

Private healthcare remittal

Final report

5 September 2016

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The Competition and Markets Authority has excluded from this published version of the report 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 [≫]. Some numbers have been replaced by a range. These are shown in square brackets. Non-sensitive wording is also indicated in square brackets.

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Glossary

Summary

- 1. This document summarises our findings in relation to:
 - (a) whether there are any features that are preventing, restricting or distorting competition (referred to as an 'adverse effect on competition' (AEC)) in the markets for the provision of privately-funded healthcare services in central London, and, if so,
 - (b) whether any action should be taken to remedy, mitigate or prevent the identified AEC(s) and/or any customer detriment arising from the AEC(s).

Background to this remittal

- On 2 April 2014 the Competition and Markets Authority (CMA) published its final report on the Private Healthcare Market Investigation¹ (the Final Report).
- 3. After publication of our Final Report, HCA challenged the CMA's self-pay and insured AEC decisions and the divestment decision at the Competition Appeal Tribunal (CAT) on a number of different grounds. AXA PPP also appealed, among other things, the divestment decision.
- 4. During the litigation, HCA's economic advisers, KPMG, identified, among other things, two coding errors in our insured pricing analysis (the IPA) which in its view impacted the robustness of the estimated price difference between HCA and its closest competitor, The London Clinic (TLC).
- 5. In light of these two errors, the CMA considered that the appropriate course was for the matter to be remitted to it in order for the CMA to review the IPA and re-consult with interested parties. Consequently, on 12 January 2015, the CAT ordered that the insured AEC decision and the divestment decision be quashed and remitted to the CMA for reconsideration.

Our approach to the remittal

6. In determining our approach to the remittal we were guided by the CAT's Ruling of 23 December 2014 (Ruling) where the CAT stated that:

¹ Private healthcare market investigation: Final report, 2 April 2014.

- (a) our task is to 'consult on the IPA and then re-determine the questions whether any new insured AEC decision should be made and whether any new divestment decision should be made';²
- (b) the guashing of the insured AEC and divestment decisions 'will leave all other parts of the Final Report, including all the reasoning in it and the other decisions regarding various other AECs on foot...', but the CMA 'will have to consider what impact the new information and representations it receives in relation to the IPA has upon the existing statements of reasoning contained in the Final Report with respect to those decisions'; and
- (c) 'If in the course of further consultation on the IPA anything emerges which [...] does have an indirect knock-on effect on the reasoning in relation to the self-pay AEC decision, the CMA will need to give careful consideration to that guestion and the implications it may have for the overall reasoning in the Final Report.'3
- 7. With the CAT's Ruling in mind:
 - (a) we have reviewed and re-consulted on the IPA;
 - (b) in relation to the other analysis and evidence that supported the insured AEC decision, we have considered whether to readopt the findings set out in our Final Report, taking into account all relevant arguments and evidence put to us by parties, both in relation to our reasoning in the Final Report and in relation to any changes in the market since the publication of our Final Report; and
 - (c) we have considered whether there are any knock-on consequences for our reasoning in relation to the self-pay AEC decision.
- 8. We have relied upon the data on which the analysis in the Final Report was based, although we did update certain data where we considered it appropriate to do so (for example, in carrying out our profitability analysis, as explained in paragraph 12).

² AXA PP Healthcare Limited v Competition and Markets Authority and others, Ruling of 23 December 2014, [2014] CAT 23, (the Ruling), at paragraph 56(b). ³ Ruling, at paragraph 60.

Overview of changes since the Final Report

- 9. A summary of our detailed assessment can be found below. However, to put this in context, it is helpful to understand how and why our thinking has changed since the Final Report.
- 10. In the Final Report, we placed significant reliance on the IPA both in support of our AEC finding in relation to the insured private healthcare markets in central London, and in assessing the proportionality of the proposed divestiture remedy.
- 11. We carried out the IPA for central London to estimate the extent of any price difference between HCA and TLC. In order to ensure that we were comparing like with like, we controlled for a number of factors. As explained above, errors found in the IPA presented in the Final Report were the basis for the remittal to the CMA. Having amended the IPA to correct these errors, and considered in detail the additional submissions and evidence received from parties during the remittal, we find that we can no longer use the IPA to conclude on the size of the price difference between HCA and TLC, as we cannot be sufficiently confident that we have adequately controlled for any differences in patient complexity, and hence are comparing like with like.
- 12. As a result, although we still find that there is an AEC in the insured private healthcare market in central London, we can no longer use the IPA either to estimate the size of the customer detriment caused by the AEC, or the potential impact of a divestiture remedy on prices. Instead, we have had to rely more heavily on our profitability analysis to estimate both customer detriment and the potential impact of divestiture on prices. We have had to make a number of assumptions both in carrying out our profitability analysis and in using it to estimate the detriment arising to insured and self-pay patients. We consider that the number and the nature of these assumptions reduces the reliance that we can place on the detriment estimates in this case. This is discussed in more detail in paragraphs 40 to 48 and 70 to 75.
- 13. In addition to the reduced reliance that we can now place on the IPA, further analysis undertaken and evidence received during the remittal have also cast some doubt on the extent of capacity constraints in the central London market. The assessment of capacity is complex. Our view is that, overall, there are some constraints on effective capacity, although analysis undertaken during the remittal suggests there may be spare capacity in some measures, such as number of beds available and intensive care unit (ICU) capacity.

- 14. The combination of these factors has made it less certain what the likely impact of any divestment would be in terms of reduced prices. As explained further below, this makes it difficult for us to conclude with any degree of confidence that a divestment remedy would be proportionate, as we are not in a position reliably to quantify the benefit of the divestment.
- 15. To add to this, the position on likely future new entry has also evolved since the Final Report. At the time of the Final Report, there had been no entry of scale and virtually no entry of any size in London for over ten years. During the remittal, Cleveland Clinic announced its plans to open a large new private hospital at a site in central London (although since this announcement, Cleveland Clinic has experienced delays which mean that its planning application has yet to be submitted, and hence the likelihood and timing of entry is increasingly uncertain). (See Endnote for an update.) There has also been entry by a small number of specialist operators and plans for entry by others. While the precise timing, scope and impact of future new entry is uncertain, our view is that there is a real prospect of new entry within the medium term (by which we mean, in this context, the next 7 to 12 years) which would have a significant impact on the scale of customer detriment arising from the AEC. This prospect of entry is one of a number of factors bearing on our assessment of the proportionality of the divestment remedy.

Our analytical framework

- 16. When revisiting our competitive assessment for privately-funded healthcare services in central London we conducted detailed analysis around two high-level questions:
 - (a) whether there are any structural features in this market that could give rise to an AEC; and
 - (b) what are the AECs (if any) arising from these structural features.
- 17. We first defined the relevant product and geographic markets, which provided us with a framework, in terms of the set of specialties and relevant (private) healthcare providers on which our subsequent analysis has largely focused. We then reassessed the market features which characterise privately-funded healthcare services in central London, based on an analysis of local competitive constraints, barriers to entry and expansion and the framework for bargaining (between hospital operators and private medical insurers (PMIs)). Finally, we reconsidered market outcomes for privately-funded healthcare services in central London based on an analysis of non-price outcomes (quality and range), insured prices (including our revised IPA) and profitability.



Figure 1: The specific issues that we considered as part of our competitive assessment of privately-funded healthcare services in central London

18. We provide a brief summary of our key conclusions on market structure and market outcomes below.

Market structure

Market definition

- 19. We readopt our conclusions in relation to product and geographic market definition as set out in our Final Report. We find:
 - (a) Distinct product markets in the provision of hospital services for individual specialties and, for each individual specialty, separate markets for inpatient, day-patient and outpatient services.
 - (b) The area covering the private hospitals and private patient units (PPUs) in central London is a separate geographic market.
- 20. Our competitive assessment has focused on private hospitals, including PPUs, in central London across 16 key specialties and oncology. We have also taken into account competitive constraints exerted by specialist and non-inpatient providers in central London, by private hospitals and PPUs outside central London and by the NHS on a case-by-case basis.

Competitive constraints

- 21. We find that the market for privately-funded healthcare services to insured patients in central London remains highly concentrated as HCA continues to have high shares of supply relative to other hospital providers (around 50% share of total revenue and admissions, compared with just over 10% for the next largest competitor) across many of the 16 key specialties, plus oncology, on which our competitive assessment has focused.
- 22. We recognise that there has been some growth in PPUs in central London since the Final Report. However, this has been broadly in line with overall growth in private healthcare in central London, and PPUs continue to have a small share of admissions in the markets for privately-funded healthcare services. HCA's internal documents suggested that it views some PPUs as a potential source of competitive constraint, and we judged that a small number of PPUs appear capable of imposing a competitive constraint on HCA, in particular specialist PPUs, such as those at the Royal Marsden and Great Ormond Street. On the whole, however, our view is that the constraints imposed by PPUs in aggregate remain weak at present. We also find that non-inpatient providers (both outpatient only and providers of daycase and outpatient facilities) in aggregate are currently a weak constraint on HCA. Non-inpatient facilities have a small share of Bupa's and AXA PPP's admissions and a small share of their revenues. In addition, the evidence suggests that although non-inpatient providers compete with HCA for a narrow set of services, primarily imaging and diagnostic procedures, HCA itself maintains a strong position in this area.
- 23. Despite some changes in the market, in our view HCA continues to face weak competitive constraints both from other central London hospital providers/PPUs and from providers outside central London, and we remain of the view that NHS services are not a close substitute for private patient services provided by HCA. We also do not believe that competition from international providers constrains the prices HCA charges to UK customers due to its ability to price discriminate, as evidenced by the fact that self-pay prices on its UK websites are 'For UK Residents Only'.
- 24. In summary, we readopt our conclusion from the Final Report and find that HCA currently faces weak competitive constraints in the market for the provision of privately-funded hospital services for insured patients in central London. However, as set out in paragraph 13 above, we note that there is now some mixed evidence on the extent of spare capacity in the central London market. We take this into account in assessing the nature and extent of the competitive constraints on HCA and the expected effectiveness and proportionality of any remedy.

Barriers to entry and expansion

- 25. In spite of the attractiveness of the growing privately-funded healthcare services market in central London, there has been no substantial entry, and only limited expansion, by private hospital operators over the last ten years (or more).
- 26. Our review of the evidence indicates that high sunk costs and long lead times, exacerbated by the limited availability of suitable sites and planning constraints, remain the principal barriers to entry in central London.
- 27. We noted that the reorganisation of many NHS trusts' estates has the potential to ease constraints on the availability of suitable sites. However, our view is that this is highly unlikely to take place in a sufficiently timely manner to facilitate the new entry of private hospital operators that could constrain HCA in the near future (by which we mean, in this context, the next two years).
- 28. During the remittal, we received evidence of actual entry by a small number of specialist providers, as well as increased interest in entry/expansion in the central London market and evidence of expected continued growth in demand within central London. Although we recognise that there have been recent setbacks for some of the planned new entrants, we believe that there is still a greater prospect of new entry in the future, compared with that which existed at the time of the Final Report of both larger hospital operators and smaller, more specialised entrants. However, it is not possible to predict precisely the timing or impact of any such entry.
- 29. Given the lead times in establishing a hospital, we would be aware of any new entry likely to take place in the near future (that is, within two years). Although we know of some planned new entry in this time frame, eg the Schön Klinik and the Nuffield PPU at Barts, we do not believe these new entrants would impose a sufficient constraint on HCA to address the AEC on their own.
- 30. As discussed further below, our view is that there is a real prospect of new entry which would result in an increased competitive constraint on HCA, and therefore downward pressures on HCA's prices over the medium term. This is relevant to our assessment of the proportionality of potential remedies. However, for the purpose of assessing whether there is an AEC, we have not seen any evidence to suggest that the threat of such entry has placed any significant constraint on HCA to date, or will do so in the near future. We therefore do not consider that the prospect of large-scale, smaller or

specialist new entry in the medium term undermines our finding that there is an AEC.

31. We therefore readopt our conclusion from the Final Report that significant barriers to entry and expansion exist.

Bargaining

- 32. As we noted in our Final Report, with regard to insured patients, prices of treatments are set in national bilateral negotiations between hospital operators and PMIs, which typically focus on the price of the overall bundle of services/treatments.
- 33. In relation to central London, we continue to find that HCA and the PMIs are dependent on each other and have some power in the bargaining relationship, ie neither side are 'price-takers'. We do not agree with HCA's argument, put to us during the remittal, that an extreme 'sharing rule', in which HCA receives a very small share of the bargaining surplus, is a plausible description of its negotiations with PMIs in the privately-funded healthcare services market in central London. The evidence put to us suggests that PMIs are not able to negotiate on a 'take-it-or leave it' basis with HCA given the PMIs' views that their own customers consider HCA hospitals in central London to be a 'must have'.
- 34. We have also considered the extent to which PMIs can use alternative products or contracting strategies to increase their outside options (eg through the use of restricted networks, service-line tenders and open referrals). We have found that, although there has been some growth in their use by PMIs, they have not materially improved PMIs' outside options with respect to HCA.
- 35. Therefore we readopt our conclusion from the Final Report that while PMIs have some bargaining power, they do not have countervailing buyer power which is sufficient to offset the exercise of market power by HCA.

Market outcomes

36. Outcomes of the competitive process in a market can provide evidence about how a market functions, the extent of competition, whether there is an AEC and, if so, the extent of any resulting customer detriment.

Quality and range

- 37. In relation to quality, we continue to find that there is no evidence of material quality differences between HCA and TLC, although we note there is a lack of comparable data across the common range of treatments that both hospital operators provide.
- 38. Similarly in relation to product range, while we recognise that HCA offers a wider range of treatments than TLC (eg HCA offers cardiology while TLC does not), we consider that both operators nonetheless offer a broad range of treatments.
- 39. On this basis we readopt our conclusions in the Final Report that there is a degree of competition over both quality and range in central London.

Insured prices

- 40. As part of the original market investigation, we conducted an empirical analysis of insured prices for inpatient and day-case treatments for the period from 2007 to 2011, using a methodology that controls for a number of differences between hospital operators in relation to treatment and patient mix (such as patient gender, length of stay and age) this is what we generally refer to as the IPA, which was the key focus of the litigation and the subsequent remittal. At a high level, the IPA for central London aimed to identify whether there was a price difference between HCA and its closest competitor, TLC.
- 41. As explained in paragraph 4 above, there were some errors in the analysis presented in our Final Report which we have corrected during the remittal. We have also undertaken a significant amount of additional work during the remittal, in particular in response to detailed comments from parties on the revised IPA Working Paper published during the remittal. HCA submitted a number of new submissions and evidence which suggested that: our IPA did not fully account for differences in patient complexity between HCA and TLC; that HCA, in its view, attracted more complex patients than TLC; and that when this was taken into account, there was no statistically significant price difference between HCA and TLC.
- 42. We have produced estimates of price differences between HCA and TLC for 36 insurer-year pairs which show that, for many insurers in many of the years covered by our analysis, HCA charged higher prices than TLC. Looking at the overall average price difference across all insurers and all years also indicates that HCA's prices were higher than TLC's, and that this difference was statistically significant.

- 43. There are four main drivers that could plausibly explain a price difference between HCA and TLC: different treatment mix; different patient complexity; quality differences; and weak competitive constraints on HCA. The first three reasons would be consistent with a competitive market, whereas the fourth reason would suggest a competition problem.
- 44. Differences in treatment mix are explicitly controlled for in the IPA, which only compares treatments that HCA and TLC both provide.
- 45. On patient complexity, the IPA includes a number of variables (patient age, sex and length of stay) that attempt to control for this, but HCA has argued that the analysis does not do this effectively. The reasons given by HCA as to why it attracts more complex patients than TLC (for the same treatments) are plausible, although there are difficulties in quantifying the effect of this, given limitations in the data available. While other parties did not consider that HCA treated more complex patients than TLC for the same treatments, we cannot rule out the possibility that differences in patient complexity are not fully controlled for in the IPA. As a result, we cannot be confident that the IPA is comparing like with like in terms of patient complexity.
- 46. We then considered quality as a possible reason for the price difference. We did not find any evidence of material quality differences between HCA and TLC, and therefore in our view this is unlikely to explain the price difference.
- 47. In contrast, there is a substantial body of evidence and analysis indicating that HCA has a strong position in central London and faces weak competitive constraints (see our findings above). Our finding from the IPA that there is a price difference between HCA and TLC is consistent with that evidence.
- 48. We therefore still conclude that weak competitive constraints are leading to HCA charging higher insured prices than TLC. However, unlike at the time of our Final Report, we can no longer conclude on the size of this price difference between HCA and TLC, as we cannot be sufficiently confident that the IPA adequately controls for any differences in patient complexity, and hence compares like with like.

Profitability

49. Both in the Final Report and in our updated analysis in the remittal, we found that HCA earned returns substantially and persistently in excess of the cost of capital. Our finding of excess profitability suggests that the price of privately-funded healthcare services may be high in relation to the costs incurred by HCA in providing those services, and thus higher than we would expect in a well-functioning market. Therefore, we readopt our conclusions

in the Final Report that HCA made returns that were substantially and persistently in excess of the cost of capital and that this, together with the evidence concerning market share and barriers to entry, suggests that HCA is charging prices that are higher than would be expected in a well-functioning market.

