.
2. This appendix summarises the approach to calculating the NPV of the divestiture remedy and our provisional conclusions at the time of the PDR, outlines the submissions received in response to the PDR and WACC working paper concerning the assumptions used and our assessment of the arguments, and then updates the NPV analysis using revised assumptions.

### What we said in the PDR

3. As set out in the remittal PFs and PDR (and subsequent correction), while we consider that HCA charges higher insured prices than TLC, our revised IPA no longer allows us to conclude on the size of this price difference that is due to weak competitive constraints on HCA, as we cannot be sufficiently certain that we have adequately controlled for any differences in patient complexity between HCA and TLC.<sup>2</sup> Therefore, in order to assess the potential impact of a divestiture remedy, rather than relying on the revised IPA to assess the benefits of divestiture, we developed our profitability analysis in a number of respects. First, we updated the analysis to cover the period up to 2015 (inclusive) in order to ensure that we have current estimates of the economic profits made by HCA.<sup>3</sup> Second, we sought to identify the relative profitability of HCA's UK (self-pay and insured) and overseas customers, through an allocation of overhead costs and capital between customer types.
4. Table 1 below shows our estimates at the time of the correction to the PDR of the likely impact on revenues of the divestiture of HCA's hospitals. We assumed that both options (ie either (i) the Wellington Hospital or (ii) the

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<sup>1</sup> A correction to the PDR was published 4 April 2016, with a revised NPV analysis. This supplemental PDR refers to the [revised NPV analysis and tables](#).

<sup>2</sup> PFs, paragraphs 11.25–11.37.

<sup>3</sup> As set out in PFs, Section 9, we provisionally concluded that there was no evidence of a material change in HCA's profitability since 2011. We noted Bupa's submissions that HCA's profitability may have increased since 2011. However, an increase in profitability would not have altered our finding (that HCA was making profits that were substantially and persistently in excess of the cost of capital). Therefore, we determined that it was not necessary to update our profitability analysis for the purposes of assessing whether or not there is an AEC in the central London market. However, when considering the potential impact of remedies, we considered that an increase in HCA's profitability could have an impact on our assessment of the proportionality of any remedies. Therefore, for these purposes, we have updated this analysis (and the accompanying WACC calculation).

London Bridge and Princess Grace Hospitals) were equivalent and that the loss of economies of scale, reorganisation and transaction costs were the same for both packages. Our ‘base case’ estimated net benefits of between [X] over five years when assuming a [X]% to [X]% decrease in HCA prices, that is, ranging from a negative to a positive NPV. Our ‘upside case’ estimate was of a net benefit of between [X] (that is, all positive NPV results) while the ‘downside case’ estimate gave negative results (between [X]), meaning that there would be net costs over a five-year period. Further details on our assumptions and analysis are available in the Appendix to the PDR published on 22 March 2016 and the correction published on 4 April 2016.

**Table 1: NPV of divestiture**

(£'000)

NPV estimate	UK self pay & insured sensitivities			
	3.0% decrease in HCA prices			
Loss of economies of scale	Year 3 (2019/20)	Year 5 (2021/22)	Year 7 (2023/24)	Year 10 (2025/26)
£[X] million – downside case	[X]	[X]	[X]	[X]
£8.2 million – base case	[X]	[X]	[X]	[X]
£0 million – upside case	[X]	[X]	[X]	[X]
	6.0% decrease in HCA prices			
£[X] million – downside case	[X]	[X]	[X]	[X]
£8.2 million – base case	[X]	[X]	[X]	[X]
£0 million – upside case	[X]	[X]	[X]	[X]

Source: CMA analysis.

5. We noted in the PDR that the NPV estimate of the divestiture took into account only the price benefits of divestiture. Any quality and/or innovation benefits that would result from the dynamic process of rivalry between competing hospital operators were assessed by means of a qualitative assessment.<sup>4</sup>
6. Since the PDR, parties<sup>5</sup> have made submissions in relation to our profitability analysis, as well as our various assumptions. In the following section we discuss the parties’ submissions and our response to each of them, as well as setting out our revised NPV analysis and the impact this has had on our overall assessment of the proportionality of Remedy 1 (the divestiture remedy).

### Submissions and evidence received since the PDR

7. In this section, we set out the submissions and evidence received from parties, since publication of the PDR and the working paper on the WACC, on

<sup>4</sup> PDR Appendix, paragraph 25.

<sup>5</sup> HCA, BUPA, AXA PPP, TLC and Spire.

our NPV analysis, our assessment of these arguments, and the impact on the assumptions used in our updated NPV analysis.

8. We have considered parties' comments on:
  - HCA's loss of economies of scale;
  - HCA's transaction and reorganisation costs;
  - Our general methodology; and
  - the WACC calculation.
9. Details of our assessment of parties' comments regarding new entry and the impact of divestiture on pricing, which also influence the NPV analysis, can be found in the main text (paragraphs 63 to 76).

### ***Loss of economies of scale***

#### *Parties' views*

##### *HCA*

10. In its submissions following the publication of the PDR, HCA acknowledged the CMA's recognition that there would be substantial transaction costs, reorganisation costs and losses of economies of scale resulting from a divestiture. However, HCA noted that the CMA had not updated its estimates of these costs from the original investigation, instead applying (with some modifications) our estimates from the Final Report. HCA claimed that the costs in a number of the categories considered by the CMA had increased.<sup>6</sup>
11. HCA supplied updated figures to the CMA for its estimates of the economies of scale it would lose following the divestiture (see Table 2). Depending on whether the divestiture package comprises one hospital (ie the Wellington) or two hospitals (ie London Bridge and Princess Grace), HCA estimated that the loss of economies of scale could be [redacted], respectively. The break-down of these figures is set out in Table 2.

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<sup>6</sup> [HCA response to PDR](#), p5, paragraph 2.15.

**Table 2: HCA estimates of loss of economies of scale**

Cause of loss of economies of scale	£ million	
	Divestiture of one hospital (Wellington)	Divestiture of two hospitals (London Bridge and Princess Grace)
Recharged central costs that would need to be covered by HCA's remaining facilities	[REDACTED]	[REDACTED]
Group costs	[REDACTED]	[REDACTED]
Sarah Cannon Research UK	[REDACTED]	[REDACTED]
HCA laboratories	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]

Source: HCA estimates.

12. HCA told us that central costs could not, in general, be scaled back in proportion to the divestitures and there was no guarantee that the economies of scale could be replicated fully by a buyer, particularly where that purchaser did not already have a significant presence in the London market.
13. HCA submitted that its economies of scale had increased over time, as it had [REDACTED]. Previous figures provided by HCA related to its 2011 estimate of the economies of scale it would lose following divestiture.
14. HCA also submitted that Bupa had misunderstood the CMA's arguments as to why economies of scale should be included in the proportionality assessment.<sup>7</sup> The CMA's inclusion in its NPV calculation of lost economies of scale as a result of a divestiture remedy was independent from the question of whether economies of scale were relevant customer benefits (RCBs). Therefore, HCA said that Bupa's arguments that economies of scale should not be treated as RCBs were irrelevant and did not undermine the CMA's inclusion of lost economies of scale in its proportionality assessment. Furthermore, HCA said that Bupa was incorrect in arguing that the substantial reduction in HCA's economies of scale would not be passed on to consumers (see Bupa's views in paragraph 16 below).