Our findings on the AEC(s)

Insured AEC

- 50. We conclude that the following two structural features in the markets for the provision of privately-funded healthcare services to insured patients in central London are, in combination, leading to an AEC:
 - (a) high concentration, with HCA having a large market share; and
 - (b) high barriers to entry and expansion, arising primarily from high sunk costs and long lead times, the latter being exacerbated by limited site availability and planning constraints.
- 51. In combination, these features result in weak competitive constraints on HCA in the provision of privately-funded healthcare services for insured patients in central London.
- 52. We also conclude that the AEC is leading to customer detriment in the form of higher prices being charged by HCA than we would expect in a wellfunctioning market. As explained in paragraphs 47 to 49 above, this conclusion is supported by the profitability analysis which demonstrates that HCA has made returns that are substantially and persistently in excess of its cost of capital, and is consistent with the revised IPA.
- 53. We note that some of the evidence in support of the AEC is now less certain than at the time of the Final Report, and that we are no longer able to conclude on the extent of the customer detriment arising from the AEC. We have taken this into account in assessing the effectiveness and proportionality of potential remedies. However, we remain of the view that there is an AEC.

Self-pay AEC in central London

54. As explained in paragraph 6 above, the self-pay AEC decision has not been quashed by the CAT. However, as instructed by the CAT and given that we previously based our divestment decision on both the insured AEC decision and the self-pay AEC decision, we have also considered whether any of the

analysis undertaken during the remittal in relation to the insured AEC decision could have a material impact on the reasoning in support of the self-pay AEC decision insofar as it relates to the central London market.

55. We conclude that nothing that has emerged during the remittal has a material impact on the reasoning in support of the self-pay AEC decision insofar as it relates to the central London market.

Remedies

- 56. Having concluded that there are AECs in insured and self-pay private healthcare services in central London, we considered what, if any, additional remedies were required to address these AECs (these remedies would be in additional to those set out in the Final Report, and already implemented by the Private Healthcare Market Investigation Order 2014).
- 57. In our Notice of Possible Remedies (Remittal Remedies Notice) published in November 2015, we outlined six remedies which we were considering, and invited comments. The parties subsequently suggested further remedies and/or variations to the remedies that we had proposed. We considered each potential remedy, taking account of our consideration of the evidence we have received in written responses to our Remedies Notice, response hearings with parties to this investigation, and their further submissions of evidence.

Framework used

- 58. We assessed the extent to which the different remedy options are likely to be effective in achieving their aims, including whether they are practicable and when they would be likely to have an effect.
- 59. We also assessed the extent to which the different remedy options are proportionate, and in particular whether a 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.
- 60. In making our assessment of proportionality of the divestment remedy, we were mindful of the following comments made previously by the CAT:

- (a) 'The greater the interference with [European Convention on Human Rights (ECHR)] rights, the more robust and reliable the evidential basis relied upon to justify that interference may be required to be.' (HCA International Limited v CMA [2014] CAT 11, paragraph 36); and
- (b) 'where the CC has taken such a seriously intrusive steps as to order a company to divest itself of a major business asset ..., the [CAT] will naturally expect the CC to have exercised particular care in its analysis of the problem....and of the remedy it assesses is required.' (BAA v CC [2012] CAT 3, paragraph 20(7))

Divestiture remedy

- 61. We considered which hospitals HCA would need to divest in order to remedy, mitigate or prevent the AEC or customer detriment arising from the AEC.
- 62. Our view remains that divestiture of either the Wellington Hospital together with the Platinum Medical Centre, or the London Bridge Hospital together with the Princess Grace Hospital, would be of sufficient scale and provide a sufficiently broad range of specialisms to be capable of creating a new competitor which would be likely to exert a material constraint on HCA. As a result, we are of the view that a divestiture remedy is likely to be effective in remedying or at least mitigating the AEC we have identified and thereby would reduce prices.
- 63. We considered whether additional oncology services should be included in the divestiture packages, as suggested by some of the parties, since neither of the potential divestiture packages offered radiotherapy treatments. However, we observed that there are already a number of other private hospital operators offering radiotherapy treatments in central London, such that it was not clear that additional non-HCA radiotherapy facilities were required for effective competition in central London. Nonetheless, we do recognise that a divestment (or new entry) without a full range of oncology services may not be a fully effective constraint on HCA in the short term, although it would still have an impact on prices. However, we reasoned that a purchaser of a divested hospital could install the required facilities to compete across the full range of oncology services within a few years (if there was an economic case for doing so). Given the existing non-HCA radiotherapy capacity in the market and the time frame over which a purchaser of the divestiture package could develop radiotherapy, our view is that it would be disproportionate to require HCA to divest additional radiotherapy facilities.

- 64. We then assessed the proportionality of the proposed divestiture remedy. In order to be satisfied, after careful consideration, that such a remedy is proportionate, we would need to be satisfied that the benefits of the remedy are expected to outweigh the costs.
- 65. To assist us in making this assessment, we conducted an analysis of the net present value (NPV) of the proposed divestiture, which sought to quantify the costs and benefits of divestiture, taking into account a range of plausible scenarios. We compared the costs and benefits of divestiture against a counterfactual situation in which there was no remedy. In coming to a view on the appropriate counterfactual situation against which to assess the costs and benefits of a divestiture remedy, we considered how the market was expected to develop over the next 20 years, particularly with respect to new entry.
- 66. Our view is that there is a real prospect of new entry within the medium term (ie within 7 to 12 years from now, which is 5 to 10 years post divestment assuming it will take two years for divestiture to be completed). Given uncertainties about when new entry will occur, which have increased since the Remittal Provisional Decision on Remedies, we have included different scenarios based on new entry taking place in year 5, 7 or 10 following divestiture (which represents 7, 9 or 12 years from now).
- 67. The impact which new entry would have on prices would necessarily depend on the nature and scale of that entry. We note that the most likely new largescale entrant is Cleveland Clinic. Although Cleveland Clinic intends to provide a wide range of specialties, it has also confirmed that it does not intend to provide medical oncology on site for many years if at all. We note that the PMIs have told us that additional non-HCA oncology services are essential to constrain HCA, and we recognise that a new entrant providing PMIs with a credible alternative in oncology would be likely to be a more effective constraint on HCA than one which did not. However, our view is that increasing competition in other specialties will result in lower prices overall, even if HCA retains a strong position in one or a small number of specialisms. As we discussed earlier in paragraph 63 when considering divestiture packages, we consider that even without medical oncology, if Cleveland Clinic enters the market it is likely to exert significant downward pressure on HCA's prices.
- 68. We have not sought to model exact entry scenarios, as we consider this would be spuriously precise given the uncertainties described above. Instead we have modelled variations within three plausible scenarios: (a) a scenario in which entry removes 75% of the excess profits estimated from our profitability analysis; (b) a scenario in which entry removes 100% of the

excess profits; and *(c)* a scenario in which entry removes 50% of the excess profits. We recognise that none of the potential entrants in relation to whom we have specific evidence would be likely (by themselves) to have the impact reflected by the top end of this range. However, we consider that large-scale entry by a single player, most likely Cleveland Clinic, or a combination of entrants, would be likely to remove a significant proportion of the excess profits.

- 69. Next, we sought to assess the likely impact of divestiture on HCA's prices, ie the expected benefit of a divestiture remedy. One of the difficulties in conducting this analysis during the remittal was that we could no longer rely on the IPA to estimate the likely impact on prices that could be expected to result from a divestiture remedy. Therefore, we have had to rely much more heavily on our profitability analysis in the remittal in order to assess the extent to which HCA's prices exceed the competitive level (recognising the large number of assumptions required to identify excess profits by customer type, ie UK, overseas and NHS patients).
- 70. 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, the level of detriment. This, in turn, indicates the maximum extent to which prices might be expected to fall if HCA's market power were to be reduced, for example by a divestiture remedy, and gives a range of between 3.0% and 7.5% of revenues. However, there are a number of reasons we would not expect divestiture to result in prices falling by as much as 3.0% to 7.5% (ie to the level where HCA earns no more than its weighted average cost of capital (WACC)).
- 71. In a bargaining context, where prices are determined through bilateral negotiations between multiple hospital operators and multiple insurers, we would expect a divestiture to increase the competitive constraints on HCA, as it provides insurers 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 following divestiture, even if the extent of the decrease may vary for different hospital operators and PMIs. However, given that these negotiations lead to different hospital operators charging different prices to different insurers, it has not been possible to model the process of price setting in this market in a way that leads to predictions of how much average prices could be expected to change in response to additional competition (be it a divestiture or new entry).

- 72. As a large operator, HCA is likely to benefit from economies of scale not realised by smaller competitors. Some of HCA's excess profits may reflect these sorts of efficiencies.
- 73. Post divestment, therefore, HCA's unit costs would increase, as a consequence of any such loss of economies of scale, reducing the scope for it to cut prices while still making normal returns. Our best estimate is that, due to this loss of economies of scale, the potential decrease in prices as a consequence of divestment is at least two percentage points less than HCA's excess profits might otherwise imply.
- 74. In addition, we note that: *(a)* the mixed evidence on spare capacity has increased uncertainty over the likely impact of a divestment remedy on HCA's prices; and *(b)* we expect the information remedies imposed following the Final Report to have some impact on prices, irrespective of whether there is a divestiture.
- 75. Taking the above into account, we therefore believe the realistic range of price impact due to divestment to be substantially lower than the 3.0% to 7.5% range estimated by the profitability analysis.
- 76. The potential impact of the economies of scale which HCA would lose as a result of the divestiture are taken into account directly in our NPV analysis by adjusting the price benefits of the divestment. However, given the other factors set out in paragraphs 74 and 75 above, the results of the NPV analysis should be treated as an upper bound of the NPV of divestiture.
- 77. We also note that the range of estimated price impacts is far lower than the price impact that we had assumed when we ordered divestment in the Final Report.
- 78. What the NPV analysis shows is that under a range of different scenarios, reflecting different plausible assumptions about the price impact of divestiture and the timing and effectiveness of new entry, the NPV of divestiture ranges from –£[200–300] million to £[700–800] million.
- 79. We believe it is unlikely that there will be no new entry at all within 20 years following divestiture, or that there will be new entry which has no impact on prices. However, even disregarding the prospect of new entry entirely, we would still need to expect that divestment would lead to a reduction in prices, albeit only a small reduction, in order for the benefits of a divestment to outweigh the costs. There are various reasons why we cannot be confident that this would be the case. In particular, if the extent to which HCA's profits exceed its WACC is at the lower end of our range (3%), there is a real risk that the divestiture would have no impact on prices, once lost economies of

scale and the impact of the existing information remedy are taken into account. Even if we were to assume that HCA's profits are higher than this, for the reasons set out above there are uncertainties about how much prices will fall as a result of the divestiture.

- 80. In light of our NPV analysis, and giving due consideration to the uncertainties as to the price impact of divestiture and the prospect of new entry in the market within 20 years of the divestiture, we were unable to form an expectation that the benefits of a divestiture remedy in addressing the AEC would outweigh its costs. We were also mindful of the comments of the CAT regarding the intrusiveness of divestiture and the need for particular care before making such an order (see paragraph 60). We therefore conclude that the proposed divestiture package for HCA does not meet our criteria for a proportionate remedy.
- 81. The inquiry remittal group (the Group) is not unanimous in this decision, with two of the five group members (Anthony Morris and Jeremy Peat) dissenting.
- 82. The dissenting members consider 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). They believe that in the majority of the most plausible scenarios, the price benefits of divestiture would outweigh the costs significantly, and divestiture would therefore be both fully effective and proportionate.
- 83. Having concluded that our proposed divestiture package was disproportionate we also considered narrower divestiture packages (either London Bridge on its own, or one or more oncology centres) put forward by one party, which it considered would partially mitigate the AEC. However, we concluded that we could not form an expectation that the benefits of these remedies would outweigh the costs.

Other remedies

- 84. We noted submissions from parties that even if divestiture was not considered proportionate, we should still look at other ways of reducing HCA's market power pending any effective new entry. We therefore looked in detail at a range of other potential remedies. In particular, given the prospect of future entry and the possible time-limited nature of the AEC, we considered a 'light touch' price control measure which at the time of the Remittal Remedies Notice we had not been minded to consider further.
- 85. The remedies we considered were:

- requiring HCA to give competitors access to its hospital facility in order to compete;
- placing restrictions on HCA's further expansion in central London;
- a price control on HCA;
- preventing tying and bundling, including the removal of all restrictive contractual clauses with insurers;
- measures to enhance the availability of sites for private hospitals in central London; and
- imposing stronger constraints on HCA's relationships with consultants.
- 86. However, we conclude that all would be ineffective in addressing the identified AEC.

Our decision on remedies

87. We have therefore concluded that there are no additional remedies that would be both effective and proportionate in addressing the features in the private healthcare market in central London that we have identified, beyond those that we imposed in the Private Healthcare Market Investigation Order 2014 ('Final Order'). This was a majority decision of the Group.

Findings

1. Background to the remittal to the CMA

The private healthcare market investigation

- 1.1 On 4 April 2012, the Office of Fair Trading (OFT) made a market investigation reference to the Competition Commission (CC) under sections 131 and 133 of the Enterprise Act 2002 (the Act) regarding the supply or acquisition of privately-funded healthcare services¹ in the UK.²
- 1.2 Following an extensive market investigation, on 2 April 2014, the Competition and Markets Authority (CMA), the CC's successor, published its Final Report.³ The Final Report set out our findings based on the evidence we received and the analysis we carried out during the course of the market investigation.⁴
- 1.3 The Act requires us to decide whether 'any feature, or combination of features, of each relevant market prevents, restricts or distorts competition in connection with the supply or acquisition of any goods or services in the United Kingdom or a part of the United Kingdom'. If it is decided that there is such a feature or combination of features, then there is an adverse effect on competition (AEC).⁵
- 1.4 If the CMA decides there is an AEC, we are required to decide whether action should be taken by us, or whether to recommend that action is taken by others, for the purpose of remedying, mitigating or preventing the AEC, or any detrimental effect on customers so far as it resulted from or may be expected to result from the AEC, and if so what action should be taken.⁶
- 1.5 In the Final Report, we identified two structural features of the market for privately-funded healthcare services by private hospital operators,⁷ which were:

¹ For our purpose we considered that privately-funded healthcare services were services provided to patients via private facilities/clinics including private patient units (PPUs), through the services of consultants, medical and clinical professionals who work within such facilities.

² The terms of reference for that investigation can be found in Appendix 1.1 of the Final Report.

³ On 1 April 2014 the CMA took over many of the functions and responsibilities of the CC and the OFT, including in relation to the private healthcare market investigation. For ease of reference, from this point the CC, OFT and the CMA are referred to together as the CMA.

⁴ The findings are set out in Section 10 of the Final Report.

⁵ See sections 134(1) and 134(2) of the Act.

⁶ See section 134(4) of the Act.

⁷ When referring to private hospital operators, we generally mean a person who operates a private healthcare facility that has inpatient facilities including NHS PPUs. Similarly, by private hospital we generally mean a facility providing inpatient services as well as day-case and outpatient services.

- (a) high barriers to entry and expansion for private hospitals; and
- *(b)* weak competitive constraints exerted on private hospitals in many local markets including central London.⁸
- 1.6 We found the following:
 - (a) These two features in combination gave rise to AECs in the markets for the provision of hospital services which led to higher prices for inpatient and some day-case and outpatient hospital services to self-pay patients at private hospitals in local markets which are subject to weak competitive constraints across the UK, including in central London (the self-pay AEC decision).
 - (b) Together these features gave rise to AECs in the markets for hospital services which led to higher prices across the range of treatments being charged by HCA⁹ to private medical insurers (PMIs) for hospital services to insured patients in central London¹⁰ (the insured AEC decision).¹¹
- 1.7 In making these findings, we considered evidence from a large number of interested parties (including hospital operators, insurers, consultants and patients) and undertook a wide-ranging analysis which included an assessment of:
 - (a) barriers to entry and expansion;
 - (b) local competitive constraints; and
 - *(c)* market outcomes, including assessing both pricing and non-pricing outcomes (ie quality and range) and the profitability of the largest UK private hospital operators.
- 1.8 As part of our assessment of market outcomes in relation to pricing, we conducted, among other things, an empirical analysis of the insured prices that PMIs paid to different hospital operators (the IPA). Based on the results of this analysis we found that HCA charged higher prices to PMIs than The London Clinic (TLC) (its closest competitor in central London).

⁹ HCA International Limited and any company in the group as appropriate.

¹⁰ The area inside the North and South Circular Roads.

⁸ We have concluded in this remittal that it is more appropriate to describe the relevant feature as 'high concentration, with HCA having a large market share'. The weak competitive constraints on HCA are an outcome of the two features we have identified.

¹¹ The CMA also found that a number of other features relating to clinician incentives and information availability led to other AECs. These features and AECs are set out in the Final Report, paragraphs 10.7–10.9.

1.9 To address the AECs outlined in paragraph 1.6 the CMA decided on a package of remedies.¹² One element of this package was to require the divestiture by HCA of either the Wellington Hospital together with the Wellington Hospital Platinum Medical Centre, or the London Bridge and the Princess Grace hospitals, in order to introduce greater rivalry in central London (the 'divestment decision').

Appeals to the Competition Appeal Tribunal and remittal decision

- 1.10 After publication of our Final Report, HCA challenged the CMA's self-pay and insured AEC decisions and the divestment decision at the Competition Appeal Tribunal (CAT) on a number of different grounds.¹³ AXA PPP also appealed against, among other things, the divestment decision.¹⁴
- 1.11 In the course of HCA's appeal, the CAT ordered the CMA to disclose to HCA via a data room ('the CAT Data Room'), the data and methodology used in the IPA. HCA's external economic advisers, KPMG, reviewed the IPA data, methodology and analysis that was disclosed into the CAT Data Room and produced a report of its findings (the CAT Data Room Report (DRR)). HCA also instructed an independent economics expert, Professor Waterson, who visited the Data Room and produced a further report (the Waterson Report).
- 1.12 As a result of KPMG's review of the IPA, HCA claimed that there were substantive and significant issues¹⁵ regarding the robustness of the work done by the CMA for the IPA. In particular, KPMG identified two coding errors in the IPA which impacted the robustness of the estimated price difference between HCA and TLC.
- 1.13 In light of these two errors, the CMA considered that the appropriate course was for the matter to be remitted back to the CMA for it to review the IPA and re-consult with interested parties.
- 1.14 Consequently, on 12 January 2015, the CAT ordered that the insured AEC decision and the divestment decision be quashed and remitted back to the CMA for reconsideration.¹⁶

¹² Final Report, Section 11.

¹³ Further information on the HCA appeal can be found on the CAT website.

¹⁴ Further information on the AXA PPP appeal can be found on the CAT website.

¹⁵ CAT's Ruling of 23 December 2014, paragraph 5.

¹⁶ CAT's Order of 12 January 2015 which quashed the insured AEC decision, as described in paragraph 10.5 of the Final Report, and the divestment decision, described in paragraphs 11.132, 13.1(*a*) and 13.48.

- 1.15 The remainder of HCA's challenge and the relevant grounds of AXA's challenge have been stayed pending our redetermination of the insured AEC decision and the divestment decision.
- 1.16 The CMA concluded in its Final Report that there was no AEC for insured patients outside central London¹⁷ and that decision was not appealed. As such, the CMA is not able to reopen the analysis and findings in relation to outside central London.

Our approach to the remittal

1.17 The CAT provided some guidance on the approach that the CMA should take to the remittal in its Ruling of 23 December 2014, explaining that:

The task of the CMA will be to consult on the IPA and then redetermine the questions whether any new insured AEC decision should be made and whether any new divestment decision should be made. The CMA will have to consider what impact the new information and representations it receives in relation to the IPA has upon the existing statements of reasoning contained in the Final Report with respect to those decisions.

This [quashing of the insured AEC and divestment decisions] will leave all other parts of the Final Report, including all the reasoning in it and the other decisions regarding various other AECs on foot.¹⁸

1.18 In relation to the self-pay AEC decision, the CAT said:

If in the course of further consultation on the IPA anything emerges which [...] does have an indirect knock-on effect on the reasoning in relation to the self-pay AEC decision, the CMA will need to give careful consideration to that question and the implications it may have for the overall reasoning in the Final Report.¹⁹

1.19 Based on this guidance, the CMA's focus for the remittal was to review and re-consult on the IPA, where we conceded there had been errors. In relation to the other analysis and evidence, our starting point was the findings set out in the Final Report. Nevertheless, as part of reconsidering our decisions, we recognised that the CMA has a duty to take into account all relevant

¹⁷ Final Report, paragraphs 6.493–6.494 and 10.6.

¹⁸ CAT's Ruling of 23 December 2014, paragraph 56 b).

¹⁹ CAT's Ruling of 23 December 2014, paragraph 60.

arguments and evidence put to us by parties, not only on the IPA but also on the other building blocks of our analysis which fed in to our insured AEC decision (eg market definition, competitive constraints, barriers to entry, bargaining and profitability analysis). This includes argument or evidence about:

- (a) any changes in the provision of private healthcare services since the publication of the Final Report;
- (b) other issues not addressed in the Final Report or raised previously by parties; and/or
- (c) issues addressed in the Final Report, but where the parties disagreed with the approach taken or reasoning given in the Final Report.
- 1.20 We have relied upon the data on which the analysis in the Final Report was based. We decided we would update such data if parties put forward plausible arguments, supported by evidence where possible, as to why this was necessary, for example because of changes in the market since publication of the Final Report, or if we considered that it was appropriate to do so for other reasons.
- 1.21 The self-pay AEC decision has not been quashed by the CAT and therefore the CMA is not reconsidering that decision as part of this remittal. However, the self-pay AEC decision (in relation to central London) remains a relevant issue in the remittal insofar as it formed part of the basis for the divestment decision which has been quashed and which the CMA is reconsidering as part of the remittal.²⁰ As indicated by the CAT, we have therefore given careful consideration to whether anything which has emerged during the remittal could materially affect the reasoning in support of the self-pay AEC decision (see Section 10).

Conduct of the remittal

1.22 We published a notice of the launch of the remittal and invitation to comment on 25 February 2015.²¹ We received responses from AXA PPP, Bupa, HCA

 ²⁰ See paragraph 11.12 of the Final Report and as set out in our assessment of the benefits and the proportionality of the divestiture remedy, which included self-pay revenues.
 ²¹ Invitation to comment.

and Nuffield Health and published these initial written submissions on our website on 15 April 2015.^{22,23,24,25}

- 1.23 We subsequently published a further notice²⁶ on 4 April 2015 which invited additional views and evidence from interested parties to aid the CMA's reconsideration of the insured AEC decision and the divestment decision. Specifically, we asked parties to provide any new evidence on how the provision of private healthcare services in central London may have changed in the period since the publication of the Final Report.
- 1.24 Responses to this notice were requested by 4 May 2015. We received written submissions from AXA PPP, BMI Healthcare, Bupa, HCA and Nuffield Health and published non-confidential submissions on 19 June 2015.^{27,28,29,30,31,32}
- 1.25 Information requests were also sent to other parties, seeking either to clarify points made in submissions or to ask for additional information where parties had pointed to new evidence. For example, we sent information requests relating to entry or expansion and the disposal of sites, to various hospital operators and NHS trusts.
- 1.26 On 11 June 2015 we published a working paper which set out the analysis and revised results on the IPA (the Remittal IPA Working Paper).³³ Parties were invited to submit their responses by 24 July. Written submissions on the Remittal IPA Working Paper were received from AXA PPP, Bupa and HCA and non-confidential versions of these submissions were published on 6 August 2015. ^{34,35,36}
- 1.27 We subsequently held hearings with AXA PPP, Bupa, HCA and TLC in August to enable parties to make further representations to the Group, based on their previous submissions (primarily on the Remittal IPA Working

²² AXA PPP initial response.

²³ Bupa initial response.

²⁴ HCA initial response.

²⁵ Nuffield Health initial response.

²⁶ Invitation to comment and submit further evidence

²⁷ AXA PPP response to comment and submit further evidence.

²⁸ BMI response to comment and submit further evidence.

²⁹ Bupa response to comment and submit further evidence.

³⁰ HCA response to comment and submit further evidence.

³¹ Nuffield Health response to comment and submit further evidence.

³² HCA made an additional submission which was published 30 June 2015.

³³ The Remittal IPA Working Paper.

³⁴ AXA PPP response to the Remittal IPA Working Paper.

³⁵ Bupa response to the Remittal IPA Working Paper.

³⁶ HCA response to the Remittal IPA Working Paper.

Paper, but not limited to that). Non-confidential summaries of the hearings were published on 21 September 2015.^{37,38,39,40,41}

- 1.28 On 10 November 2015 we published our Remittal Provisional Findings report (Remittal PFs).⁴² The Remittal PFs summarised our provisional findings in relation to whether there were any features that were preventing, restricting or distorting competition in the market for the provision of privately-funded healthcare services to insured patients in central London. We provisionally found that the AEC was leading to customer detriment in the form of higher prices being charged by HCA than we would expect in a well-functioning market.
- 1.29 In addition, we also published a Remittal Notice of Possible Remedies⁴³ on 10 November 2015. This report considered what, if any, remedies were required to address the insured AEC, together with the separate AEC we found in the Final Report in respect of the self-pay AEC, in central London.
- 1.30 We invited parties to submit responses to both the Remittal PFs and Remittal Notice of Possible Remedies report by 3 December 2015. Written submissions were received from AXA PPP, Bupa, HCA, Spire Healthcare and TLC. Non-confidential versions of these submissions were published on 11 December 2015.^{44,45,46,47,48,49}
- 1.31 We subsequently held hearings with AXA PPP, Bupa, HCA and TLC in December 2015 to enable the parties to make further representations to the Group on the Remittal PFs and Remittal Notice of Possible Remedies report. Non-confidential summaries of the hearings were published on 22 January 2016.^{50,51,52,53}
- 1.32 On 22 March 2016 we published our Remittal Provisional Decision on Remedies (Remittal PDR).⁵⁴ We provisionally concluded that there were no

³⁷ AXA PPP hearing summary.

³⁸ Bupa hearing summary.

³⁹ HCA hearing summary.

⁴⁰ TLC hearing summary.

⁴¹ The London Clinic hearing summary was published on 1 October 2015.

⁴² Remittal Provisional Findings report.

⁴³ Remittal Notice of Possible Remedies report.

⁴⁴ AXA PPP response to the Remittal PFs.

⁴⁵ Bupa response to the Remittal PFs.

⁴⁶ HCA response to the Remittal PFs.

⁴⁷ Spire Healthcare response to the Remittal PFs.

⁴⁸ TLC response to the Remittal PFs.

⁴⁹ HCA's non-confidential submission was published on 15 December 2015.

⁵⁰ AXA PPP response hearing summary.

⁵¹ Bupa response hearing summary.

⁵² HCA response hearing summary.

⁵³ TLC response hearing summary.

⁵⁴ Remittal Provisional Decision on Remedies report.

additional remedies that would be both effective and proportionate in addressing the AECs that we have identified, beyond those that we imposed in the Private Healthcare Market Investigation Order 2014. This was a majority decision of the Group. We invited parties to submit responses by 13 April 2016.

- 1.33 We subsequently published a correction to the revised net present value (NPV) analysis,⁵⁵ originally published as an appendix to the Remittal PDR. On the basis of the revised NPV analysis, we found that our provisional conclusion (as set out in paragraph 1.34 above) was unchanged.
- 1.34 Written submissions to the Remittal PDR were received from AXA PPP, Bupa, HCA, Spire Healthcare and TLC. Non-confidential versions of these submissions were published on 29 April 2016.^{56,57,58,59,60,61} In addition, Bupa and HCA made written submissions on the revised NPV analysis.^{62,63}
- 1.35 Following the publication of the Remittal PDR, we held a hearing with Cleveland Clinic on 15 April 2016. A non-confidential summary of the hearing was published on 4 May 2016.⁶⁴ In response to specific requests from the parties, we also subsequently held further hearings with AXA PPP and Bupa in May 2016 for the purpose of making further representations to the Group. Non-confidential summaries of the hearings were published on 10 June 2016.^{65,66}
- 1.36 On 7 July 2016 we published a Supplemental Provisional Decision on Remedies (Remittal Supplemental PDR).⁶⁷ We concluded that, while our reasoning on the proportionality of the divestment remedy had changed since the Remittal PDR, our overall provisional conclusion that such a remedy would not be proportionate remained the same. We invited parties to submit responses to the Remittal Supplemental PDR by 21 July 2016.

⁶⁴ Cleveland Clinic hearing summary.

⁵⁵ Revised net present value analysis.

⁵⁶ AXA PPP response to Remittal PDR.

⁵⁷ Bupa response to Remittal PDR.

⁵⁸ HCA response to Remittal PDR.

⁵⁹ Spire Healthcare response to Remittal PDR.

⁶⁰ TLC response to Remittal PDR.

⁶¹ The London Clinic's non-confidential submission was published on 3 May 2016.

⁶² Bupa NPV submission.

⁶³ HCA NPV submission.

⁶⁵ AXA PPP hearing summary.

⁶⁶ Bupa hearing summary.

⁶⁷ Supplemental Provisional Decision on Remedies report.

- 1.37 Written submissions to the Remittal Supplemental PDR were received from AXA PPP, Bupa, HCA, Spire Healthcare and TLC. Non-confidential versions of these submissions were published on 25 July 2016.^{68,69,70,71,72}
- 1.38 The non-confidential versions of the evidence received, including parties' written submissions, responses to the Remittal IPA Working Paper and summaries of hearings with a number of parties, can be found on the CMA website.

Information disclosed to parties

- 1.39 In addition to publishing evidence, the Group also considered it necessary to disclose some of the confidential evidence/data to certain parties.⁷³
- 1.40 At the start of the remittal we set up new confidentiality rings to enable the external legal/economic advisers of the parties (should they wish to do so) to use the confidential information disclosed during the CAT proceedings, as well as certain confidential information disclosed during the original market investigation, for the purposes of the remittal (subject to the advisers giving new confidentiality undertakings).⁷⁴
- 1.41 During the remittal the CMA also disclosed new information into these confidentiality rings, including an unredacted version of the IPA Working Paper and other information relating to the IPA and further analysis and our NPV analysis.
- 1.42 The Group also considered that it was necessary to set up a disclosure room upon publication of the Remittal IPA Working Paper in order to disclose the underlying data, analysis and results of the revised IPA ('the IPA Working Paper Disclosure Room'). We received requests to access the IPA Working Paper Disclosure Room from Bupa and HCA and the Group agreed to give access to advisers for both parties.

⁶⁸ AXA PPP response to Remittal Supplemental PDR.

⁶⁹ Bupa response to Remittal Supplemental PDR.

⁷⁰ HCA response to Remittal Supplemental PDR.

⁷¹ Spire Healthcare response to Remittal Supplemental PDR.

⁷² TLC response to Remittal Supplemental PDR.

⁷³ Pursuant to section 241 of the Act, the CMA may disclose certain 'specified information' (within the meaning of section 238 of the Act) for the purpose of facilitating the exercise by it of its functions.

⁷⁴ These advisers had to undertake, among other things, not to advise any party in relation to any pricing negotiations between any hospital operator and any PMI concerning the price and/or terms and conditions of services supplied to patients of the PMIs for a defined period (the 'Adviser Disqualification Clause').

- 1.43 The Remittal IPA Working Paper Disclosure Room was open from 21 June until 21 July 2015. It operated under strict rules restricting access to the external economic and/or legal advisers of the parties.⁷⁵
- 1.44 Subsequently, the Group also considered it necessary to disclose certain information arising from the analysis carried out by HCA's advisers, KPMG, during the IPA Working Paper Disclosure Room, in order to put various questions to the parties. We disclosed this information into the existing confidentiality ring and also to a limited number of individuals from the parties (subject to approval by the CMA and signing separate confidentiality undertakings).
- 1.45 Following the publication of the Remittal PFs, a second Disclosure Room was opened, between 11 November and 2 December 2015, to allow a further review of the Insured Pricing Analysis.

⁷⁵ The CMA approved the external advisers, who were required to sign undertakings before being granted access to the disclosure room and, while in the disclosure room, to abide by a set of rules governing its use.

2. Structure of the Remittal Final Report

- 2.1 This document, together with its appendices, sets out the findings that we have reached based on our analysis of the submissions and evidence received during the course of the remittal. It refers, where appropriate, to material published separately on the CMA website. It also draws on the previous evidence and analysis set out in full in the Final Report. We have not reproduced the full evidence and analysis contained in the Final Report and therefore these findings should be read in conjunction with that report.
- 2.2 In each section we first briefly set out our previous relevant findings and the relevant section/paragraphs of the Final Report. We outline the relevant comments and evidence received from parties. We then assess and respond to those comments, where necessary cross-referring back to the Final Report, and describe any further work/analysis we have undertaken during the remittal. Finally, we conclude with our overall views on each area and whether we propose re-adopting our findings from the Final Report (either with similar or supplementary reasoning), or we propose different findings. This approach is taken to all the various building blocks of our analysis undertaken in the Final Report (eg market definition, competitive assessment etc).

Framework for our competitive assessment

2.3 Paragraph 163 of the Guidelines¹ explains that:

To provide focus and structure to its assessment of the way competition is working in a market the CC sets out one or more 'theories of harm'. A theory of harm is a hypothesis of how harmful competitive effects may arise in a market and adversely affect customers.'

2.4 Paragraph 165 of the Guidelines continues by stating that:

The starting point for formulating theories of harm in market investigations is the work already done by the referring body, particularly the terms of reference ... and decision documents.²

2.5 Building on the observations about the supply of privately-funded healthcare made by the OFT in its market study and the early submissions received following the OFT's reference, we identified seven theories of harm, which

¹ Guidelines for market investigations: Their role, procedures, assessment and remedies (CC3).

² Final Report, paragraph 4.4.

are set out in Section 4 of the Final Report³ and which we subsequently used to structure our overall investigation. We also noted that competitive harm can flow from five main sources:⁴

- (a) unilateral market power (including market concentration);
- (b) barriers to entry and expansion;
- (c) coordinated conduct;
- (d) vertical relationships; and
- (e) weak customer response.⁵
- 2.6 As further set out in Section 6 of the Final Report, we then applied the framework for our competitive assessment to determine whether there were features of the private healthcare markets that gave rise to one or more AECs.⁶
- 2.7 We have applied the same analytical framework to the competitive assessment of private hospital operators in central London in this remittal. The results of our analysis of product and geographic markets, defined in Section 3, provided a framework for the assessment of competitive constraints, in terms of the set of medical treatments and relevant (private) healthcare providers on which our assessment has largely focused. We then went on to reassess the market features characteristic of privately-funded healthcare services in central London based on an analysis of barriers to entry and expansion, local competitive constraints and the framework for bargaining (between hospital operators and PMIs). Finally, we reconsidered market outcomes for privately-funded healthcare services in central London, namely insured prices (including our revised empirical analysis of insured prices), non-price outcomes (quality and range) and profitability.

³ Final Report, paragraph 4.5.

⁴ Final Report, paragraph 4.7.

⁵ CC3, paragraph 170; paragraph 172 notes that these sources are not mutually exclusive.

⁶ This assessment addressed our theories of harm 1, 3 and 5 and certain aspects of theory of harm 7 (see the Final Report, paragraph 4.5).