#### *Private medical insurers*

15. AXA PPP submitted that we had afforded too much respect to HCA's claims and that we should not include the economies of scale in our NPV analysis, for a number of reasons, such as:<sup>8</sup>

<sup>7</sup> See of [Bupa's response to PDR](#), paragraphs 3.65 to 3.70.

<sup>8</sup> [AXA PPP response to PDR](#), p11, factor 9.

- (a) To the extent that some of the overheads related to the administration of the divested facilities, HCA could voluntarily offer to transfer these to the buyer of the divested assets.
  - (b) HCA's business (in central London, the UK more generally and elsewhere) continued to expand, and it was therefore likely that resources could be reapplied within the business in a short period of time.
  - (c) The divestiture remedy itself would result in a reduction of market prices, and might therefore be expected to lead to a corresponding increase in demand (over and above the exogenous market growth trend).
  - (d) To the extent that scale economies were important, this would be likely to have an impact on the identity of the bidder(s) for the divested assets. In particular, organisations that believed that adding the divested assets to their existing portfolios, whether in the UK or worldwide, would, other things being equal, be likely to have a competitive advantage in any divestiture auction, which would be expected to counteract any deemed effect that reduced the price benefit of the divestiture remedy.
16. Bupa told us that any economies of scale available to HCA could not be treated as an RCB since no benefit – notably in the form of lower prices – was passed on to consumers as a result of such economies. Bupa continued by saying that this fact had been effectively recognised by us in our profitability analysis, which showed a significant producer surplus for HCA and that prices did not reflect costs, and the IPA which showed that HCA was significantly more expensive than its rival, The London Clinic. Bupa said that there was no compelling or credible evidence that HCA's economies of scale were passed on to consumers in the form of lower prices, therefore we should exclude them from the NPV analysis.<sup>9</sup>
17. Bupa also said that there was a clear risk that HCA's estimates of the loss of economies of scale were biased upwards by the desire to inflate costs to prevent the divestiture.

#### *Our assessment*

18. In relation to AXA PPP's comments in paragraph 15, we agree that some overheads relating to the administration of the divested asset would be transferred to the buyer. However, there are other head office costs which

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<sup>9</sup> [Bupa response to PDR](#), p34, paragraphs 3.64–3.70.

cannot be disaggregated and therefore transferred on. We discuss these in Table 3 below.

19. In relation to Bupa's comment in paragraph 16 above, as set out in paragraphs 67 and 68 of the Supplemental PDR, we consider a loss of scale economies to be relevant in this context because it is likely to lessen the price impact of a divestiture. A loss of economies of scale as a result of the divestiture is likely to reduce the scope for HCA to reduce its prices. This is why this is relevant to our proportionality assessment, not because this loss of scale economies constitutes an RCB, which we do not consider to be the case.
20. In response to AXA PPP's and Bupa's submissions as to whether we need to include the loss of economies of scale, we assessed whether these should be tapered off over time and whether they would continue after entry takes place in central London. We considered whether a purchaser of the divested asset could replicate the lost scale economies and whether HCA could regain the lost scale economies over time as a result of further expansion.
21. In the first instance, we noted that while HCA's business may continue to expand, with resources 'reapplied within the business' in a relatively short space of time, we did not agree that this would necessarily reduce the impact of the loss of economies of scale from the point of view of our cost-benefit assessment. To the extent that market growth allows HCA (and other operators) to realise further economies of scale in the future, we consider that this effect is independent of our divestiture remedy. Therefore, while future growth might allow HCA to reduce its unit costs to the same level as currently, there would still be an impact as, in the counterfactual situation (of no divestiture remedy), HCA's unit costs may have fallen further as a result of this same growth. While we would expect the potential for achieving (further) scale economies to decline at some stage, we do not have any evidence to suggest when this point may be reached. On this basis, while noting the uncertainty, we concluded that any loss of economies of scale should be modelled on a constant basis over the 20-year period, rather than tapering off.
22. Next, we considered the extent to which a purchaser of any divested hospital could recreate HCA's lost economies of scale and the potential impact that this might have on prices in the market following a divestiture. Unlike with transaction costs, we note that it is not clear that these scale economy losses are a net loss. If the buyer of the divested assets is an established operator, then it may benefit from economies of scale and replicate some or all of the potential losses that HCA may incur. In this case, the unit cost of the purchaser may decline to around the level of HCA's current unit costs, allowing the purchaser to charge a price equal to HCA's current unit costs and still make a normal return on its capital employed. In this way, the effect of the

loss of scale economies in lessening the likely price impact of the divestiture would be reduced or eliminated.<sup>10</sup> Under this scenario, our view is that any scale economies lost to HCA should not be included in the NPV calculation (since these would not limit customers' price benefits).

23. Alternatively, in the situation in which the buyer was smaller or new to the market and, therefore, was not in a position to replicate the lost economies of scale, or in which the buyer was able to recreate HCA's economies of scale but chose not to price below HCA (post-divestiture), HCA's loss of economies of scale would have the effect of reducing the price benefit to customers arising from the divestiture remedy. Under this scenario (which we consider more likely), our view is that it was justifiable to include the scale economies loss in the NPV calculation.
24. We have therefore considered an NPV scenario where we assume the loss of economies of scale to be constant (at £[X] a year) every year for the next 20 years (our 'central estimate'). Similar to the approach adopted in the PDR, we have also modelled an 'upside case' where we assume no loss of economies of scale (economies of scale loss are £0.0 million for 20 years) and a 'downside case' where we assume that the loss of economies of scale is £[X] a year (which is the lower bound of HCA's estimates), given the uncertainty in the assumptions made in adjusting HCA's estimates for the central estimate as set out below.
25. All three scenarios discussed in the paragraph above assume that once effective new entry takes place (whether that is in year 5, year 7, year 10 or year 20) the price benefit realised as a result of divestiture reduces to zero. This implies that any price benefit realised after effective new entry takes place is attributed in full to the new entrant who will exert competitive pressure on HCA, and not to the divestiture remedy.
26. In addition to the three scenarios, we have modelled a sensitivity case, which is a sensitivity to our 'central estimate'. In this case, we assume that new entry is not fully effective in addressing the AEC and after new entry takes place the price benefit realised as a result of divestiture reduces to half its level before entry. For instance, if we were to assume that post divestiture there will be a 6.0% price reduction and new entry happens in year 7 but it is only partially effective, then from year 7 onwards we assign half of that price reduction to

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<sup>10</sup> In this scenario, the purchaser of the divested assets would choose to price below the level at which the post-divestiture HCA business could make a normal return on capital employed. It may do this in order to gain market share.

competitive pressure from the new entrant (ie 3%) and we assume that only 3% is a benefit of divestiture.