Figure 2.1: The key building blocks of our competitive assessment of private hospital operators in central London

- 2.8 In summary, our findings of the remittal⁷ are set out in this report as follows:
 - Section 3 Market definition
 - Section 4 Competitive constraints on private hospital operators in central London
 - Section 5 Barriers to entry and expansion in central London
 - Section 6 Bargaining
 - Section 7 Quality and range
 - Section 8 Insured pricing analysis (IPA)
 - Section 9 Profitability
 - Section 10 Self-pay patients analysis
 - Section 11 AEC
 - Section 12 Remedies

⁷ We note that the Final Report contains sections on the background to the industry (Section 2) and the various parties (Section 3) which we have not sought to reproduce in this Remittal Final Report.

3. Market definition

- 3.1 In this section, we discuss and respond to parties' comments made during this remittal in relation to our previous findings on product and geographic market definition, as set out in Section 5 of the Final Report.
- 3.2 As we stated in the Final Report, market definition is a useful tool but not an end in itself. Identifying the relevant market involves an element of judgement, and the boundaries of the market do not determine the outcome of our competitive assessment in a mechanistic way. In particular, our competitive assessment will take into account any relevant constraints from outside the market, segmentation within it, or other ways in which some constraints are more important than others.¹

Product market definition

- 3.3 In relation to the product market(s) the evidence on which we based our previous findings and our assessment is set out in paragraphs 5.5 to 5.51 of the Final Report and our conclusions are set out in paragraphs 5.52 to 5.54 of the Final Report.
- 3.4 In the provision of hospital services we found different product markets for individual specialties and, for each specialty, separate product markets for inpatient, day-patient and outpatient services. We also found that privately-funded medical treatments appeared to be in a separate product market from NHS-funded medical treatments as a whole.
- 3.5 Based on these findings we took the following approach in our competitive assessment (see paragraph 5.54 of the Final Report):²
 - *(a)* Focused largely on general³ private hospitals and private patient units (PPUs) providing inpatient care.
 - (b) Aggregated most of the specialties where we considered it appropriate.
 - (c) Considered constraints within these markets arising in the provision of more complex treatments (also known as 'high acuity' or 'tertiary' care).

¹ CC3, paragraph 133.

² This approach influenced our calculations of shares of supply. See paragraph 3.14 below for a more detailed explanation of how we calculated shares of supply in the Final Report.

³ By 'general' private hospitals and PPUs, we mean the facilities that are not specialised in a single specialty (or treatment).

(*d*) Considered constraints from outside the markets exerted by NHS hospitals on a case-by-case basis.

Parties' comments on the product market definition and our response

- 3.6 During the remittal we received various comments from parties in relation to product market definition and we deal with these points below. In particular, we discuss:
 - (a) HCA's arguments about inconsistencies in our previous approach due to our focus on the most commonly provided specialties and general private hospitals and PPUs; and
 - *(b)* HCA's arguments against our previous approach of excluding outpatient and day-patient clinics (ie non-inpatient facilities) from the set of hospitals and facilities that formed the focus of our competitive analysis.⁴

Focusing on specialties most commonly provided and on general private hospitals and PPUs

- Our conclusions in the Final Report
- 3.7 We found that the vast majority of private hospitals and PPUs we analysed are not specialised in a single specialty (or treatment).⁵ We also found that while most general private hospitals and PPUs provide a range of specialties, not every specialty is offered at every single hospital.⁶
- 3.8 On the basis of these findings, we adopted the approach of focusing our competitive assessment on general private hospitals and PPUs and on the 16 specialties⁷ that were offered by 80% or more of the facilities in our set of hospitals. In addition to these 16 specialties, we also considered oncology, as it accounted for a relatively large share of total admissions and total revenue in 2011.
 - Parties' comments during the remittal
- 3.9 During this remittal, HCA raised new criticisms⁸ of some apparent inconsistencies in our shares of supply in central London. These inconsistencies

⁴ We consider competitive constraints from non-inpatient providers in paragraphs 4.41–4.52 and 4.117–4.127. ⁵ Final Report, paragraph 5.45.

⁶ Final Report, paragraph 5.49.

⁷ These 16 specialties are: anaesthetics; cardiology; clinical radiology; dermatology; gastroenterology; general medicine; general surgery; neurology; obstetrics and gynaecology; ophthalmology; oral and maxillofacial surgery; otolaryngology; plastic surgery; rheumatology; trauma and orthopaedics; and urology.

⁸ HCA response to comment and submit further evidence, paragraphs 4.98–4.109 and 4.125–4.127.

arose as a consequence of our overall approach of focusing on common specialties and general providers. For example, HCA has pointed out that we omitted what it considered to be certain key competitors such as Great Ormond Street Hospital's PPU (paediatrics) and Moorfields Eye Hospital's PPU (specialising in ophthalmology) from our shares of supply.

- 3.10 In its response to our Remittal PFs, Bupa submitted that there were important specialties in central London outside the 16 specialties and oncology on which we focused specialisms which HCA 'dominated' and which the CMA should consider in its competitive assessment and remedies design.⁹ Bupa highlighted [≫] as examples of such specialties.
 - Our response
- 3.11 We discuss these criticisms in more detail, together with several robustness checks in response to them, in the next section on competitive constraints. We believed that our overall approach, as set out in the Final Report, of focusing on general facilities and the most commonly provided specialties remains valid. We continued to assess competitive effects both inside and outside our market definition, and therefore our conclusions do not depend on excluding certain specialties or specialist providers from the relevant product market. We assessed competitive conditions are materially different to those in other specialties in central London. This includes, where relevant, specialties that are not within the set of 16 that we had previously identified. We also took into account specialist providers in central London where we have evidence that these exert a competitive constraint.

Excluding outpatients and day-case-only providers

- Our conclusions in the Final Report
- 3.12 In the Final Report, we noted that outpatient and day-patient care were becoming increasingly important, in terms of both admissions and revenue.¹⁰ We also noted that there was an asymmetric constraint, in that hospitals that provided inpatient care also typically provided day-patient and outpatient care in the same specialty, whereas the converse was not usually the case.¹¹

⁹ Bupa response to the Remittal PFs, paragraph 1.7(ii).

¹⁰ Final Report, paragraph 5.36.

¹¹ Final Report, paragraph 5.38.

- 3.13 We focused in the Final Report on the supply of private healthcare services (inpatient, day-case and outpatient) by providers of inpatient care because:¹²
 - *(a)* providers of inpatient care accounted for a substantial share of revenue;¹³
 - *(b)* concentration was relatively higher in the provision of inpatient care than in the provision of day-patient and outpatient care;¹⁴ and
 - (c) while providers of inpatient care competed with a wider set of providers, including day- and outpatient-only clinics, in the provision of day-patient and/or outpatient care, this was unlikely to hold across the full range of day- and outpatient treatments. In particular, certain day- and outpatient treatments (for example, those which required inpatient care as a back-up or those which were ancillary to an inpatient treatment) were likely to be subject to similar competitive conditions as those arising in the provision of inpatient treatments. Outpatient- and day-patient-only providers would not be able to compete effectively with inpatient providers for some of these services.
- 3.14 Focusing on providers of inpatient care affected our competitive assessment in the Final Report. Most directly, in our competitive assessment of central London, we calculated shares of total admissions (ie inpatient and day-case admissions) by counting only admissions at facilities that provided inpatient care, and excluded admissions at day-patient-only facilities. Similarly, we calculated shares of total revenues (ie inpatient, day-case and outpatient revenues) by including only revenues from facilities that provided inpatient care, and excluded revenues from facilities that only offered day-case or outpatient care.¹⁵ However, we noted that our competitive assessment was also based on shares for inpatient admissions and revenues, which are unaffected by non-inpatient providers.

¹² Final Report, paragraph 6.4.

¹³ Final Report, paragraph 5.43. According to LaingBuisson (*Private Acute Medical Care: UK Market Report 2013*, p13), the total revenue of private independent acute medical hospitals and clinics was £4,352 million in the UK in 2012. The revenue of the operators owning or managing the 192 private hospitals we have looked at in the Final Report accounts for more than 80% of this total revenue.

¹⁴ Final Report, paragraph 5.47 – according to LaingBuisson, there were 264 day-only clinics in the UK in 2013, compared with 201 facilities registered to take inpatients. Most of the day-only facilities are relatively small clinics. They accounted for 27% of all private admissions in the UK in the first half of 2013, while the remaining 73% of total admissions took place in private hospitals that also provided inpatient care (ibid, Table 6.1, p119). There is an error in the Final Report paragraph 5.47: the sentence 'They account for 27% of all private day-case admissions in the UK in 2012' should say: 'They account for 27% of all private admissions in the UK in the first half of 2013'.

¹⁵ Final Report, paragraph 6.204.

- Parties' comments during the remittal
- 3.15 During the remittal, HCA argued that we should not have excluded outpatient- and day-case-only centres from our competitive assessment.¹⁶ HCA advanced three arguments for this:
 - (a) First, HCA argued that outpatient and day-case care was growing in importance, and accounted for a majority of admissions. For some specialties (fertility, orthopaedics and oncology), outpatient and daycase services were the primary mode of delivering care, so excluding non-inpatient facilities presented a distorted picture of the competitive conditions for those specialties.
 - (b) Secondly, HCA argued that we were incorrect to suggest that certain outpatient and day-case treatments required inpatient back-up. According to HCA, there were no outpatient treatments that required inpatient care as a back-up and which needed to be carried out in hospitals. Similarly, HCA argued that all day-case procedures might be carried out in day-case clinics, and only a minority of patients might require inpatient back-up. Typically, it was those patients with more complex underlying conditions or co-morbidities who might require an inpatient stay in case of any complications. We discuss HCA's arguments and evidence on this point in more detail below.

HCA explained that it was the patient's condition, rather than the procedure, which determined whether or not a patient could be referred to a day-case clinic or to a hospital. Therefore, in HCA's view, day-case providers competed with hospitals for the majority of patients across all day-case procedures. Even if inpatient care was required later, HCA noted that we previously found that it was not necessarily a relevant customer benefit to remain within a single healthcare provider's treatment pathway.¹⁷ Therefore, outpatient and day-case facilities could effectively compete for patients, and transfer them to other inpatient facilities or the NHS if back-up was needed.

(c) Finally, HCA argued that, even if it were to accept the point on inpatient back-up, we had not distinguished between HCA's outpatient/day-case services which required inpatient back-up and those which did not, for which outpatient and day-case centres could provide effective competition. Therefore, HCA argued that it was unfair for us to exclude outpatient and day-case centres from the shares of supply that we

¹⁶ HCA response to comment and submit further evidence, paragraphs 4.100–4.108.

¹⁷ Final Report, Appendix 11.1, paragraph 59.

calculated in the Final Report, when we include revenue and admissions across the whole range of HCA's outpatient and day-case services.

- Our response
- 3.16 We accepted HCA's point that including non-inpatient facilities in central London would affect our assessment of the competitive constraints on private hospitals' day-case and outpatient activity. However, we did not accept that this invalidates our approach of focusing primarily on inpatient facilities:
 - *(a)* First, in our competitive assessment, we also took into account HCA's share of inpatient admissions and revenues, which are unaffected by non-inpatient providers (as these do not have any inpatient admissions or revenues).¹⁸
 - (b) Second, we accepted that HCA's shares of total admissions and revenues will be overestimated to some extent as a result of omitting non-inpatient providers. To address this issue, we have given some further consideration in this remittal to the competitive constraints provided by non-inpatient facilities in central London (see paragraphs 4.41 to 4.52 and 4.117 to 4.127) and we found that this overestimation is unlikely to be significant.¹⁹
- 3.17 Furthermore, we noted that while the competitive constraints may differ for inpatients, day-case and outpatient services, to the extent that insurers contract across a range of services when dealing with inpatient providers, this may lead to competitive conditions for inpatient provision also having an effect on competition for day-case and outpatient activity.

Conclusions on product market definition

3.18 On the basis of the evidence and analysis set out in paragraphs 5.5 to 5.51 of the Final Report, and the additional evidence and analysis presented above, we readopted the findings in paragraphs 5.52(a) and (c) of the Final Report on the relevant product markets, which are:

(a) Due to the fact that demand-side substitution by patients across different medical treatments is likely to be very limited, the starting point for product market definition is one of

¹⁸ For example, in paragraphs 6.205 and Appendix 6.10, paragraphs 37–39 of the Final Report, we explicitly refer to and discuss inpatient shares of admissions and revenues.

¹⁹ We estimate that non-inpatient providers will have virtually no effect on HCA's share of total admissions and reduce HCA's share of total revenues by less than [%] points.

narrowly delineated product markets covering each different medical treatment. In addition, privately-funded medical treatments appear to be in a separate product market from NHS-funded medical treatments as a whole.

. . .

(c) In the provision of hospital services:

(i) There is a significant degree of supply-side substitution across treatments within the same existing specialty. Within each given specialty, however, supply-side substitution is greater for more routine treatments, which do not require highly-specialised equipment and staff, than for more complex treatments. There is more limited evidence of hospitals switching to treatments in new specialties. Within each given specialty, while there appears to be scope for hospitals providing inpatient care to switch capacity into the provision of day-patient and outpatient treatments, the ability to switch into the provision of inpatient treatments by day-only/outpatient clinics, which provide only outpatient and/or day-patient care, appears very limited (ie asymmetric constraints appear to exist).

(ii) Focusing on the 215 general private hospitals and general PPUs [across the UK] which provide inpatient care,²⁰ 16 specialties are offered by 80 per cent or more of these hospitals. These 16 specialties accounted for 86 per cent of total admissions²¹ and 75 per cent of total revenue²² at these hospitals in 2011.

(iii) Oncology is the main specialty accounting for a relatively large share of total admissions and total revenue that is not among the specialties offered by more than 80 per cent of the 215 general private hospitals and general PPUs [across the UK] with inpatient care. In particular, oncology accounted for 9.6 per cent of total admissions and 7.5 per cent of total revenue at these hospitals in 2011. Oncology is currently

²⁰ Including: (a) all private general hospitals with inpatient care owned by BMI, HCA, Nuffield, Ramsay and Spire; (b) 19 of the largest other private general hospitals with inpatient care (including Aspen and Circle); (c) all general PPUs with inpatient care managed by BMI, HCA, Ramsay and East Kent Medical Services; and (d) the 40 largest general PPUs with inpatient care by revenue. ²¹ Including inpatient and day-patient.

²² Including inpatient, day-patient and outpatient care.

offered by 135 (64.7 per cent) of the 215 general private hospitals and general PPUs which provide inpatient care, plus four specialised private hospitals and PPUs providing inpatient care.

- 3.19 We also readopted the approach in relation to product market definition set out in paragraph 5.53(b) of the Final Report, which is:
 - (b) In the provision of hospital services:

(i) Given the significant degree of supply-side substitution across treatments within an existing specialty, the market is not limited to the treatment, but extends to the specialty. Given the more limited supply-side substitution across treatments in new specialties, the market is no wider than each specialty.

(ii) Given the existence of asymmetric constraints between hospitals providing inpatient care and day-only/outpatient clinics, for each specialty, inpatient, day-patient and outpatient care are considered to be distinct product markets.

- 3.20 We revised the approach that we previously set out in paragraph 5.54(a) of the Final Report in relation to the assessment of competitive constraints in the provision of hospital services:
 - (a) Although we have defined separate markets for inpatient, day-patient and outpatient care, the boundaries of these markets are blurred to some extent. We acknowledged that, in general, hospitals providing inpatient care compete with a wider set of providers, including dayonly/outpatient clinics, in the provision of some day-patient and/or outpatient care. We therefore no longer relied on our original argument in paragraph 5.54(a) of the Final Report that some day-patient and outpatient treatments are likely to be subject to similar competitive conditions as those arising in the provision of inpatient treatments. because of the need for inpatient back-up or their ancillarity to inpatient treatments. However, in light of the evidence that we have considered in this remittal we believed that the competitive constraint from dayonly/outpatient clinics in central London is unlikely materially to affect our competitive assessment. Therefore, our competitive assessment remained focused largely on hospitals providing inpatient care, and we considered that it is still appropriate to focus mainly on the set of general

private hospitals and general PPUs providing inpatient care.²³ We also took into account specialist providers in London, on a case-by-case basis, where we had evidence that these exert a competitive constraint.²⁴

3.21 We readopted the findings in paragraphs 5.54(b)–(d) of the Final Report in relation to the assessment of competitive constraints in the provision of hospital services, which are:

(b) We concluded that each specialty is considered as a separate product market. However, supply-side substitution appears to be greater across treatments in different specialties when the hospital already provides the relevant specialties. Given that many hospitals in our set are already active in the provision of treatments across [the] set of 16 specialties, and are therefore well placed to expand into new treatments across each of those specialties, for the purposes of the assessment of competitive constraints we have aggregated the 16 specialties together where we considered it appropriate. Given that fewer hospitals in our set are active in the provision of oncology compared with the other 16 specialties, we have looked at oncology separately in our competitive assessment where possible.

(c) Given that, within each specialty, supply-side substitution appears to be greater for more routine treatments than for more complex treatments, in our competitive assessment we considered constraints within these markets arising in the provision of more complex treatments (also referred to as 'high acuity' or 'tertiary' care).

(d) In our competitive assessment we considered constraints from outside the markets exerted by NHS hospitals, ie providers of NHS-funded treatments, on a case by case basis, where we have evidence that these exert a competitive constraint.

²³ We further note that, as we state in paragraph 6.5 of the Final Report, depending on the specificity of each analysis, our analyses of competitive constraints have considered inpatient treatments and/or day- and outpatient treatments.

²⁴ Previously, we took into account three specialist oncology facilities in Greater London: Mount Vernon Cancer Centre (EN Hertfordshire Trust); London Oncology Clinic (HCA); and NHS Ventures UCLH (HCA).