27. We note that there are considerable uncertainties over the appropriate treatment of economies of scale in the NPV analysis. We also note that we cannot forecast with any degree of accuracy which would be the most likely outcome post divestiture.
28. Next, we considered AXA PPP's submission that a reduction in prices would increase growth over and above the exogenous trend in the market. We agree that this could well be the case. We note that the size of this effect will depend on the extent to which a divestiture is successful in lowering prices and the price elasticity of demand, which, for insured patients, depends on the extent to which lower prices are passed on to final customers and on the extent to which this increases demand for PMI. We have not sought to quantify these effects since we consider that it would be difficult to do so reliably. However, we recognise that our NPV estimates may (slightly) understate the net benefits of a divestiture remedy to the extent that this effect is not included.
29. In terms of the potential size of any loss of economies of scale, we took HCA's estimate of £[redacted] a year (which is based on divesting one hospital only) as the starting point of our analysis. We assumed that, faced with the choice whether to divest one or two hospitals, HCA would choose the least costly and least intrusive package. Therefore, we analysed in detail the lower end of the scale proposed by HCA. We carefully considered HCA's assumptions and estimates and we decided that, in certain areas, costs could be further reduced from HCA's assumed levels. Table 3 sets out HCA's views on the likely loss of economies of scale following a divestiture, as well as our reasoning and provisional conclusions on reasonable values to include in our NPV analysis. Our analysis suggests that divestiture of the Wellington Hospital would be the least costly and least intrusive package, and that the best estimate of loss of economies of scale for this divestiture package is £[redacted]. We have therefore carried out the NPV analysis assuming the divestiture of the Wellington hospital. The costs of divestiture of the London Bridge and Princess Grace hospitals would be higher (estimated by HCA to be £[redacted]), thus reducing the estimated benefit of divestiture. In other respects, we have used a similar approach to that used in the PDR.
30. We note that the NPV figures would be lower if we were to take into account the upper range of HCA's estimate of economies of scale loss of £[redacted] for the London Bridge and Princess Grace Hospitals. The £[redacted] loss of economies of scale related to the divestiture of the Wellington Hospital.



**Table 3: Loss of economies of scale**

Area/function	HCA view	CMA view
Estates	This category also includes fixed costs relating to Head Office buildings which cannot be reduced following divestiture.	We agreed that costs relating to the Estates team could not be reduced further post divestiture.
Central services	The costs of many of these group-level departments are expected to remain unchanged, or could not be fully reduced in proportion to lost revenues, following the proposed divestitures given that the work performed at group level (rather than hospital level) would not significantly change, if at all.	We agreed that in areas where the business function is performed by a small number of staff (ie 1 or 2) across the whole of HCA, these costs could not be reduced further from HCA's estimates.
Group functions	The costs typically relate to functions relating to the group, or work conducted across insurers and suppliers rather than on an individual facility basis, and as such the workload for these staff is unlikely to decrease materially post divestiture.	However, where HCA employs larger teams, we would expect that excess administrative staff could be reduced by between 50% and 100% across all the other functions.
Quality Assurance Teams	Given that the roles would still need to be performed for the remaining HCA facilities and the group-level functions within their roles would be unchanged, HCA considers that the costs associated for the large majority of these teams would not be reduced following the proposed divestiture.	Any excess staff relating to group functions, such as Payroll, Administration, Insurance Contracting, Debt Recovery, Corporate Finance, Financial Accounts and Account Payable would either be transferred to the purchaser of the divestiture business or made redundant. Therefore, we have reduced HCA's estimate of the loss of economies of scale across central services, group functions and quality assurances teams by 50%.
Group costs	These costs relate to the direct running of HCA's headquarters and do not include services that are scalable at a hospital operation level.	We agreed that costs relating to the unrecoverable group costs could not be reduced further post divestiture.
HCA labs	HCA considers that even though the volume of tests overall may be reduced, it would still need to provide a similar level of service, therefore, would not be able to scale back its costs proportionately to the reduced volume. However, some cost reductions could be made.	We believe that HCA could make some cost reduction post divestiture (such as staff and other expenditure), albeit some other costs will be fixed (such as plant and machinery). We consider that approximately 50% of these costs could be reduced by scaling back the operation.
Sarah Cannon Research	Given the importance of SCRUK to HCA's commitment to improving patient outcomes, it would not consider scaling back this operation.	We believe that HCA could scale back this operation if the volume of patients treated declined significantly post divestiture. HCA did not provide any evidence as to why it could not do so.

Source: HCA submission and CMA analysis.

31. As set out in Table 4 and applying the same reasoning as in the PDR,<sup>11</sup> in some cases, we have included HCA’s full estimate of its loss of economies of scale, while in other cases, we have reduced the estimate by between 50% and 100% (in the case of Sarah Cannon Research). We note that this assessment involves a number of assumptions over which there is some degree of uncertainty. As a result, we consider the results to be indicative rather than precise estimates of the likely loss of economies of scale. The table below summarises our assumptions in relation to the loss of economies of scale in our ‘central estimate’.

**Table 4: Loss of economies of scale**

	£ million	
	HCA	CMA
Recharged costs – estates	[X]	[X]
Recharged costs – central services	[X]	[X]
Recharged costs – group functions	[X]	[X]
Recharged costs – quality assurance teams	[X]	[X]
Group costs	[X]	[X]
Variable costs – HCA labs	[X]	[X]
Sarah Cannon Research Institute UK	[X]	[X]
<b>Total</b>	[X]	[X]

Source: CMA analysis.

32. For our NPV analysis, we have therefore assumed a best estimate of £ [X] million loss of economies of scale due to divestiture of the Wellington hospital.

### **Transaction and reorganisation costs**

#### *Parties’ views*

##### *HCA*

33. In its response to the PDR, HCA updated its estimate of transaction costs. HCA’s estimate is that these costs would now be between a low of £ [X] (if it were to divest the Wellington Hospital to one buyer) and a high of £ [X] (if it were to divest the London Bridge and Princess Grace Hospitals to two separate buyers), comprising Merger & Acquisition (M&A) fees of between £ [X] and £ [X], legal fees of between £ [X] and £ [X] and due diligence fees and tax structuring advice fees of between £ [X] and £ [X]. HCA suggested that we should use the upper end of the range (ie £ [X]). In addition, HCA put forward the view that we should take into account the costs incurred by a purchaser of the hospitals, which it estimated at between £ [X] and £ [X]

<sup>11</sup> PDR Appendix, paragraph 29.

(including debt arrangement fees and political adviser fees for the buyer), giving total transaction costs of between £[redacted] and £[redacted].<sup>12</sup>

#### *Private medical insurers*

34. AXA PPP told us that whereas scale economies, if they could not be regained, might impact on pricing on a forward-looking basis, and hence impact consumers, the transaction/reorganisation costs were one-off fixed and sunk costs that would not affect forward-looking pricing. They were merely a loss of producer surplus from a firm that had enjoyed – over a sustained period of time – returns significantly above the cost of capital (even excluding capital gains), and whose market position constituted an AEC. Therefore to accord significant weight to these in determining the outcome of the investigation was, in AXA PPP's view, misguided.<sup>13</sup>
35. Bupa told us that it had significant concerns that the divestiture costs included in the NPV analysis were overstated and, more importantly, that the economic effects that these costs had on prices were overstated. In Bupa's view, there was a significant risk that the CMA's current approach would simply reward and protect HCA's inefficiency at the cost of continued detriment to consumers.<sup>14</sup>
36. Bupa also noted that the £[redacted] of reorganisation costs were not submitted by HCA, but were assumed by the CMA. Bupa was concerned that these costs were unsupported by evidence that they were necessary or appropriate in size.
37. Bupa said that it was perverse in the modelling that including these one-off costs to HCA apparently reduced the benefit to consumers from the divestiture, even though they contributed substantially to 'condemning' consumers to a continued AEC in future.

#### *Our assessment*

38. In response to AXA PPP's points in paragraph 34, we considered that transaction costs are one-off costs that are only incurred as a result of the divestiture. Our view is that, although we would not expect them to have an impact on prices in the future, they should be netted off against the benefits of divestiture. HCA and the potential buyer would not incur those costs if it were

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<sup>12</sup> [HCA response to PDR](#), p56, paragraph 7.47.

<sup>13</sup> [AXA PPP response to PDR](#), p10, factor 8.

<sup>14</sup> [Bupa response to PDR](#), pp35 & 36, paragraphs 3.71–3.82.

not for the divestiture. Therefore, we considered that the right treatment of those costs is to include them in the NPV calculation.

39. In response to Bupa's points in paragraph 35, we analysed the costs presented by HCA against industry benchmarks and reduced, wherever reasonable, the quantum of those costs to a level where we considered the costs to be realistic. We left out of our calculation costs that we did not consider to be reasonable, such as political adviser costs and debt arrangement costs.
40. We considered HCA's arguments concerning the transaction and reorganisation costs caused by divestiture which should be included in the NPV analysis.
41. Consistent with the approach that we have adopted in estimating the loss of economies of scale, we have assumed that HCA would choose the least costly divestiture, ie that of the Wellington hospital. Therefore, in relation to most of the transaction costs, we have taken the lower end of the range given by HCA. We reviewed the transaction cost figures submitted by HCA and made the following adjustments:
  - (a) We took the lower point of HCA's estimates for M&A fees of £[x], equating to approximately [x]% of the property value and consistent with our understanding of average fees charged by financial advisers for transactions of this nature.
  - (b) For legal fees, we took the middle points of HCA's ranges, of [x] for HCA and £[x] for the buyer. We deviated from our approach of using the lower bound estimate as we considered that these may understate the actual legal costs that HCA was likely to incur on the sale of a hospital of the size of the Wellington.
  - (c) For due diligence fees, we took the lower bound of HCA's range to cover both the buyer and HCA.
  - (d) We did not include the political adviser fees as we did not consider that either vendor or purchaser would need to incur such costs.
  - (e) We also did not include the debt arrangement fees from the buyer's estimate as we consider that the buyer might pay for the property from existing cash reserves.
42. These adjustments (detailed in Table 5 below) give us an estimate of approximately £[x] of fees to be incurred by the buyer and the seller (HCA)

combined, in the event of HCA divesting the least costly, least intrusive package (ie the Wellington hospital).

**Table 5: Transaction costs of a divestiture remedy\***

	<i>£ million</i>		
	<i>Low</i>	<i>High</i>	<i>CMA estimate</i>
<i>To HCA</i>			
M&A/Corporate Finance	[£]	[£]	[£]
Financial, Tax, IT and Pension DD	[£]	[£]	[£]
Clinical/Commercial/Quality/Governance DD	[£]	[£]	[£]
Tax Structuring	[£]	[£]	[£]
Property Valuations	[£]	[£]	[£]
Political Adviser	[£]	[£]	[£]
Legal Fees	[£]	[£]	[£]
<b>Total</b>	[£]	[£]	[£]
<i>To acquirer</i>			
M&A/Corporate Finance	[£]	[£]	[£]
Debt arrangement fees	[£]	[£]	[£]
Financial, Tax, IT and Pension DD	[£]	[£]	[£]
Clinical/Commercial/Quality/Governance DD	[£]	[£]	[£]
Tax Structuring	[£]	[£]	[£]
Property Valuations	[£]	[£]	[£]
Political Adviser	[£]	[£]	[£]
Legal Fees	[£]	[£]	[£]
<b>Total</b>	[£]	[£]	[£]

Source: CMA analysis.

\* Assuming HCA divests the Wellington Hospital.

43. In addition to the transaction costs discussed above, we thought that redundancy (and reorganisation) costs would also be incurred as a direct result of our divestiture remedy and the need to reduce the central business functions to reflect the smaller size of the business. In response to Bupa's response to the PDR,<sup>15</sup> we note that this figure is approximate and was based on the submissions of another party in the original inquiry. However, this estimate does not have a material impact on the overall NPV figures as it is a one-off cost. Therefore, we have not sought to obtain a more precise figure. HCA submitted that our estimate would be at the low end of the spectrum. In the PDR we assumed that £[£] would be spent on reorganisation costs. This figure remains unchanged.

<sup>15</sup> [Bupa response to PDR](#), paragraph 3.72.

## General methodology

### Parties' views

#### AXA PPP

44. AXA PPP argued that the CMA's NPV analysis failed to take into proper consideration the following factors:<sup>16</sup>
- (a) Factor 1: The CMA assumed that entry by Cleveland Clinic was 100% certain. AXA PPP believed there must be some uncertainty about whether this entry would happen (given that Cleveland Clinic did not yet have planning permission), and even if the entry were extremely likely, such that the expectation was that it would occur, this expectation could not logically assume a 100% likelihood, as opposed to (say) an 80% likelihood.
  - (b) Factor 2: The evidence from all sources pointed to an expectation of a price benefit of at least [redacted]%, not [redacted]%. In AXA PPP's view, we were unreasonably biased towards finding a negative NPV, and a more reasonable (yet still conservative) approach would be to consider one of the following approaches:
    - (i) take the midpoint of the KPMG range [redacted];
    - (ii) take the lower bound of the CMA estimate [redacted];
    - (iii) take the midpoint of (i) and (ii) above [redacted];
    - (iv) take the upper bound of the KPMG range [redacted];
    - (v) take the average of (i) – (iv) [redacted].
  - (c) Factor 3: The revenue base to which the price benefit applied was artificially narrow because it excluded outpatient revenues.
  - (d) Factor 4: The private healthcare market in central London was growing and this scaled up the revenues to which the price benefit should be applied.
  - (e) Factor 5: The CMA appeared to have applied the price benefit of the remedy only to the (pre-divestiture) HCA assets, as opposed to the market as a whole. Since HCA's share of the central London market was

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<sup>16</sup> AXA PPP response to PDR, section 3.

a little below 50%, in AXA PPP's view the CMA had applied the price benefit to less than half the market.