Geographic market definition

- 3.22 In relation to the geographic market, the evidence on which we based our original findings and our assessment are set out in paragraphs 5.55 to 5.69 of the Final Report and our conclusions are set out in paragraph 5.70 of the Final Report.
- 3.23 In the provision of hospital services we found that generally hospitals in central London were close substitutes for each other, but were only weakly constrained by hospitals outside central London, and therefore we considered central London as a separate geographic market. However, in our competitive assessment we took into account the strength of the competitive constraints exerted on private hospitals by other hospitals/PPUs both within and outside this market.
- 3.24 We address parties' comments on our geographic market definition below, in particular, HCA's arguments against our approach of defining central London as a separate geographical market.

Parties' comments on the geographic market definition and our response

Our conclusions in the Final Report

- 3.25 Our reasoning for adopting a central London market definition is set out in the Final Report, paragraph 5.59. There were two main reasons:
 - (a) Market conditions, both on the demand side and on the supply side, differ markedly from those prevailing elsewhere in the UK or are more evident in central London than elsewhere, including:
 - (i) 'a high PMI penetration rate, in part arising from the large presence of corporate PMI customers';
 - (ii) 'a significant number of patients travelling from greater London and outer London into central London';
 - (iii) 'a significant number of private hospitals and PPUs, with a widespread offer of complex treatments or specialties';
 - (iv) 'strong reputation of some private hospitals and PPUs which are perceived by patients as offering a higher quality of care than private hospitals and PPUs elsewhere in the UK'; and

- (v) 'private hospitals and PPUs in general drawing patients from very wide geographic areas'.²⁵
- *(b)* PMIs, and some hospital operators, consistently expressed the view that hospitals in central London (and possibly a subset of these) were closer substitutes for each other.²⁶
- 3.26 For the purposes of our analysis, we defined central London as the NUTS2 region of Inner London,²⁷ which roughly coincides with the areas within the North and South Circular roads.

Parties' comments during the remittal

- 3.27 During this remittal, HCA reiterated its argument made during the original investigation that we had adopted an incorrect approach to geographic market definition, which excluded from the relevant geographic market providers based outside central London.²⁸ HCA argued that:
 - (a) We should have used 80% catchment areas (ie defining the catchment area as the set of surrounding postcode areas in which at least 80% of a hospital's patients live), as we did for hospitals outside central London. Only [≫]% of HCA's admitted patients had a central London postcode.²⁹ The majority of HCA's patients, travelling from outside central London, had a wide range of alternative local providers to choose from. HCA further argued that, as it could not discriminate between patients, competition for patients outside central London would benefit all of its patients, even those in central London who did not travel outside this area.
 - (b) In HCA's view, the distinct features of central London that we outlined did not lead to the conclusion that patients did not regard non-central London hospitals as effective substitutes. HCA pointed out that we had not carried out any analysis of patient choices to determine the extent to which patients would switch in response to a small but significant

²⁵ Final Report, Appendix 6.10, paragraphs 3–34.

²⁶ Final Report, Appendix 6.10, Annex A, paragraphs 6–9, 16, 18, 23–26 and 42–46.

²⁷ NUTS stands for Nomenclature of Territorial Units for Statistics, a commonly used standard for referencing regions for statistical purposes, developed and regulated by the European Commission. Inner London includes the following boroughs: Camden; City of London; Hackney; Hammersmith and Fulham; Haringey; Islington; Kensington and Chelsea; Lambeth; Lewisham; Newham; Southwark; Tower Hamlets; Wandsworth; and Westminster.

²⁸ HCA response to comment and submit further evidence, paragraphs 4.79–4.94.

²⁹ HCA response to comment and submit further evidence, paragraph 4.80, based on 2011 HCA patient admissions data. HCA noted that 'the proportion may be even less since many of these may have their main residence outside central London or may have recorded their work address instead of their home.' (HCA submission on 1 May 2015, paragraph 4.91.)

deterioration in value (such as quality of care) of central London hospitals.³⁰

Our response

- 3.28 HCA raised similar concerns during our original investigation, see the Final Report, paragraphs 6.232 to 6.236.
- 3.29 Before we address HCA's concerns, we note that, regardless of the precise boundaries of geographical markets, in the Final Report we considered the strength of competitive constraints from hospitals within and outside the geographical market.³¹ We assessed the competitive constraints from outside our defined market (including from Greater London hospitals) and found that our conclusions are robust to these considerations. As a result, the competitive constraint exercised by any genuine competitor on HCA and other central London providers will have been taken into account, regardless of whether they fell within the relevant geographic market.
 - Catchment areas and patient travel patterns
- 3.30 In the Final Report we stated that catchment areas were only a starting point for our competitive assessment, with a number of widely-recognised limitations. Their use for hospitals outside central London was pragmatic and necessary due to the large number of local markets. We considered in our local competitive assessment the constraints on each hospital, whether arising within or outside the hospital's catchment area.³² In contrast, for hospitals in central London, we were able to use a more comprehensive approach to geographic market definition, taking into account distinct features and parties' views about the closeness of competition between specific hospitals.³³ However, after using a more comprehensive approach for hospitals in central London, as noted in paragraphs 3.2 and 3.29, above, we still considered competitive constraints from within and outside the market.
- 3.31 Furthermore, even though central London hospitals have large catchment areas that include outer London hospitals, this does not necessarily imply that they are equally constrained by all hospitals in their catchment areas. Relying on shares calculated for Greater London would give too much

³⁰ As noted above, this is analogous to the SSNIP test that competition authorities routinely apply when considering the scope of a market.

³¹ We explicitly considered the competitive constraints from private hospitals and PPUs in outer London in, for example, the Final Report, paragraphs 6.224–6.228 and Appendix 6.10, paragraphs 38 & 39. ³² Final Report, paragraphs 5.64–5.67.

³³ Final Report, paragraphs 6.234 & 6.235.

weight to the competitive constraint imposed by outer London hospitals on central London hospitals (see Section 4 paragraphs 4.149 to 4.176 for our assessment of the competitive constraints from outer London hospitals).

- 3.32 In the Final Report, we found that a significant number of patients travel from Greater London into central London. We found that, for insured and self-pay patients in 2011, 54% of patients living in Greater London attended a central London hospital.³⁴ In contrast, only 5.4% of patients living in central London attended a hospital in Greater London. We also found that the median 80% catchment area was 24 miles for central London hospitals, but only 8 miles for Greater London hospitals. These indicate that, for central London patients, hospitals in Greater London do not appear to be effective substitutes and that Greater London hospitals are not successful at winning patients' business from the central London area.
- 3.33 We noted that, as HCA has pointed out, these travel patterns do not necessarily inform us about the behaviour of the marginal patient (ie patients who would switch to or away from using central London hospitals in response to a small change in the value of central London hospitals). For example, central London hospitals may still be constrained by Greater London hospitals when competing for the marginal self-pay patient who needs relatively straightforward treatment and lives in Greater London, particularly if central London hospitals are unable to discriminate between patients based on where they live. However, as we noted in the Final Report, as each PMI needs to be able to offer local hospital cover which meets the needs and expectations of many geographically dispersed policyholders, a hospital will only be effectively constrained where there are alternative hospitals that are suitable not just for some, but for a substantial number of policyholders in the area.³⁵
 - Distinct features of central London
- 3.34 We believed that the competitive conditions for private healthcare services in central London are materially different to those elsewhere in the UK, including outer London, due to the features that we describe in paragraph 3.25 above. We considered that the following features are of particular importance:
 - (a) Some private hospitals and PPUs in central London are perceived by patients, doctors and insurers to be offering a higher quality of care than

³⁴ Final Report, Appendix 6.10, Table 5.

³⁵ Final Report, paragraph 6.145.

private hospitals and PPUs elsewhere in the UK, including Greater London. This implies that outer London hospitals are not viewed as close substitutes for central London hospitals. Even though, as HCA pointed out, we could not objectively judge the relative levels of quality, what matters for competitive constraints are patients' and consultants' perceptions of quality, which we were able to test via surveys and questionnaires.³⁶

- (b) Some complex treatments, particularly those using new technologies or focused on high acuity care and complex and tertiary surgery (eg cardiac, neurosurgery and oncology services), are available in central London and are not widely available in private hospitals and PPUs outside central London.³⁷ For patients who require these treatments, outer London hospitals are clearly not effective substitutes for central London hospitals. Also, PMIs need to be able to offer access to these more complex treatments, some of which may only be provided in central London, in order to provide attractive medical insurance products. This is particularly the case if access to these complex specialties is important to customers. For instance, there is some evidence that access to oncology treatments is the main reason why customers take out PMI.³⁸
- (c) Central London has a large presence of corporate PMI customers. These corporate clients are particularly important for PMIs, as many of them may have a national presence in addition to a headquarters in central London, so they can represent a significant volume of business for PMIs beyond central London. PMIs report that many corporate clients in central London demand access to central London hospitals, and therefore do not regard Greater London hospitals as effective substitutes because they would like their employees to be able to access treatment and appointments close to their place of work to minimise absences and disruption.^{39,40} As a result, PMIs need to provide access to central London hospitals in order to have a credible offer for corporate clients.

³⁶ Final Report, Appendix 6.10, paragraphs 6–13, and also Appendix 2.1, paragraph 40.

³⁷ For example, HCA acknowledged in a hearing that there was a stronger likelihood of more treatment being provided in central London compared with outside central London, and that hospitals in central London took and treated more complex tertiary cases that were more expensive on average. (HCA hearing summary.)
³⁸ Final Report, Appendix 6.2, paragraph 60 – according to HCA's Cancer Strategy document, 91% of people gave cancer as their main reason for taking out PMI.

³⁹ Final Report, Appendix 2.1, paragraphs 30–41.

⁴⁰ On this point, HCA argued (in paragraph 4.90(ii) of HCA response to comment and submit further evidence) that while employers may wish to secure access to convenient central London hospitals for diagnostic and outpatient appointments for employees, for inpatient treatment (which is the focus of our analysis), patients would prefer to be treated at a hospital near their home rather than their place of work. However, this observation does not change that fact that PMIs still need to obtain access to central London hospitals for some customers (such

Conclusions on geographic market definition

3.35 On the basis of the evidence and analysis set out in paragraphs 5.55 to 5.69 of the Final Report, and the additional evidence and analysis set out above, we readopted the approach to geographic market definition for the provision of private healthcare and the way in which we assess competitive constraints that we set out in paragraphs 5.70(a), (c)(i) and (c)(iii) of the Final Report, which are:

(a) We treat the geographic scope of competition in the provision of private healthcare services as local for both consultant and hospital services.

(c) In relation to hospital services, we have defined the local geographic markets on the basis of the location of suppliers. Local geographic markets are defined as the areas covering sets of private hospitals and PPUs competing closely because enough patients consider them to be substitutes in terms of distance. In particular:

(i) we have considered the area covering the private hospitals and PPUs in central London as a separate geographic market;

• • •

. . .

(iii) regardless of the precise boundaries of these geographic markets, in our local competitive [assessment] for central London... we have taken into account the relative strength of the competitive constraints exerted by different private hospitals/PPUs within [this] geographic [market]. We have also considered competitive constraints provided by private hospitals/PPUs located outside [this] geographic [market].

as those resident in central London or corporate clients) and for some treatments (such as day-case and outpatient treatments, but also any inpatient treatments that are only available in central London hospitals). Also, PMIs stated that patients who had received an initial consultation in central London were more likely to receive inpatient treatment with the same consultant, at the consultant's preferred facility (often a central London hospital).

4. Competitive constraints in central London

4.1 This section of the Remittal Final Report (Remittal FR) covers our assessment of competitive constraints faced by private hospitals (including PPUs) located in central London, including our analysis of shares of supply and capacity.

Our conclusions in the Final Report

- 4.2 We assessed the competitive constraints faced by private hospitals including PPUs located in central London.¹ We then examined competitive constraints from outside the relevant market, in particular from publicly-funded healthcare provided by the NHS and from private hospitals (including PPUs) in outer London.² We found that:
 - (a) HCA faces weak competitive constraints from private hospitals including PPUs located in central London;
 - (b) NHS services are not a close substitute for private patient services provided by HCA and the competitive constraints exerted by the NHS on HCA are, if any, very limited; and
 - (c) HCA faces weak competitive constraints from Greater London hospitals.
- 4.3 We considered parties' views on competitive constraints between private hospitals including PPUs in paragraph 6.216 of the Final Report, and set out these views in the Final Report, Appendix 6.10, Annex A. We noted that our finding on the competitive constraints from private hospitals and PPUs in outer London was 'consistent with the views of many parties', as set out in the Final Report, Appendix 6.10, Annex A.
- 4.4 We also considered whether the vertical integration between HCA and certain GP practices was likely to lead to significant harm to competition in central London. We examined the relevant GPs' referral patterns and found that the evidence did not indicate that HCA's vertical integration in GP practices was at that time likely to lead to foreclosure of its rivals from patients.
- 4.5 Finally, in paragraphs 6.231 to 6.253 of the Final Report, we outlined and directly responded to several arguments that HCA raised in relation to our central London analysis. In the course of this remittal, HCA has reiterated many of its arguments and responded to our reasoning in these paragraphs

¹ Final Report, paragraphs 6.200–6.218.

² Final Report, paragraphs 6.220–6.228.

of the Final Report. HCA has also advanced several new arguments criticising our competitive assessment of central London.

Further assessment during the remittal

- 4.6 In this section, we discuss and respond to parties' arguments and additional evidence provided during this remittal in relation to our assessment of competition within central London. More specifically, we discuss:
 - (a) competitive constraints from private hospitals including PPUs (and noninpatient providers) in central London (paragraphs 4.7 to 4.128);
 - (b) competitive constraints from the NHS (paragraphs 4.129 to 4.148);
 - (c) competitive constraints from private hospitals and PPUs outside central London (paragraphs 4.149 to 4.176);
 - *(d)* HCA's vertical integration with GP practices (paragraphs 4.177 to 4.180); and
 - (e) our conclusions on our competitive assessment of central London (paragraph 4.181).

Competitive constraints from private hospitals including PPUs (and non-inpatient providers) in central London

4.7 Our previous assessment of the constraints on HCA from within the market (that is, from private hospitals and PPUs in central London) is set out in paragraphs 6.204 to 6.219 of the Final Report. We found that:

... HCA faces weak competitive constraints from private hospitals including PPUs located in central London. In particular, the competitive constraints imposed by PPUs in aggregate are weak. The evidence suggests that, considering insured patients, and in particular PMIs' corporate clients, the set of HCA's closest competitors is much narrower than the set of all private hospitals including PPUs in central London and that TLC, whilst being much smaller than HCA, is HCA's closest competitor. This is likely to make it very difficult for PMIs to switch a large proportion of their business from HCA to its closest competitors in central London.³

³ Final Report, paragraph 6.218.

- 4.8 During this remittal, various parties provided comments on many aspects of the evidence and analysis that led to this finding. We have categorised these comments under the following headings, each of which is discussed below:
 - (a) shares of supply and capacity of private hospitals including PPUs located in central London (paragraphs 4.10 to 4.72);
 - (b) HCA's business cases on competitive constraints from private hospitals (including PPUs) in central London (paragraphs 4.73 to 4.101);
 - (c) competitive constraints from PPUs and other private hospitals in central London (paragraphs 4.102 to 4.116); and
 - (*d*) competition from non-inpatient facilities in central London (paragraphs 4.117 to 4.127).
- 4.9 Parties also commented on competitive constraints in relation to product quality and range. These are discussed in Section 7 (Quality and range).

Shares of supply and capacity of private hospitals including PPUs in central London

- Our conclusions in the Final Report
- 4.10 Shares of supply in central London in 2011 are presented in the Final Report, Appendix 6.10, Tables 6, 8, 9 and 10. Shares of capacity in central London in 2011 are presented in the Final Report, Appendix 6.10, Table 11.
- 4.11 On the basis of our shares of supply analysis, we previously found central London to be 'a highly concentrated market in which HCA has a strong position across all specialties and an even stronger position when considering the most common specialties and the more complex segments of the market.'⁴
 - Parties' comments during the remittal
- 4.12 We have organised parties' comments on our estimates of shares of supply and capacity under the following headings:
 - (a) General criticisms of our estimates;

⁴ Final Report, paragraph 6.211.

- *(b)* Whether there is effective non-HCA spare capacity in central London; and
- (c) Changes in shares of supply and capacity since the Final Report.
- o General criticisms of our estimates of shares of supply and capacity
- 4.13 HCA considered the most appropriate measure to be share of capacity. In its view, capacity was what mattered for the ability of HCA's rivals to absorb PMIs' volumes currently treated at HCA hospitals.⁵ HCA said that admission and revenue shares were misleading, because hospital operators that competed more successfully would attract a higher proportion of patients, and (particularly insofar as the share of revenue was concerned) because of differences in quality and case mix.⁶
- 4.14 HCA argued that we placed too much reliance on 'crude shares of supply', which followed from its view that our market definition was incorrect, and that the estimates did not include all relevant providers and artificially inflated HCA's market shares.⁷ HCA stated that:
 - (a) We incorrectly omitted a number of PPUs in central London from our previous share calculations.⁸ As a related point, HCA pointed out that we included the admissions and revenues at HCA's hospitals for specialties that we either excluded from consideration (such as paediatrics, fertility, and neuro-rehabilitation) or for which we excluded certain key competitors (such as the PPU at Moorfields Eye Hospital, which specialises in ophthalmology).
 - (b) Our calculations of shares of supply in the Final Report included admissions and revenues at HCA's hospitals for which it faced competition from outpatient and day-case clinics (ie non-inpatient providers), which we excluded from our previous competitive assessment.⁹ As discussed in Section 3 on market definition, HCA considered that our previous approach for excluding outpatient and daycase clinics was illogical.¹⁰ In response to our updated analysis of shares in the Remittal PFs, which looked at non-inpatient providers'

⁵ HCA response to comment and submit further evidence, paragraph 4.130(i).