- (f) Factor 6: The CMA had not given any weight to the qualitative benefits of additional competition in the period before Cleveland Clinic entry. The CMA should, in AXA PPP's view, at least acknowledge that this was a material factor, and that any quantitative estimates of the NPV were therefore likely to be understated given this dimension.
- (g) Factor 7: Relying on a five-year time frame was unreasonably optimistic. AXA PPP considered that the CMA had seriously misjudged the likely speed of entry by Cleveland Clinic to the point where Cleveland Clinic (in combination with existing non-HCA facilities) would allow PMIs to cease to be dependent on HCA.
- (h) Factor 8: Transaction costs would not affect forward-looking pricing. This point has been addressed in paragraphs 38 to 43 above.
- (i) Factor 9: Lost scale economies were overstated. This point has been addressed in paragraphs 18 to 32 above.

#### *Bupa*

45. Bupa argued that the CMA's provisional conclusion that the costs of a divestiture outweighed the benefits was undermined substantially by the following key issues and errors in the NPV analysis:<sup>17</sup>
- (a) Benefits to self-pay patients arose immediately post divestiture, not gradually over two years as we assumed in the PDR.
  - (b) The treatment of outpatient revenue was inconsistent.
  - (c) The economic profits were underestimated – Bupa said the CMA had selected the most conservative estimate of customer detriment.
  - (d) The cost allocation placed disproportionate excess profits on the international patients segment.
  - (e) The assumed counterfactual on HCA's growth caused benefits to be underestimated – Bupa said that we should grow revenue year-on-year going forward for the NPV analysis, not just focus on 2015 revenues.

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<sup>17</sup> [Bupa response to PDR](#), pp26–41, paragraphs 3.17–3.110.

- (f) Assuming annual benefits would fall to zero from year 5 due to Cleveland Clinic's entry was an extremely strong assumption that could not be justified – Bupa said that we should assume patient benefits would continue thereafter.
- (g) The CMA should bring forward in time the insurer price benefits.
- (h) A range of benefits that would flow from the divestitures was not taken into account – ie price effects across the market, reduced deadweight loss for consumers, quality & innovation benefits and benefits to international patients (cheaper tariffs).
- (i) The economies of scale losses were not RCBs – we address this point in paragraphs 18 to 32.
- (j) The levels of costs in each year were substantially overestimated – Bupa said that HCA could reconfigure its US headquarters to absorb the HCA UK costs and losses following divestiture – we also address this point above.
- (k) We should remove the year 3 column from the NPV table – it may lead the reader to consider that the results appear mixed; and
- (l) We must probability weight the scenarios.

#### *HCA*

46. HCA told us that, in its view:

- (a) the CMA overstated the benefits of a divestiture remedy;
- (b) the CMA had no evidence linking a divestiture to any improvements in market outcomes;
- (c) the CMA overstated HCA's economic profitability, which was used by the CMA to quantify the benefits of a divestiture remedy;
- (d) the CMA disregarded the future impact of the information remedy imposed following the original inquiry; and
- (e) the CMA inappropriately put weight on NPV scenarios yielding benefits beyond five years.<sup>18</sup>

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<sup>18</sup> [HCA response to remittal PDR](#), p9, paragraphs 2.14–2.16.



47. Furthermore, HCA said that the CMA did not take into account the impact of further litigation on the date at which divestiture would occur. A conservative estimate would be that a divestiture would be delayed by at least 12 months, commensurately shortening the period over which any benefits would be realised before expected entry.<sup>19</sup>

#### *Our assessment*

48. We address in turn the PMIs' and HCA's points below, except the points raised about the treatment of scale economies loss and transaction costs which are discussed in detail in paragraphs 10 to 43 above.
49. AXA PPP's factor 1 indicates that we should apply a lower than 100% probability to Cleveland Clinic's entry into the central London market. Since the publication of the PDR, we held a hearing with Cleveland Clinic and received further evidence relating to its entry into central London. This evidence is discussed in the main body of this Supplemental PDR, in paragraphs 26 and 27. After careful consideration of the new evidence available to the CMA, we consider that the likelihood and timing of entry of Cleveland Clinic is more uncertain than it was at the time of the PDR and we can no longer assume that it will (together with other non-HCA hospitals) be fully effective in addressing the AEC. However, it is difficult to apply a probability of entry to Cleveland Clinic's plans, and we therefore looked at various different entry scenarios (ie year 5, 7 and 10) to address the uncertainty around Cleveland Clinic's entry in central London. We also included a 'no effective' entry scenario (year 20) to reflect the possibility that entry does not happen at all and/or does not have a significant impact on prices.
50. AXA PPP's factor 2 and Bupa's point (c) are similar and deal with the ROCE analysis from which we derived the price benefit. We discussed the rationale for using the KPMG scenario 2 in the Appendix to the PDR.<sup>20</sup> We still consider that the opportunity cost to HCA of operating a private hospital is given by the highest value alternative use for the HCA assets. In addition, we explained that the capital gains on those assets should be excluded for the purposes of an economic profitability assessment as part of a competition review as HCA should not expect such windfall gains to be repeated in the future.
51. AXA PPP's factor 3 and Bupa's point (b) are similar and discuss the treatment of outpatient revenues in our NPV calculation. In the PDR, we adopted a

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<sup>19</sup> [HCA response to remittal PDR](#), p9, paragraphs 2.12–2.13.

<sup>20</sup> [PDR Appendix](#), paragraph 18.

conservative approach by excluding outpatient revenues from our analysis on the basis that our PFs had found that HCA may face additional competitive constraints for some outpatient treatments compared to the weak constraints it faced for inpatient and day-case treatments.<sup>21</sup> However, in response to AXA PPP's and Bupa's submissions, we reviewed this approach. We noted that our estimate of the potential price benefits that may be realised following divestiture (of between [X] % and [X] % in the PDR) was calculated on the basis of total revenues from UK patients (inpatient, day-case and outpatient). Therefore, we agreed with AXA PPP and Bupa that it was consistent to apply the price reduction to year-end 2015 HCA revenues for UK patients (both insured and self-pay) across inpatient, outpatient and day-case treatments. We note that this approach does not make any assumption regarding whether HCA is able to earn economic profits on outpatient treatments. In our profitability analysis, we estimated the total level of economic profits earned by HCA in 2015. We then divided this by HCA's total revenues from UK patients to give the range of [X] % to [X] %. To the extent that such profits were only earned on inpatient and/or day-case treatments, we note that a larger price reduction should be applied to these revenues. Alternatively, as we set out here, we could apply the [X] % to [X] % range to total UK revenues.

52. AXA's factor 4 and Bupa's (e) deal with the treatment of market growth going forward. We accept Bupa's and AXA's views that the market is likely to continue to grow and we should reflect this in our NPV analysis. The latest LaingBuisson report states that as a whole, the sector has grown by around 8% per year (in current terms) since 2006. LaingBuisson highlights that this revenue growth has resulted, at least in part, from an increase in the acuity of treatments offered by private hospitals in central London, with the volume of patients treated remaining broadly static over the period.<sup>22</sup> As our NPV analysis is in real terms, we consider that it should seek to reflect expected growth in revenues resulting from either an increase in the volume of patients treated or an increase in the acuity of services provided but should exclude revenue growth that was the result of inflation. We are not aware of any reliable long-term forecasts of growth for the private healthcare market and note that this would be influenced by a broad range of factors. However, we consider that real growth might be expected to be lower in the future than in the past as private hospitals have, in recent years, sought to 'catch up' with the NHS in terms of the range and acuity of services provided. In this context, we noted that Bupa suggested a market growth rate of [X] %. We reasoned that, even accounting for inflation of around 3%, past growth had significantly

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<sup>21</sup> PDR, paragraph 2.44 and footnote 87.