⁶ HCA response to comment and submit further evidence paragraph 4.130(iii)–(iv).

⁷ HCA response to comment and submit further evidence, paragraph 2.3, 21st bullet.

⁸ HCA response to comment and submit further evidence, paragraphs 4.31 & 4.125. The omitted central London PPUs are: Chelsea and Westminster Hospital; Great Ormond Street Hospital; Moorfields Eye Hospital; and UCLH (which has the National Hospital for Neurology and Neurosurgery).

⁹ HCA response to comment and submit further evidence, paragraphs 4.126 & 4.127.

¹⁰ Paragraphs 3.12 and 3.17.

share of Bupa and AXA PPP's spending in central London,¹¹ HCA argued that we should examine non-inpatient shares by specialty, not merely by total revenue, because non-inpatient services could play a more significant role in some specialties such as orthopaedics and oncology.¹² HCA also suggested that we should take the available capacity of day-case and outpatient clinics into account,¹³ although it did not suggest how we could do so beyond estimating shares of consulting rooms (which we have already done). In addition, HCA cited recent entry and expansion by day-case clinics as evidence that day-case and outpatient providers were increasingly becoming a more significant part of the competitive landscape in central London.

- 4.15 HCA also argued that, as we did not include any overseas providers in our market share assessment, we should exclude HCA's international patients and revenues from our market share estimates.¹⁴
- 4.16 HCA also raised specific issues with our estimates of shares of capacity in central London:
 - (a) HCA stated that our previous treatment of critical care level 3 (CCL3)¹⁵ beds and other measures of capacity was misleading, for two reasons. First, HCA argued that critical care level 2 (CCL2) beds could be readily converted into CCL3 beds, so it would be more appropriate to consider shares of CCL2 and CCL3 beds.¹⁶
 - (b) HCA also argued that we should have included the NHS CCL3 beds, theatres and consulting rooms available to PPUs, notwithstanding our view that the NHS prioritised the use of NHS critical care facilities for NHS-funded patients. HCA's argument was that there was no evidence that PPU patients were currently encountering any difficulty in gaining access to NHS critical care facilities,¹⁷ and because the lifting of the private patient income 'cap' had provided NHS trusts with commercial opportunities to expand PPUs, NHS trusts were increasingly incentivised to ensure that PPUs were properly resourced to cater for their patients.

¹¹ Remittal PFs, paragraphs 4.37–4.40 and Table 4.5.

¹² HCA response to the Remittal PFs, paragraph 2.14. See also HCA response to comment and submit further evidence, paragraphs 4.102–4.104.

¹³ HCA response to the Remittal PFs, paragraph 2.17.

¹⁴ HCA response to the Remittal PFs, paragraph 2.89.

¹⁵ 'Critical Care - Level 3' refers to patients requiring advanced respiratory support alone, or monitoring and support for two or more organ systems. This level includes all complex patients requiring support for multi-organ failure. See the Health and Social Care Information Centre website.

¹⁶ HCA response to comment and submit further evidence, paragraphs 4.128(i).

¹⁷ HCA response to comment and submit further evidence, paragraph 4.128(ii).

- (c) HCA also pointed out that, as a consequence of excluding non-inpatient providers, the shares of consulting rooms were likely to be overestimated.¹⁸
- 4.17 Bupa argued that there was a significant risk that our shares of supply underestimated the extent of HCA's 'dominance'. In its response to our Remittal PFs, Bupa submitted that there were specialties which were important in central London, but which were not provided by most private hospitals across the UK and so were not in the 16 specialties and oncology on which we focused. Bupa supplied a list of 27 specialties for which its spend in central London in 2014 exceeded $\pounds[\%]$, and highlighted [%] as additional specialties in which HCA had a 'dominant' position.¹⁹
 - Whether there is effective non-HCA spare capacity in central London
- 4.18 Evidence and parties' views on the extent to which there was effective spare capacity in private hospitals including PPUs in central London were mixed.
- 4.19 HCA argued that there was substantial spare capacity in the private healthcare sector generally, and we should have analysed directly the level of spare capacity available in central London.²⁰ Specifically, HCA argued that there was sufficient spare non-HCA capacity in central London to absorb all of the PMI patients treated at HCA hospitals, and that the existence of spare capacity in central London constrained HCA's ability to negotiate higher prices. HCA submitted the following analysis:
 - (a) Based on the peak daily number of Bupa and AXA patients at HCA hospitals in 2012 and updated capacity information from LaingBuisson, HCA calculated that the spare (bed) capacity its central London rivals needed in order to absorb the peak number of inpatients that went to HCA facilities was only [10-20]% of beds for Bupa's patients and only [5-10]% of beds for AXA PPP's patients. HCA considered that it was highly likely that HCA's competitors retained at least this level of spare capacity, even during periods of peak utilisation.²¹
 - *(b)* HCA's economic advisers (KPMG) took the opportunity, in the July 2015 disclosure room, to analyse Healthcode data on insured patient

¹⁸ HCA response to comment and submit further evidence, paragraph 4.127.

¹⁹ Bupa response to the Remittal PFs, paragraph 1.7(ii).

²⁰ HCA response to comment and submit further evidence, paragraph 4.135, fifth bullet.

²¹ HCA response to comment and submit further evidence, paragraph 4.136.

admissions in 2011 and found that [\gg].²² In its response to the Remittal PFs, KPMG extended this analysis to account for [\gg]. It also carried out separate analyses of capacity and utilisation of [\gg] theatres. KPMG found that, based on the Healthcode data, [\gg].²³ Therefore, in HCA's view, there is sufficient non-HCA capacity in central London to allow insurers to delist HCA and move all of their patients from HCA to other providers, if they so wished. [\gg]^{24,25}

- 4.20 Evidence received from other parties indicated that beds were not a good measure of effective capacity, for a variety of reasons:
 - (a) TLC told us that there was insufficient spare capacity in central London for insurers to switch away from HCA, particularly for oncology, where the availability of inpatient beds was not a constraining factor.²⁶ Factors such as the availability of theatre slots and radiotherapy services were more likely to be constraining factors in oncology, leading TLC to believe that there was insufficient non-HCA oncology capacity in central London to absorb all private cancer work.²⁷ Therefore, TLC strongly disagreed with HCA's assessment of capacity. It submitted that the relevant capacity constraint was in respect of oncology and the ability of any alternative provider to HCA to offer the full range of oncology services, equipment and consultants to deal with the entire patient pathway.
 - *(b)* Similarly, AXA PPP argued that effective 'capacity' to serve corporate customers depended on a number of factors beyond spare beds, including a consultant base, skilled medical staff, organisational experience, clinical track record, and reputation in addition to general 'brand' perception (which, in AXA PPP's view, often attached to the facility rather than the owner itself).²⁸
 - (c) Both AXA PPP and Bupa told us that, even if there were sufficient spare bed capacity at non-HCA facilities in central London, this spare capacity did not translate into an effective competitive constraint on HCA. They told us that this was because insurers were limited in their ability to

²⁵ [≫]

²² This analysis was performed using inpatient bed capacity data from Table 11 in Appendix 6.10 of the Final Report, and included inpatient beds at PPUs. The KPMG report did not state that it had performed the analysis without PPU beds. Nor did the underlying code performing this analysis which KPMG submitted to the CMA contain a sensitivity analysis that excluded PPU beds. HCA later submitted, in paragraph 3.10 of its response to hearing summaries on 13 October 2015, that this analysis showed 'that there is sufficient available capacity in private hospitals excluding PPUs. Even if one were to exclude all PPUs from the spare capacity analysis ... [\gg]' ²³ HCA response to the Remittal PFs, paragraphs 2.27–2.30.

²⁴ HCA response to the Remittal PFs, paragraphs 2.27–2.30.

²⁶ TLC hearing summary, paragraph 11.

²⁷ TLC hearing summary, paragraph 12.

²⁸ AXA PPP response hearing summary.

redirect patients away from HCA in order to take advantage of any spare capacity, as most insured patients had an unrestricted choice of hospitals in the PMIs' network.²⁹ Thus, even if there were sufficient effective spare capacity (which they did not believe was the case), AXA PPP and Bupa did not believe that, based on their experience, they would be able to direct most patients away from HCA to take advantage of any spare capacity.

- (d) Furthermore, both insurers considered that much of the available spare bed capacity was in facilities that did not competitively constrain HCA, such as PPUs, which were not popular with patients and doctors,³⁰ and private hospitals that were not attractively located for corporate customers. AXA PPP stated it needed HCA's hospitals in its networks in order to have a credible PMI proposition, so that, regardless of available bed capacity elsewhere, it still needed to contract with HCA and offer HCA's hospitals to its customers, particularly corporate clients. In AXA PPP's view, the existence of spare beds among fragmented competitors on its own did not amount to an alternative offering that would be acceptable to the vast majority of corporate customers headquartered in London. AXA PPP further argued that evidence of substitution possibilities at the margin did not remove their dependence on HCA for the core offerings.³¹
- 4.21 In response to the suggestion that the availability of consultants may be a constraining factor, HCA argued that there was no evidence which suggested that was the case.³² HCA noted that (i) there was a high number of consultants in central London (and a far greater availability of consultants in central London than in any other local healthcare market), and (ii) consultants could and readily did switch or split their practice across multiple facilities. In addition, HCA argued that the CMA had not identified consultant availability as a constraining factor for new entry and expansion, or that there was a shortage of consultants seeking practising privileges. Furthermore, HCA referred to the CMA's consultant survey findings showing that 44% of consultants in Greater London had time available and would like to do more private work, suggesting that PMIs would have little difficulty in finding consultants to treat patients if they were to move them from HCA's facilities.³³ However, in its hearing in December 2015, AXA PPP argued that

²⁹ On this point, Bupa also considered that [²⁶]. We discuss these clauses in the section on Bargaining.

³⁰ HCA objected to Bupa's point [\gg].

³¹ AXA PPP response hearing summary.

³² HCA response to the Remittal PFs, paragraph 2.31.

³³ HCA response to Remittal Supplemental PDR, paragraph 18.

consultants and specialist staff in oncology were likely to find it more difficult to switch their practice and all their patients to another facility, compared with consultants in other specialties, because of the relatively long treatment times in oncology cases and the large number of staff in multi-disciplinary teams that were involved in treatment.³⁴

- 4.22 In response to other parties' emphasis on oncology, HCA argued that it was not the case that a new entrant must offer cancer services in order to be able to compete in providing private healthcare. It told us that private hospital operators competed on a specialty basis, and a new entrant specialising in, say, cardiovascular services was no less credible in that specialism because it did not have an integrated cancer offering. HCA further argued that there was continuing, significant new entry and expansion in all aspects of oncology (including radiotherapy, chemotherapy, and cancer surgery),³⁵ and the high cost of radiotherapy equipment had not deterred this entry and expansion.
 - o Changes in shares of supply and capacity since the Final Report
- 4.23 Finally, parties disagreed over the direction of change in shares of supply since the Final Report.
- 4.24 HCA stated that we should update our previous share of supply calculations, based on the most recent available data. It cited a February 2015
 LaingBuisson report³⁶ in which:
 - *(a)* HCA's share of overnight beds in central London was 41.4% (as compared with 46.5% in 2011 in our Final Report³⁷);³⁸
 - (b) HCA's share of revenue in central London, based on 2013 annual accounts, was 50.4% (as compared with [50–60]% in 2011 in our Final Report³⁹);⁴⁰ and

³⁴ AXA PPP response hearing summary.

³⁵ HCA cited the following examples: VPS's proposed entry (which we note has now been abandoned); TLC's new cancer centre; Advanced Oncotherapy's joint venture with Circle in developing a proton beam therapy centre; Proton Partners International announced entry with services providing radiotherapy, chemotherapy and proton beam therapy; the Royal Marsden's PPU expansion; Bupa Cromwell's plan to develop oncology; and the proposed entry of Cleveland Clinic (which we note is not planning to provide medical oncology as part of its initial service offering). We discuss these actual and potential entrants in Section 5 of this report.

³⁶ LaingBuisson (February 2015), Private Acute Medical Care in Central London: Market Report.

³⁷ Final Report, Appendix 6.10, Table 11.

³⁸ HCA submission on 1 May 2015, paragraphs 4.121–4.123.

³⁹ Final Report, Appendix 6.10, Table 6.

⁴⁰ HCA response to comment and submit further evidence, paragraphs 4.121–4.123.

- (c) HCA's share of capacity in Greater London (which, in its view, was the correct measure) was only 27.5% of total beds, based on LaingBuisson's published bed numbers.⁴¹
- 4.25 HCA further stated that, in its view, updated market information from private healthcare providers in central London would be likely to show that PPUs had grown even further and accounted for an even higher share in today's market.⁴²
- 4.26 AXA PPP stated that the aggregated and disaggregated share analysis in the Final Report remained broadly accurate, but HCA's position had strengthened in some respects. AXA PPP observed that HCA had made a number of expansions in central London since the Final Report, and emphasised that HCA retained a very high share of supply in oncology and cardiology.
- 4.27 AXA PPP provided additional data on HCA's share of its oncology spending in central London for July 2014 to June 2015, which showed that HCA received [≫]% of its spend.⁴³
- 4.28 Bupa's view was that HCA dwarfed other hospitals in a highly concentrated central London market,⁴⁴ and that our findings in the Final Report continued to align with Bupa's own more recent (2014) experience in central London.⁴⁵ Bupa reported that HCA's share of Bupa spend in central London had grown slightly, and that the [≫].⁴⁶ As with AXA PPP, Bupa also observed HCA's expansion in central London since the Final Report,⁴⁷ and stated that, in contrast to HCA's continued growth, it had not observed any substantive entry by new players since the Final Report.⁴⁸
- 4.29 Bupa noted that our analysis on market shares and concentration in the Remittal PFs continued to rely on revenue and admissions data that we collected from parties in 2011. Bupa reiterated that HCA had grown substantially since 2011 and that, in its experience, HCA now controlled even higher shares of revenue in strategically important specialties (such as oncology and cardiology) and in aggregate across specialties. In Bupa's view, therefore, there was a significant risk that the Remittal PFs

⁴¹ HCA response to comment and submit further evidence, paragraph 4.96(i).

⁴² HCA response to the Remittal PFs, paragraphs 2.8-2.12.

⁴³ AXA PPP response hearing summary.

⁴⁴ Bupa submission on 6 May 2015, section 2.

⁴⁵ Bupa submission on 6 May 2015, paragraph 2.11.

⁴⁶ Bupa submission on 6 May 2015, paragraphs 2.8–2.15.

⁴⁷ Bupa submission on 6 May 2015paragraph 2.20.

⁴⁸ Bupa submission on 6 May 2015, paragraph 2.16.

underestimated HCA's dominance at a specialty level and the strength it gained from 'dominating' so many specialties in combination.⁴⁹ Bupa also supplied some analysis of its hospital spend in central London from 2011 to 2014 as evidence for this point (presented in Table 4.3 below). Bupa's spend data showed that HCA had a [\gg]% share of its spend across all specialties in central London in 2014 and [\gg]% in 2011.⁵⁰ These are higher than LaingBuisson's estimates of HCA's revenue share of 50.3% in 2013 and 48.5% in 2014, which we presented in Table 4.1 of the Remittal PFs (and Table 4.1 below).

- Our response to parties' views on shares of supply and capacity
- 4.30 We consider each of the parties' points in turn, and organise our response under the following headings:
 - (a) HCA's criticism of our 'reliance' on shares of admissions and revenue (paragraphs 4.31 to 4.32);
 - (b) HCA's criticism that central London shares exclude relevant competitors, include irrelevant specialties, and do not include all relevant specialties (paragraphs 4.33 to 4.40);
 - (c) central London shares exclude non-inpatient providers (paragraphs 4.41 to 4.52);
 - (d) HCA's criticism that its revenue and admissions from international patients should be excluded from our calculations for shares of supply (paragraph 4.53);
 - (e) HCA's criticisms of our calculations for shares of capacity in private hospitals including PPUs in central London (paragraphs 4.54 to 4.56);
 - (f) spare capacity in central London (paragraphs 4.57 to 4.68);
 - (g) updating our shares of supply and developments since the Final Report (paragraphs 4.69 to 4.71); and
 - (*h*) our conclusions on shares of supply and capacity of private hospitals including PPUs in central London (paragraph 4.72).

⁴⁹ Bupa response to the Remittal PFs, paragraph 1.7(i).

⁵⁰ Note: these shares are across of all Bupa's spend and are not limited to the 17 specialties that were the focus of our investigation.

• HCA's criticism of our 'reliance' on shares of admissions and revenue

- 4.31 Regarding HCA's overall point that we placed too much reliance on shares of supply, we believe our market definition for private healthcare treatments in central London hospitals to be robust and, as a consequence, shares of supply to be a valid indicator to use in the assessment of firms' market power. We further note that shares of supply are only one of the factors we have taken into account in our assessment of competitive constraints within the market we have defined. In addition, we have also taken account of competitive constraints from outside the market.
- As we stated in the Final Report⁵¹ and in line with our Guidelines,⁵² we used 4.32 several indicative measures to understand how the market was operating. and we have considered shares based on revenues, admissions and capacity. We do not agree with HCA that admissions and revenue shares are misleading due to any differences in quality. As we previously explained, shares based on revenues are particularly relevant whenever there may be differences in quality, a point which is recognised in our Guidelines.⁵³ Although the evidence available to us did not indicate material guality differences between HCA and its close competitors in central London (as discussed in paragraphs 7.6 to 7.21), shares of revenues could take account of any vertical product differentiation that may exist due to the higher quality and stronger reputation of central London hospitals relative to outer London hospitals. This is particularly important if investments to improve quality are made over the course of several years, suggesting that it might be difficult for outer London hospital operators to reposition themselves within a short time frame.54

Central London shares exclude relevant competitors, include irrelevant specialties and do not include all relevant specialties

4.33 HCA observed that our shares of supply in the Final Report omitted a number of specialist PPUs in central London: Great Ormond Street Hospital PPU; Moorfields Eye Hospital PPU; and National Hospital for Neurology and Neurosurgery (which is part of UCLH NHS Foundation Trust (FT)).⁵⁵ This was due to our previous approach of focusing on general facilities providing inpatient services across a range of specialties. Due to data limitations, we previously calculated shares of total revenue for each of the general private

⁵¹ Final Report, paragraph 6.249.