<sup>22</sup> LaingBuisson's Healthcare Market Review, published 8 March 2016, p xvii.

exceeded the [X] % forecast level suggested by Bupa. As a result, we have included an assumed a constant growth rate of 3.5% a year (in real volume terms) for the next 20 years, which is approximately halfway between the historical rate of growth and the rate forecast by Bupa.

53. We take note of AXA PPP's factor 5. However, we do not consider that we should apply the price benefit to the whole market. We found that HCA charges higher prices than its main competitor, although we could not conclude on the precise size of the price difference that was due to weak competitive constraints on HCA. Therefore, following divestiture, we expect that HCA's price will fall towards the competitive level, but we do not have any basis to assume that the prices of HCA's competitors will also decrease following divestiture, given that the evidence indicates that at least HCA's main competitor already charges below HCA.
54. We note AXA PPP's factor 6 and Bupa's point (h) and we agree that other potential benefits will flow from the divestiture. The NPV estimate of divestiture does not account for any quality and/or innovation benefits that would result from the dynamic process of rivalry between competing hospital operators. However, these benefits are not amenable to quantification and inclusion in an NPV analysis. We have considered the impact of such benefits in our qualitative assessment.
55. We note AXA PPP's factor 7 and Bupa's points (k) and (l). However, we considered a wide range of scenarios and sensitivities in our NPV assessment to provide a better understanding as to what the market may look like following divestiture under a wide range of possible situations.
56. We note Bupa's point (a) and we agree with its assessment. Our revised NPV analysis now assumes that the benefits to self-pay patients arise immediately post divestiture.
57. We note Bupa's point (d). We performed the analysis and allocated costs under four different scenarios and the scaling factors, usage ratios and resulting economic profit percentages for each of these scenarios. We discussed these scenarios in detail in the Appendix to the PDR and consider our approach to be reasonable.
58. We note Bupa's point (f) and agree that some price benefits may persist after the new entry takes place. We have amended our NPV analysis to take account of this point by including a scenario in which, following entry, only 50% of the potential price benefits are realised (see Table 7). We have also modelled sensitivities on our other cases with 50% of potential price benefits realised.

59. We note Bupa's point (g), however, the treatment of revenues is consistent with our assessment in the Final Report. We assume that current contracts will be rolled over post divestiture for a period of 18 months to allow for a smooth transition of the businesses for both customers and the new buyer.

### ***The WACC calculation***

60. Subsequent to issuing the PDR, we published a working paper<sup>23</sup> providing details of how we calculated the WACC for HCA which was used in our profitability analysis, which in turn led to our estimate of the price difference between HCA and other operators.
61. We received two responses to this working paper. In this section, we discuss the arguments made by the parties, our assessment and how we have amended our use of the WACC and the implications for our revised NPV analysis.

### ***Parties' views***

#### ***Bupa***

62. Bupa made the point that the CMA had presented no evidence in the working paper explaining why it believed a WACC of 10.0% – towards the top end of the CMA's range (in the top quintile of values in the range) – was appropriate as the preferred point estimate. Bupa said the CMA had presented no argument that the range was 'asymmetric', with estimates towards the top end being more likely than estimates elsewhere in the range.<sup>24</sup>
63. Bupa also said that the WACC was therefore more likely to be around the midpoint (9.0%) than at the more extreme point estimate of 10.0%.<sup>25</sup>

#### ***HCA***

64. HCA said that it had identified three errors in the CMA's calculations. Correcting these errors alone had a material impact on the calculation of WACC, and therefore the assessment of HCA's profitability. In addition, HCA had identified several other shortcomings in the CMA's methodology for measuring WACC for a stand-alone private hospital operator, which in its view undermined the reliability of the CMA's conclusions.

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<sup>23</sup> CMA working paper (22 April 2016), [Assessment of the cost of capital](#).

<sup>24</sup> [Bupa response to WACC working paper](#), p2, paragraph 1.3.

<sup>25</sup> [Bupa response to WACC working paper](#), p3, paragraphs 2.1–2.6.

65. HCA said that at a high level these errors and concerns were:<sup>26</sup>
- (a) The CMA had made errors in its calculations including:
    - (i) incorrectly measuring firm leverage (or gearing) for the purposes of unlevering beta (in some instances, the gearing ratios adopted by the CMA could apply only if HCA's equity had a negative market value in certain years – which was not the case);
    - (ii) relying upon statistically insignificant beta estimates; and
    - (iii) incorrectly calculating the impact of inflation on the equity risk premium (ERP).
  - (b) In HCA's view, the CMA further understated the WACC through:
    - (i) placing too much weight on certain estimates of the equity market return (EMR), that were not representative of the time period being analysed for the purposes of the remittal (2007 to 2015);
    - (ii) understating asset beta, due to selection of inappropriate overseas proxies; and
  - (c) understating the cost of debt by using assumptions as to the cost of debt which did not reflect the market rates which in fact had applied during 2007 to 2015.
66. In HCA's view, correcting for these errors and methodological flaws resulted in an adjusted WACC range of 10.3% to 11.7%, with a midpoint of 11.0%. In HCA's view, this adjusted figure was a more robust estimate of the WACC for a hypothetical stand-alone private hospital operator, and therefore as a benchmark of a normal rate of return for the private healthcare industry in the UK.<sup>27</sup>

#### *Our assessment*

67. We note Bupa's views in relation to the midpoint WACC. Our price benefit analysis in the Appendix to the PDR indicated that HCA's prices to UK patients (in 2015) exceeded the level where it would have earned its WACC (of 10%) by between [£]. As explained in paragraph 18 in the Appendix to the PDR, we have placed more weight on the KPMG 2 scenario, which gives a range of between [£] price detriment. Performing the same analysis using

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<sup>26</sup> [HCA response to WACC working paper](#), p2, paragraphs 1.4.

<sup>27</sup> [HCA response to WACC working paper](#), p3, paragraph 1.5.

the WACC midpoint of 9% (as suggested by Bupa) gives a range of potential price benefits of [redacted].[redacted]. In the 2014 Final Report we used a WACC of 10.0% as our benchmark for assessing the extent of HCA's excess profits. Because the midpoint of our current range is 9.0%, we consider a WACC of between 9.0% and 10.0% to be an appropriate benchmark for our current analysis. Therefore, for the purposes of our NPV analysis, the range of potential benefits considered is [redacted].

68. We note HCA's comments in relation to our WACC calculation. We have updated the firm leverage data as suggested by HCA. Leverage is now calculated as the market value of equity to the book value of debt, whereas previously we looked at the book value of both equity and debt. The net effect on the overall beta estimates is negligible.
69. HCA's other points in relation to the beta estimates and the treatment of inflation are not new and they have been put to us during the original market investigation. These points have already been addressed in the WACC working paper.<sup>28</sup>

### ***Revised NPV analysis***

70. This section explains how the evidence and arguments received since the PDR (as discussed above) have affected our NPV analysis of the proposed divestiture package. Given our assessment of the submissions, we have amended our NPV analysis with revised assumptions and scenarios as outlined below.