⁵² CC3, Annex A, paragraph 1.

⁵³ CC3, Annex A, paragraph 2.

⁵⁴ For example, HCA argued that it had been investing heavily since its acquisition of a number of hospitals in central London in the late 1990s/early 2000s (see the Final Report, paragraph 6.392).

⁵⁵ HCA response to comment and submit further evidence, paragraph 4.125.

hospitals and PPUs (and three specialist oncology facilities) providing inpatient services in central London, rather than disaggregated shares of revenue by specialty. As a result, our shares of supply in the Final Report included admissions and revenues at HCA's facilities for specialties (such as paediatrics) in which certain PPUs that we have not included in our shares (ie not included in the denominator) may compete for patients.

- 4.34 We assess the impact of these omitted providers using a combination of three approaches:
 - (a) First, we present updated shares of total revenue and inpatient bed capacity, which are estimated by LaingBuisson based on providers' annual reports and accounts. These include a number of PPUs that were not in our previous shares of supply, including those specialist PPUs identified by HCA (see Table 4.1 below).
 - (b) Second, using the data from our original investigation on disaggregated share of admissions by specialty, which we previously presented in the Final Report, Appendix 6.10, Table 8, we calculated HCA's share of total admissions aggregated across the 16 specialties that are the focus of our analysis⁵⁶ plus oncology (see Table 4.2 below). This approach addresses the issue that our shares included admissions from HCA's hospitals for specialties that we did not focus on in our competitive assessment, such as paediatrics. It does not address the issue HCA raised that our shares of supply for some included specialties excluded some competitors, such as Moorfields Eye Hospital PPU for ophthalmology and non-inpatient providers for various other specialties, but this issue is addressed by our first approach. (We discuss the competitive constraints and impact on shares of supply from non-inpatient providers in paragraphs 4.117 to 4.127 and 4.41 to 4.52 below.)
 - (c) Third, we report data from Bupa on HCA's share of its spend by specialty in central London in 2011 and 2014, and we calculate HCA's share of total Bupa spend aggregated across the 16 specialties plus oncology (see Table 4.3 below). This approach complements our previous approaches and addresses two issues that HCA raised (it includes specialist PPUs that we previously omitted, and does not include spend for specialties that were not the focus of our investigation). It further addresses HCA's criticism that we inappropriately included HCA's

⁵⁶ These 16 specialties are: anaesthetics; cardiology; clinical radiology; dermatology; gastroenterology; general medicine; general surgery; neurology; obstetrics and gynaecology; ophthalmology; oral and maxillofacial surgery; otolaryngology; plastic surgery; rheumatology; trauma and orthopaedics; and urology.

admissions and revenue from international patients and revenues in our market share estimates. The drawback of this approach is that it is only based on the data of one (albeit the largest) insurer.⁵⁷

4.35 In implementing the first approach, using data and estimates from LaingBuisson,⁵⁸ we calculated shares of total revenue and inpatient beds in central London in 2014, and we examined the effect on those shares of first excluding and then including a number of PPUs in the shares, including those specialist PPUs identified by HCA, as set out in Table 4.1 below. Although the shares are based on public data from a later time period, they can still indicate how sensitive our previous estimates of central London shares of total revenue and capacity would be to including these seven PPUs.

⁵⁷ Bupa's share of PMI revenues was 39.5%, according to Laing & Buisson, *Health Cover 2013*.

⁵⁸ CMA analysis, based on LaingBuisson (February 2016), *Private Acute Medical Care in Central London: Market Report, second edition*, Table 1.1.

Table 4.1: Central London aggregate shares of total revenue and inpatient beds, 2011 and 2014

%

| | | | | % |
|--|---------------------------|----------------------------|---------------------------|----------------------------|
| | Total revenue | | Inpatient beds | |
| | Final Report (2011) | Laing Buisson (2014) | Final Report (2011) | Laing Buisson (2014) |
| НСА | [%] | 48.5* | [%] | 41.4 |
| TLC | [≫] | 10.5 | [≫] | 11.0 |
| The Bupa Cromwell Hospital | [%] | 7.6 | [≫] | 6.9 |
| Hospital of St John & St Elizabeth | [≫] | 3.3 | [≫] | 2.8 |
| BMI | [≫] | 3.9 | [≫] | 7.8 |
| King Edward VII's Hospital Sister Agnes | [≫] | 1.4 | [≫] | 2.4 |
| Aspen | [※] | 1.1 | [≫] | 2.5 |
| Phoenix Hospital Group# | [※] | 0.7 | [≫] | 0.6 |
| Total private hospitals | [※] | 77.1 | [≫] | 75.1 |
| Royal Marsden NHS Foundation Trust | [※] | 5.6 | [≫] | 3.0 |
| Great Ormond Street Hospital for Children NHS Foundation Trust | [※] | 3.0 | [≫] | 2.1 |
| Imperial College Healthcare NHS Trust | [※] | 3.1 | [≫] | 5.7 |
| Royal Brompton and Harefield NHS Foundation Trust | [≫] | 2.7 | [≫] | 2.4† |
| University College London Hospital NHS Foundation Trust | [≫] | 1.3§ | [≫] | 2.7§ |
| Royal Free London NHS Foundation Trust | [≫] | 1.7 | [≫] | 3.1 |
| Guy's and St Thomas' NHS Foundation Trust | [≫] | 1.5 | [≫] | 0.9 |
| Moorfields Eye Hospital NHS Foundation Trust | [≫] | 1.1 | [≫] | 0.7 |
| King's College Hospital NHS Foundation Trust | [≫] | 1.0 | [≫] | 1.2 |
| Chelsea and Westminster Hospital NHS Foundation Trust | [≫] | 1.1 | [≫] | 1.9 |
| Royal National Orthopaedic Hospital NHS Trust (RNOH)‡ | [※] | 0.4 | [≫] | 1.2 |
| St George's University Hospitals NHS Foundation Trust | [≫] | 0.3 | [≫] | 0.0 |
| Barts Health NHS Trust | [≫] | 0.1 | [≫] | 0.0 |
| Total PPUs | [≫] | 22.8 | [≫] | 24.9 |

Source: CMA and LaingBuisson.

*It is unclear whether the LaingBuisson report (*Private Acute Medical Care in Central London Market Report, second edition*, February 2016) includes HCA's revenue from its NHS venture, Harley Street Clinic at UCH. HCA's collaboration with Guy's and St Thomas' relates solely to the Trust's new cancer PPU, which is not included in these figures.

†The inpatient bed figure for Royal Brompton and Harefield includes 12 beds at the Harefield site which is not within central London.

[‡]The RNOH sees outpatients at the Bolsover Street facility in central London, who are then referred for inpatient treatment to the hospital in Stanmore, which is outside central London.

SUCLH's inpatient bed includes 24 beds at HCA's Harley Street at UCH facility. UCLH's private oncology services are delivered as a joint venture with HCA, while its private neurology, dentistry and maternity services are independent of HCA. LaingBuisson reported UCLH's revenue and beds was only available at the trust level, and not split out by specialty or facility. In the Final Report, we included revenue and beds in UCLH's private oncology service (Harley Street @ UCH) under HCA's share.

#BMI is a minority shareholder in the Phoenix Hospital Group, which owns and operates the Weymouth Street Hospital. Weymouth Street Hospital, formerly known as BMI The Weymouth Hospital, is no longer integrated with the BMI network.

4.36 As HCA noted, we did not include a number of NHS trusts with PPUs in central London in our previous calculation of shares of supply.⁵⁹ We excluded these PPUs for various reasons.⁶⁰ Using LaingBuisson's data and

⁵⁹ HCA response to comment and submit further evidence, paragraph 4.31.

⁶⁰ As explained in the Final Report, we applied several criteria to filter PPUs to include in our focal set of competitors. We looked at PPUs from the largest 30 NHS trusts across the UK (Final Report, paragraph 5.42(d)). We focused on general PPUs (Final Report, paragraph 5.46), and on the largest 40 general PPUs with inpatient care by revenue (Final Report, footnote 202 to paragraph 5.52(c)(ii)). For example, Great Ormond Street and Moorfields were excluded because they were specialist PPUs. (However, we made an exception for Royal Marsden and included it in our previous calculations, even though it was a specialist oncology PPU, as it was a major provider of acute private healthcare in a complex specialty.) UCLH's private oncology service is delivered with HCA (Harley Street at UCH) and was included in HCA's share of supply in our previous calculations. Its private neurology service (at National Hospital for Neurology and Neurosurgery) was not included. Chelsea and

estimates, we find that including the seven NHS trusts with PPUs in central London that we previously omitted lowers HCA's share of total revenues by [≫] percentage points to 48.5%. Most of the difference in HCA's share is due to the inclusion of these seven NHS trusts rather than changes over time in the relative market position of the providers that we did include in our previous calculations.⁶¹

4.37 In implementing the second approach, presented in Table 4.2 below, using data on disaggregated share of admissions by specialty, HCA's aggregate share of total admissions⁶² in central London across the 16 specialties is [45–55]%, and its aggregate share across the 16 specialties plus oncology is [45–55]%. These shares are very similar to HCA's share of total admissions in central London calculated under the previous methodology ([45–55]%).

%

Table 4.2: Central London shares of admissions by specialty, 2011

| | Total admissions | | | | Specialty admissions as proportion of total | | |
|--|--|--|--|--|--|--|--|
| | HCA | TLC | BMI* | Bupa Cromwell | Other private hospitals† | PPUs‡ | admissions in central London |
| Oncology Trauma and orthopaedics Gastroenterology Obstetrics & gynaecology General surgery Cardiology Plastic surgery Urology Ophthalmology General medicine Oral & maxillofacial surgery Anaesthetics Otolaryngology Neurology Clinical radiology Dermatology Rheumatology 16 specialties + oncology | <u>XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</u> | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | <u> XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX</u> | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | [%] [%] [%] [%] [%] [%] [%] [%] [%] [%] |

Source: CC and CMA analysis.

*Data is not available for one BMI hospital for obstetrics and gynaecology, trauma and orthopaedics and urology. This hospital accounts for [\gg]% of total admissions in central London. Data is not available for one BMI hospital for ophthalmology and two BMI hospitals for dermatology. The missing data for each BMI hospital is estimated to be [\gg]% of its total admissions in central London.

†Other private hospitals include Aspen, King Edward VII's Hospital Sister Agnes, and St John & St Elizabeth. Data for Aspen is not available for ophthalmology and rheumatology. The missing data for Aspen is estimated to be [≫]% of its total admissions in central London.

‡PPUs include those available in the columns for 'Final Report (2011)' in Table 4.1 above. Data on admissions is not available for some PPUs for some specialties. The missing data for the six included PPUs combined is estimated to be around [≫]% of

Westminster, St George's and Barts' PPUs were also not included. RNOH's private service was excluded because its main inpatient facility is located in Stanmore, outside central London. However, LaingBuisson included RNOH's revenue and inpatient beds in its central London shares because RNOH has an outpatient facility in Bolsover Street in central London.

⁶¹ To take a crude measure, calculating shares of total revenue using LaingBuisson's data but excluding the seven NHS providers that were omitted previously, we find that HCA's share of total revenue is [50–60]% and PPUs' combined share is [10–20]%, which are very similar to those calculated in the Final Report. ⁶² ie inpatient and day-case admissions.

44

all central London admissions. Private hospitals shares of admissions may be overestimated due to the exclusion of several PPUs in central London, as discussed in paragraph 4.36 above. Note: N/A = not available. Total admissions include inpatient and day-case admissions.

- 4.38 Our third approach was to consider Bupa's data on HCA's share of its spend in 2014. We are mindful that this was based on the data of a single PMI, and that this also covered a later time period than our data from the original investigation. However, we consider that Bupa's recent experience is relevant, and in addition we have no reason to believe that Bupa's experience would not be reflective of other PMIs. Therefore, we consider that HCA's share of Bupa's spend is informative and helps us to triangulate and build up a robust overall picture of HCA's share of supply in central London, both in aggregate and within specialties.
- 4.39 HCA's share of Bupa's spend in 2014 within the 17 specialties that we focused on was $[\aleph]$ %.
- 4.40 In response to Bupa's suggestion that we take into account ten additional specialties⁶³ which it considered important in central London, we note that doing so would give a very similar result [≫]%, suggesting that our conclusions are not sensitive to our decision to focus on the same set of 17 specialties.

⁶³ Haematology, neurosurgery, cardiothoracic surgery, respiratory medicine, geriatric medicine, paediatrics, sports and exercise medicine, general psychiatry, endocrinology and diabetes mellitus, and renal medicine.

Table 4.3: HCA's share of Bupa's spend in central London by specialty, 2014

0/

| | | % |
|---|--|---|
| | HCA | Specialty spend as a proportion of total Bupa spend in central London 2014 |
| Oncology Trauma and orthopaedics Cardiology General surgery Clinical radiology Gastroenterology Obstetrics & gynaecology Urology Otolaryngology Ophthalmology Neurology General medicine Plastic surgery Dermatology Rheumatology Anaesthetics Oral and maxillofacial surgery | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | X X X X X X X X X X X X X X X X X X X |
| 16 specialties 16 specialties + oncology | [※] [※] | [%] [%] |
| 27 specialties with 2014 spend >£1m | [※] | [≫] |
| All Bupa spend | [%] | [%] |

Source: Bupa and CMA analysis.

- Central London shares exclude non-inpatient providers
- 4.41 HCA criticised us for failing to take into account competition from noninpatient providers. Before responding to this more fully, we set out again our reasons in the Final Report for focusing on private hospitals and PPUs providing inpatient care (as discussed in Section 3 on market definition):⁶⁴
 - (a) providers of inpatient care account for a substantial share of revenue;⁶⁵
 - *(b)* concentration is relatively higher in the provision of inpatient care than in the provision of day-patient and outpatient care;⁶⁶ and

⁶⁴ Final Report, paragraph 6.4.

⁶⁵ Final Report, paragraph 5.43. According to Laing and Buisson (*Private Acute Medical Care: UK Market Report* 2013, p13), the total revenue of private independent acute medical hospitals and clinics was £4,352 million in the UK in 2012. The revenue of the operators owning or managing the 192 private hospitals we have looked at in the Final Report accounts for more than 80% of this total revenue.

⁶⁶ Final Report, paragraph 5.47 – according to Laing & Buisson, there were 264 day-only clinics in the UK in 2013, compared with 201 facilities registered to take inpatients. Most of the day-only facilities are relatively small clinics. They accounted for 27% of all private admissions in the UK in the first half of 2013, while the remaining 73% of total admissions took place in private hospitals that also provided inpatient care (ibid, Table 6.1, page119). There is an error in paragraph 5.47 of the Final Report: the sentence 'They account for 27% of all private day-case admissions in the UK in 2012' should say 'They account for 27% of all private admissions in the UK in the first half of 2013'.

- (c) while providers of inpatient care compete with a wider set of providers, including day- and outpatient-only clinics, in the provision of day-patient and/or outpatient care, this is unlikely to hold across the full range of day- and outpatient treatments. In particular, certain day- and outpatient treatments (for example, those which require inpatient care as a back-up or those which are ancillary to an inpatient treatment) are likely to be subject to similar competitive conditions to those arising in the provision of inpatient treatments and so outpatient- and day-patient-only providers will not be able to compete effectively with inpatient providers for some of these services.⁶⁷
- 4.42 We noted in the Final Report that there had been a trend from inpatient towards day-patient treatments.⁶⁸ To get a sense of the relative significance of each segment (inpatient, day-case and outpatient care), we analysed: admissions and revenue data from hospital operators (which typically provide care in all three settings, inpatient, day-case and outpatient) collected during our original investigation; and spend data from Bupa and AXA PPP in central London in 2011.

Table 4.4: Shares of hospital operators' admissions and revenue in central London by segment (inpatient, day-case and outpatient care), 2011

| | | | % |
|-----------------------|--------------|--------------|------------|
| | Inpatient | Day-case | Outpatient |
| Admissions Revenue | 40.6 61.8 | 59.4 17.2 | 0 21.0 |

Source: CMA analysis.

Note: Royal Marsden did not provide admissions and revenue data split by each segment and has been excluded. This also excludes a number of PPUs in central London, as discussed in paragraph 4.36 above.

4.43 Within central London, data received during our original investigation from hospital operators shows that while a majority of admissions at providers of inpatient care in 2011 were day-case (59.4%), the majority of hospital operators' revenue is derived from inpatient treatment (61.8%).

⁶⁷ Final Report, paragraph 5.54(a).

⁶⁸ Final Report, paragraph 5.35: 'Data from the five largest hospital operators shows that day-patient admissions accounted for 58 per cent of total admissions (inpatient plus day-patient) in their hospitals in 2006, and for 68 per cent in 2011. Revenue data shows a similar trend: revenue from day-patient admissions in hospitals of the five largest hospital operators accounted for 29 per cent of total revenue from admitted patients (inpatient plus day-patient) in 2006, and for 37 per cent in 2011.'