#### *Assumptions used in revised NPV analysis*

71. Our NPV analysis brings together the costs and benefits of the proposed divestiture remedy. We have made a number of assumptions in estimating the NPV of our divestiture remedy including:
- (a) The one-off costs of divestiture are approximately £[redacted] for HCA. We reasoned that the transaction costs (£[redacted]) would be incurred in the first year (this figure has increased from the previous £[redacted] in the remittal PDR NPV analysis), while the reorganisation costs (£[redacted]) would be incurred equally across the first two years following divestiture (50% in year 1 and 50% in year 2, this remains unchanged).
  - (b) The ongoing costs of divestiture – associated with a loss of economies of scale – are zero in our upside case for all years, £[redacted] per year in our

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<sup>28</sup> CMA working paper (22 April 2016), [Assessment of the cost of capital](#).

central estimate and £[X] per year in our downside case. The figures have been revised upwards from the previous £[X] figure in the base case and £[X] in the downside case used in the PDR NPV analysis.

- (c) The price benefit of divestiture is assumed to reduce to 0% after effective new entry takes place. The sensitivity to our central estimate assumes a 50% reduction in the year of entry which stays at that level for the remainder of the 20-year period. This is a new assumption, as previously we assumed that the price benefit of divestiture would reduce to 0% after effective entry took place. Our view is that 0% and 50% represent the lower and upper bounds of the likely price benefit of divestiture following new entry.
- (d) We assume that effective new entry could occur in either year 5, year 7, year 10 or does not occur at all by year 20. We previously considered that entry would occur in years 3, 5 or 7.
- (e) We apply the price reduction to year-end 2015 HCA revenues for UK patients only (both insured and self-pay) across inpatient, outpatient and day-case treatments. We have included 'outpatient' revenues which were previously excluded.
- (f) We assume market growth of 3.5% a year post 2015. We did not assume any growth in our previous NPV calculation.
- (g) We assume that self-pay benefits will occur immediately after divestiture, whereas insured benefit will lag by 18 months. Previously, we assumed that all benefits will lag by 18 months.
- (h) All NPV figures are calculated over a 20-year period, whereas previously we assumed that both price benefits and loss of economies of scale would cease once effective new entry took place.
- (i) We have used a discount rate of 3.5%, in line with the HM Treasury Green Book<sup>29</sup> approach. This remains unchanged.

#### *Central estimate and sensitivities considered in revised NPV analysis*

72. Given these uncertainties surrounding the NPV assumptions, we ran three scenarios and one sensitivity on the potential loss of economies of scale and price reduction in our NPV analysis. Specifically we considered the following:

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<sup>29</sup> [The Green Book](#) – HM Treasury guidance for public sector bodies on how to appraise programmes or projects.

- (a) Central estimate: the loss of economies of scale is constant every year at £[X] for the next 20 years and once effective new entry takes place the price reduction benefit of divestiture reduces to zero.
  - (b) Sensitivity case: the loss of economies of scale is constant every year at £[X] for the next 20 years and new entry is only partially effective, therefore the price reduction benefit of divestiture reduces to half from the year of entry onwards.
  - (c) Upside case: there is no loss of economies of scale and once effective new entry takes place the price reduction benefit of divestiture reduces to zero.
  - (d) Downside case: the loss of economies of scale is constant every year at £[X] for the next 20 years and once effective new entry takes place the price reduction benefit of divestiture reduces to zero.
73. We calculated the NPV of divestiture for different combinations of assumed price impact of divestiture [X] and assumed year of effective entry (year 5, year 7, year 10 and year 20).
74. In our view, these three factors (treatment of economies of scale, price impact of divestiture and assumed year of effective entry) are the key determinants of the calculated NPV of divestiture, but are also the factors with the greatest uncertainty. The NPV tables therefore indicate the range of NPVs of the divestiture option that can be calculated under plausible assumptions.

#### *Results of revised NPV analysis*

75. The tables below show our estimates of the likely impact on revenues of the divestiture of HCA's hospital under our central estimate, sensitivity case, upside case and downside case.
76. All NPVs are calculated over 20 years, therefore the year 20 column in each of the tables assumes no effective entry over the period.
77. We use our own assumption for loss of economies of scale of £[X] a year in our central estimate and HCA's estimate of £[X] in the downside case. We note that using HCA's upper bound estimate of £[X] (for the divestiture of London Bridge and Princess Grace Hospitals) would yield a much lower NPV.
78. The central estimate, upside case and downside case assume that once new entry happens the benefits of divestiture will reduce to 0%. This means that any reduction in prices will be 100% due to competitive pressure from effective new entry, therefore, the benefits of divestiture become 0%.



79. The tables show the NPV of divestiture under various assumptions. Each column shows the date at which entry becomes effective in constraining HCA's prices. For example, if effective entry takes place in year 5 and HCA's prices are currently 4% above the competitive level, the expected NPV of divestiture under our central estimate is [£x]. In other words, on the assumptions discussed in paragraph 71 which underpin our central estimate, for divestiture to yield a positive NPV we would need to believe that prices will come down by at least [x]% from pre-divestiture levels and that no effective new entry will occur until year 10 post-divestiture, at the earliest.

**Table 6: Central estimate (fully effective entry)**

	£m	Year of entry / year when entry might become effective			
		5	7	10	20
Extent to which HCA's prices exceed the competitive level	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]
	[£x]	[£x]	[£x]	[£x]	[£x]

Source: CMA analysis.

Note: The table shows the NPV associated with each level of excess prices and each potential entry point. These figures take into account a £[x] million loss of economies of scale in each year. Therefore, if HCA's prices exceed the competitive level by, say 5%, the actual effect on prices to consumers will be reduced by around 2% due to the loss of economies of scale. In other words, customers are assumed to benefit from a 3% net reduction in prices.

80. The table below shows our sensitivity case to our central estimate. We modelled the effect of £[x] loss of economies of scale and assumed that new entry will only be partially effective, such that the price benefit of divestiture will reduce by 50% following entry, rather than 100%. Every other assumption discussed in paragraph 71 applies to this sensitivity as well.

81. For example, if HCA's prices were currently 4% above the competitive level, with divestiture reducing these to the competitive level and entry happened in year 10, the expected NPV of divestiture under our sensitivity case is £[x]. In other words, on the assumptions discussed in paragraph 71 which underpin our central estimate, for divestiture to yield a positive NPV we would need to believe that prices will come down by at least [x]% from pre-divestiture levels and that no effective new entry will occur until year 5 post-divestiture, at the earliest.

**Table 7: Sensitivity case (partially effective entry)**

	Year of entry / year when entry might become effective				
	£m	5	7	10	20
Extent to which HCA's prices exceed the competitive level	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: CMA analysis.

- 82. In the downside case (table below), we modelled economies of scale loss of £[redacted] per year (which are based on HCA divesting the Wellington Hospital).
- 83. With this level of economies of scale loss, for divestiture to yield a positive NPV, we need to believe that prices will go down by at least [redacted]% from pre-divestiture levels and that no effective new entry will occur in the 20 years following divestiture. However, even then the benefits of divestiture are a very low £[redacted] over 20 years. In addition, we modelled a sensitivity where we assumed that new entry will only be partially effective, such that the price benefit of divestiture will reduce by 50% following entry. We found that for a positive (albeit very small) NPV, we need to believe that prices will go down by at least [redacted]% (for the 5 and 7 years entry scenarios) and at least [redacted]% for the (10 year scenario).

**Table 8: Downside case (fully effective entry)**

	Year of entry / year when entry might become effective				
	£m	5	7	10	20
Extent to which HCA's prices exceed the competitive level	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: CMA analysis.

- 84. In the upside case (table below), we modelled economies of scale loss of £0.0 million per year. This figure is consistent to the upside case discussed in the original PDR. We note that the NPV is positive across all scenarios and across all price reduction levels when the loss of economies of scale is ignored.

85. If we do not believe that there will be any loss of economies of scale to the industry post divestiture, then any price reduction ([redacted]%) or more) will yield a positive NPV regardless of when new entry occurs (year 5 or later), assuming that divestiture is fully effective and results in some drop in prices.
86. Similarly to the previous case, we also modelled a sensitivity where we assumed that new entry will only be partially effective, such that the price benefit of divestiture will reduce by 50% following entry. We found that the NPV will be positive for any price reduction (above 3%) and regardless of whether/when new entry occurs (year 5 or later).

**Table 9: Upside case (fully effective entry)**

	£m	Year of entry / year when entry might become effective			
		5	7	10	20
<i>Extent to which HCA's prices exceed the competitive level</i>	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: CMA analysis.

## Glossary

<b>AEC</b>	Adverse effect on competition as set out in section 134(2) of the Enterprise Act 2002.
<b>AXA PPP</b>	AXA PPP healthcare, a subsidiary of The AXA Group and provider of <b>PMI</b> .
<b>Bupa</b>	The British United Provident Association Limited, a provider of <b>PMI</b> and a hospital operator.
<b>Cushman &amp; Wakefield</b>	A global real estate services firm.
<b>CC</b>	Competition Commission.
<b>CC3</b>	<a href="#"><i>Guidelines for market investigations: Their role, procedures, assessment and remedies</i></a> (April 2013).
<b>Central London</b>	The NUTS 2 region of Inner London, which roughly coincides with the areas within the North and South Circular Roads. Inner London consists of Camden, City of London, Hackney, Hammersmith and Fulham, Haringey, Islington, Kensington and Chelsea, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets, Wandsworth, and Westminster.
<b>CMA</b>	Competition and Markets Authority.
<b>Consultant</b>	A registered medical practitioner who holds, has held, or is qualified to hold, an appointment as a consultant in the <b>NHS</b> in a specialty other than general practice or whose name is on the register of specialists kept by the General Medical Council. A consultant may work exclusively for the <b>NHS</b> or in private practice or a combination of the two. Except where the context otherwise provides, consultant refers to a consultant in private practice whether or not they also work in the <b>NHS</b> .
<b>Cost of capital</b>	The return that investors in a project expect to receive over the period of that investment. It is an opportunity cost and can be seen as the yield on capital employed in the next best alternative use.
<b>Day-case treatment</b>	A patient admitted during the course of a day with the intention of receiving treatment without requiring the use of a

	hospital bed overnight. If the patient's treatment then results in an unexpected overnight stay they will be admitted as an <b>inpatient</b> .
<b>DD</b>	Due diligence, reasonable steps taken by a firm to identify potential liabilities.
<b>Economic profit/profitability</b>	Defined as profits in excess of the <b>WACC</b> .
<b>Final Report</b>	The Final Report of the original investigation dated 2 April 2014.
<b>HCA</b>	HCA International Limited and any company in the group as appropriate, a <b>private hospital operator</b> .
<b>HM Treasury Green Book</b>	HM Treasury guidance for public sector bodies on how to appraise proposals before committing funds to a policy, programme or project.
<b>Hospital services</b>	All services provided by a <b>private hospital</b> including <b>inpatient</b> , <b>day-case</b> and <b>outpatient</b> services. Where it is necessary in this report to distinguish between different types of hospital services this is made clear in the text.
<b>Inpatient</b>	A patient admitted to hospital with the expectation that they will remain in hospital for at least one night.
<b>Insured patient</b>	A patient who will use <b>PMI</b> to pay (in whole or in part/the majority) for their medical care.
<b>IPA</b>	Insured Pricing Analysis.
<b>London</b>	The combined area of <b>central London</b> and outer London, synonymous with Greater London.
<b>NHS</b>	National Health Services in England, Scotland and Wales and the Health and Social Care Services in Northern Ireland.
<b>NPV</b>	Net present value.
<b>Nuffield</b>	Nuffield Health and any company in the group as appropriate, a <b>private hospital operator</b> .
<b>Outpatient</b>	A patient treated in a hospital, consulting room or clinic, who is not admitted.

<b>PDR</b>	The remittal provisional decision on remedies
<b>PFs</b>	The remittal provisional findings published on 10 November 2015.
<b>PMI/insurer</b>	As the context provides, either a private medical insurer or private medical insurance. Private medical insurance is an insurance product under which an insurer agrees to cover the costs, in whole or in part, of acute medical care. Insurer in this report refers to a PMI.
<b>PPU</b>	Private patient unit, a facility within the <b>NHS</b> providing medical care to private patients. Such units may be separate units dedicated to private patients or facilities within the main <b>NHS</b> site that are made available to private patients either on a dedicated or non-dedicated basis.
<b>Private hospital</b>	A facility which provides <b>inpatient hospital services</b> that charges fees for its services including a <b>PPU</b> . Except where the context provides otherwise, in this report hospital refers to a <b>private hospital</b> .
<b>Private hospital operator</b>	A person that operates a <b>private hospital</b> including where relevant the <b>NHS</b> in relation to <b>PPUs</b> .
<b>RCB</b>	Relevant customer benefit, as defined by section 134(8) of the Enterprise Act 2002.
<b>Remedies Notice</b>	The notice of possible remedies published on the same date as publication of the remittal provisional findings report.
<b>ROCE</b>	Return on capital employed.
<b>Self-pay patient</b>	A patient who pays for their medical care themselves.
<b>Specialties</b>	The General Medical Council divides areas of medical care into 65 specialties.
<b>Spire</b>	Spire Healthcare Limited and any company in the group as appropriate, a <b>private hospital operator</b> .
<b>Sunset provisions</b>	The terms that intentionally terminate or phase out a remedy.
<b>TLC</b>	The London Clinic, a <b>private hospital operator</b> .

<b>Treatment</b>	Except where the context otherwise provides, medical treatment includes medical, surgical and/or diagnostic/pathology treatments.
<b>WACC</b>	Weighted average cost of capital.