Table 4.5: Shares of Bupa and AXA PPP's spend in central London by segment (inpatient, day-case and outpatient care), 2011

| | | | % |
|-------|-----------|----------|------------|
| | Inpatient | Day-case | Outpatient |
| Spend | [≫] | [≫] | [≫] |

Source: CMA analysis.

Note: this is based on all of Bupa and AXA PPP spend, not just spend for the 16 specialties that we focused on during our original investigation. Therefore, this includes spend on services such as imaging and diagnostic procedures, in which non-inpatient providers may have a relatively stronger position.

- 4.44 We found that around half ([≫]%) of Bupa and AXA PPP's spend in central London in 2011 was for non-inpatient care, which gives an indication of the value of the services for which non-inpatient providers can compete and which might potentially impose competitive constraints on hospital operators in central London.⁶⁹
- 4.45 To assess the potential strength of the competitive constraints imposed by non-inpatient providers and estimate the impact of excluding non-inpatient providers on our shares of supply in the Final Report, we estimated non-inpatient providers' shares of supply. We noted in the Final Report that, according to LaingBuisson, there were 264 day-case-only clinics in the UK in 2013 which accounted for 27% of all private admissions in the UK in the first half of 2013, while the remaining 73% of admissions took place in private hospitals that also provided inpatient care.⁷⁰
- 4.46 We also asked Bupa and AXA PPP what proportion of their claims and spending in 2011 in central London was with non-inpatient facilities.⁷¹
- 4.47 On shares of total admissions (inpatients and day-case), providers of inpatient care accounted for the vast majority of Bupa and AXA PPP's admissions in central London in 2011. Bupa and AXA PPP reported that

⁶⁹ We note that our data does not take into account the revenues and admissions at these outpatient and dayonly clinics from self-pay patients. However, given the high number of non-inpatient facilities in London, we decided that it was disproportionate to collect revenues and admissions data directly from these facilities in order to calculate comprehensive shares for both insured and self-pay admissions and revenues. We also note that this analysis does not take into account revenues and admissions from other PMIs. However, we consider that Bupa and AXA PPP together account for a significant share of the PMI market. According to LaingBuisson's *Health Cover UK Market Report 2013*, Table 7.2, p126, Bupa and AXA PPP's combined share of PMI premium revenue in 2012 was 65.4%.

⁷⁰ Final Report, paragraph 6.4, based on Laing & Buisson (2013), *Private Acute Medical Care: UK Market Report,* p13, and Table 6.1, p119.

⁷¹ We note that this approach does not take into account the revenues and admissions at these outpatient and day-only clinics from self-pay patients. However, given the high number of non-inpatient facilities in London, we decided that it was disproportionate to collect revenues and admissions data directly from these facilities in order to calculate comprehensive shares for both insured and self-pay admissions and revenues. We also note that this analysis does not take into account revenues and admissions from other PMIs. However, we consider that Bupa and AXA PPP together account for a significant share of the PMI market. According to LaingBuisson's *Health Cover UK Market Report 2013*, Table 7.2, p126, Bupa and AXA PPP's combined share of PMI premium revenue in 2012 was 65.4%.

day-case-only providers accounted for [\gg] and [\gg] respectively of their daycase claims in central London in 2011. This suggests that virtually all daycase admissions took place in facilities that also provide inpatient care.⁷² We also estimate that, for most specialties, the disaggregated shares of admissions in central London by specialty given above are unlikely to be affected by including non-inpatient facilities (ie day-case facilities, as outpatients are not admitted and thus would not affect shares of admission) in central London. The potential exceptions are dermatology and plastic surgery.⁷³ For each of the remaining specialties that we considered, noninpatient facilities' share of Bupa and AXA PPP's day-case claims is below [2.5–7.5]%.⁷⁴ Therefore, on the basis of this information, we consider that including non-inpatient providers' admissions is unlikely materially to affect the aggregated shares of admissions in central London that we previously calculated.

Table 4.6: Non-inpatient providers' share of Bupa and AXA PPP's spend in central London within each segment, 2011

| | | | | % |
|------------------------------|-------------------|-------------------|-------------------------------------|---------------------------------|
| | Day-case | Outpatient | Both day- case and outpatient | All (including inpatient) |
| Bupa AXA PPP Both PMIs | [≫] [≫] [≫] | [%] [%] [%] | [%] [%] [%] | [%] [%] [%] |

Source: CMA analysis.

Note: this is based on all of Bupa and AXA PPP spend, not just spend for the 16 specialties that we focused on during our original investigation. Therefore, this includes spend on services such as imaging and diagnostic procedures, in which non-inpatient providers may have a relatively stronger position.

- 4.48 On shares of total revenue, providers of inpatient care accounted for the vast majority of Bupa and AXA PPP's spend in central London in 2011. Non-inpatient providers accounted for [5–15]% of Bupa and AXA PPP's total spend in central London in 2011. This is consistent with our previous view that providers of inpatient care account for a substantial share of revenue.
- 4.49 Going further, using data provided by Bupa and AXA PPP, we estimate that HCA's share of Bupa's and AXA PPP's spend at non-inpatient facilities (spending for both day-case and outpatient) in central London in 2011 was

⁷² We have assumed that the number of day-case claims corresponds with the number of day-case admissions, ie each day-case claim involves a single day-case admission.

⁷³ For dermatology, non-inpatient facilities' share of Bupa's and AXA PPP's day-case claims in central London in 2011 was [&]% and [&]% respectively. For plastic surgery, non-inpatient facilities' share of Bupa's and AXA PPP's day-case claims in central London in 2011 was [&]% and [&]% respectively. We note that HCA had a relatively low share of total admissions in central London in 2011 for both of these specialties ([&]% and [&]% and [&]% respectively), and that a relatively small proportion of admissions are to these specialties ([&]% and [&]% respectively) as shown in Table 4.2 above.

⁷⁴ Based on data from Bupa and AXA PPP on their spend in central London in 2011.

[\gg]% and [\gg]% respectively.⁷⁵ This is lower than HCA's share of revenues among providers of inpatient care, which we previously calculated. However, as non-inpatient providers accounted for a relatively small proportion of Bupa and AXA PPP's spend in central London in 2011, we estimate that including non-inpatient providers' revenues will only cause HCA's share of total revenue to fall by [\gg] percentage points, aggregated across all specialties.⁷⁶ Therefore, we consider that taking account of non-inpatient providers' revenues is unlikely materially to affect the shares of total revenue in central London that we previously calculated.

- 4.50 Although non-inpatient providers do not impose a competitive constraint across hospital operators' full range of activities, we considered whether non-inpatient providers are providing a constraint within the day-case and outpatient services in central London. As shown in Table 4.6 above, non-inpatient providers accounted for [a very small proportion] of Bupa and AXA PPP's day-case spend and [15–25]% of their outpatient spend in central London in 2011. This suggests that non-inpatient providers do not exert any material constraint within the day-case segment and may exert some constraint on hospital operators within the outpatient segment, although we bear in mind that HCA owns a sizeable share of the non-inpatient facilities within central London.
- 4.51 In response to HCA's suggestion that we examine non-inpatient providers' share at a specialty level, we looked at their share of Bupa's spend in 2011 in central London. As shown in Table 4.7 below, we observe that non-inpatient providers play a more significant role in some specialties, such as clinical radiology, plastic surgery and dermatology, but not oncology or orthopaedics as HCA suggests.⁷⁷ For oncology in particular, the vast majority ([≫]%) of Bupa's spend is with providers that also provide inpatient services.

⁷⁵ Based on data from Bupa and AXA PPP on their spend in central London in 2011

 ⁷⁶ This analysis is based on non-inpatient providers' share of all Bupa and AXA PPP's spend in 2011 in central London, not just for the 16 specialties and oncology which formed the focus of our analysis.
 ⁷⁷ HCA response to the Remittal PFs, paragraph 2.14.

Table 4.7: Non-inpatient providers' share of Bupa spend in central London, by specialty, 2011

%

| | | <i>,</i> . |
|--------------------------------|----------------------------|--|
| | Non-inpatient providers | Specialty spend as a proportion of total Bupa spend in central London 2011 |
| Oncology | [%] | [%] |
| Trauma and Orthopaedics | I≫] | [≫] |
| Cardiology | [≫] | [≫] |
| General surgery | [≫] | [≫] |
| Obstetrics and gynaecology | [≫] | [≫] |
| Gastroenterology | [≫] | [≫] |
| Urology | [≫] | [%] |
| Clinical radiology | [≫] | [≫] |
| Otolaryngology | [≫] | [※] |
| Neurology | [≫] | [≫] |
| General medicine | [≫] | [≫] |
| Ophthalmology | [≫] | [≫] |
| Anaesthetics | [≫] | [≫] |
| Plastic surgery | [≫] | [≫] |
| Rheumatology | [≫] | [※] |
| Dermatology | [≫] | [≫] |
| Oral and maxillofacial surgery | [≫] | [≫] |
| 16 specialties | [≫] | [≫] |
| 16 specialties + oncology | [≫] | [※] |
| Other | [≫] | [≫] |
| Total | [≫] | [≫] |

Source: CMA analysis.

- 4.52 We discuss the competitive constraints from non-inpatient facilities, particularly within the outpatient segment, in paragraphs 4.117 to 4.127 below, drawing on other sources of evidence apart from shares of supply.
 - HCA's criticism that its revenue and admissions from international patients should be excluded from our calculations for shares of supply
- 4.53 Removing international admissions and revenues from all providers in central London from our share estimates (to calculate shares of supply to UK patients only) makes almost no difference to HCA's shares of supply. It lowers HCA's share of revenue in central London in 2011 from [50-60] % to [50-60]%. HCA's share of admissions in central London in 2011 remains unchanged at [40-50]%.⁷⁸

⁷⁸ We note that we had already made this point in the Final Report, footnote 370 to paragraph 6.248.

Table 4.8: Central London aggregate shares of supply, excluding international patients, 2011

| | | % |
|---|------------------|---------------|
| | Total admissions | Total revenue |
| HCA TLC | [%] [%] | [%] [%] |
| BMI | [%] | [2~] |
| Hospital of St John and St Elizabeth | [≫] | [≫] |
| The Bupa Cromwell Hospital | [≫] | [≫] |
| King Edward VII's Hospital Sister Agnes | [%] | [≫] |
| Aspen | [%] | [%] |
| Total private hospitals | [≫] | [≫] |
| The Royal Marsden NHS Foundation Trust | [≫] | [≫] |
| Imperial College Healthcare NHS Trust | [≫] | [≫] |
| Guy's and St Thomas' NHS Foundation Trust | [≫] | [≫] |
| King's College Hospital NHS Foundation Trust | [≫] | [≫] |
| Royal Brompton and Harefield NHS Foundation Trust | [≫] | [≫] |
| Royal Free London NHS Foundation Trust | [≫] | [≫] |
| Total PPUs | [≫] | [≫] |

Source: CMA analysis.

Note: These shares exclude a number of PPUs in central London, as discussed in paragraph 4.36 above.

HCA's criticisms of our calculations for shares of capacity in private hospitals including PPUs in central London

4.54 Turning to HCA's point on critical care capacity, we have calculated HCA's share of CCL3 beds and its share of combined CCL2 and CCL3 beds in central London, not including NHS PPUs. HCA's share of critical care beds remains high, as presented in Table 4.9 below.

Table 4.9: Shares of CCL2 and CCL3 bed capacity of private hospitals in central London, 2011

| | | Number | | % |
|---|--|---|---|--|
| | CCL3 beds | CCL2+ CCL3 beds | CCL3 beds | CCL2+ CCL3 beds |
| Aspen BMI HCA Hospital of St John & St Elizabeth King Edward VII's Hospital Sister Agnes The Bupa Cromwell Hospital TLC Total | [%] [%] [%] [%] [%] [%] | [≫] [≫] [≫] [≫] [≫] [≫] [≫] | [X] [X] [X] [X] [X] [X] [X] | [%] [%] [%] [%] [%] [%] |

Source: CMA analysis.

- 4.55 For capacity measures like CCL3 beds, theatres and consulting rooms, it is not always possible to compare independent hospitals with NHS PPUs on a like-for-like basis, as patients in a PPU would have access to the NHS hospital's general facilities, with the only dedicated private facilities likely to be inpatient rooms and some consulting spaces.
- 4.56 We accept HCA's argument that our estimate of HCA's share of consulting rooms is likely to be an overestimate, given that we did not include consulting rooms available at non-inpatient facilities. To get a sense of the possible size of the overestimate, we compared our information on

consulting rooms in our set of competitors in Greater London against LaingBuisson's Directory of Independent Medical/Surgical Hospitals & Clinics.⁷⁹ We find that adding the consulting rooms from acute private facilities lowers HCA's share of consulting rooms in Greater London from [45–55]% to [40–50]%.⁸⁰

- Spare capacity in central London
- 4.57 We reviewed the KPMG analysis of the existence of spare capacity in central London submitted by HCA and considered this alongside other evidence and other parties' views on the existence of spare capacity in central London. We noted in the Final Report that we were not able to obtain robust data on spare capacity⁸¹ and we noted in the Remittal PFs that calculating relevant levels of spare capacity that would enable an insurer to switch could not be a matter of precise calculation.⁸²
- 4.58 KPMG's analysis presents evidence that, based on a set of assumptions around utilisation of beds, operating theatres and other dimensions of capacity, there was sufficient spare capacity across a range of non-HCA private hospitals and PPUs in central London based on capacity data and Healthcode invoice data for 2011.
- 4.59 KPMG's analyses of spare bed capacity, [≫] and spare theatre capacity were separate, in that they tested whether PMIs would be constrained based on each factor individually rather than under a combined constraint.
- 4.60 KPMG's latest analysis of spare capacity in central London (outlined in paragraph 4.19 above) extended its previous versions by addressing a number of issues that we had raised.⁸³ As a result of this analysis, we accept that beds and [≫] may not be constraining factors at non-HCA facilities in

⁸¹ Final Report, paragraph 11.107.

⁷⁹ LaingBuisson's Directory of Independent Medical/Surgical & Mental Health Hospitals & Clinics, contained in LaingBuisson Healthcare Market Review 2013-2014.

⁸⁰ According to LaingBuisson's directory, there were 926 consulting rooms in Medical/Surgical independent hospitals and clinics in Greater London. Of these, 660 consulting rooms belonged to entities that were included in our own set of competitors' facilities in Greater London. Of the remaining 245 consulting rooms in LaingBuisson's directory (none of which are in facilities owned or managed by HCA): three rooms are in establishments categorised as Acute Hospital (Overnight Beds) that we did not include in our set of competitors in Greater London in the Final Report; 46 rooms are in Acute NHS Hospital (PPUs) that we did not include in our set of competitors in Greater London in the Final Report, such as Great Ormond Street Hospital's PPU; 101 rooms are in establishments categorised as Acute Hospital (Day Surgery); 30 rooms are in establishments categorised as Cosmetic Surgery; 26 rooms are in establishments categorised as Lasers for Surgery; and 39 rooms are in establishments to total of 691 consulting rooms in our data set of Greater London private hospitals (not including PPUs) lowers HCA's share of consulting rooms in Greater London from [45–55]% to [40–50]%.

⁸² Remittal PFs, paragraph 4.47.

central London that would, in themselves, prevent PMIs from transferring their inpatients and [\gg] patients away from HCA.⁸⁴

- 4.61 However, we do not accept that the availability of beds and [≫] at non-HCA facilities are by themselves good indicators of effective spare capacity in central London. We note that our view of beds as a measure of effective spare capacity is consistent with the views of parties (including HCA) at hearings. HCA accepted that the number of beds alone was not a sufficient measure of effective spare capacity, although it considered that the number of beds was the 'key pinchpoint' when it considered capacity at its own hospitals and that 'beds is more of a pinchpoint, for example, than theatres.' Other parties disagreed with HCA and put forward the view that the number of beds was less likely to be a binding constraint.
- 4.62 We place less weight on KPMG's analysis on spare theatre capacity, because that analysis was more indirect and relied on several assumptions. This was because [[∞]].
 - (a) [≫].
 - (b) [×].
- 4.63 In addition, we also note that [%]
- 4.64 Finally, we also consider that $[\aleph]$
- 4.65 As an additional robustness test, we found that [%]
- 4.66 In reaching a view on spare capacity, the evidence outlined above must be balanced against a number of conflicting pieces of evidence.
 - (a) First, as we stated in the Remittal PFs, the existence and extent of spare capacity will also be substantially determined by the days and times at which consultants are available and willing to practise, and when patients are willing to be seen.⁸⁵
 - (b) Second, the KPMG findings are not consistent with the insurers' views on spare capacity nor with their actions. We noted PMIs' and TLC's views that PMIs faced difficulties when trying to find alternative capacity

⁸⁴ We conducted a number of robustness tests on this analysis, including adjustments to the minimum number of episodes required to count a hospital as offering a specialty.

⁸⁵ Remittal PFs, paragraph 4.47.

to absorb their demand were they to delist HCA.⁸⁶ We noted that Bupa, in particular, did not expect to be able to delist HCA.⁸⁷

- *(c)* Third, private operators, much more so than NHS hospitals, are likely to require a degree of planned spare capacity in order to minimise waiting times, as well as to facilitate consultant and patient preferences.⁸⁸
- (*d*) Fourth, it is not clear that the KPMG results are consistent with hospital providers' own views and actions, given the continuing investment in new theatres and equipment by central London providers.
- 4.67 We remain of the view that the necessary level of spare capacity to facilitate switching by PMIs cannot be a matter of precise calculation. Particular indicators of capacity may be more relevant to some hospitals and specialties than others. Capacity is related to multiple dimensions (not only the utilisation and availability of day and overnight beds, but also operating theatres, intensive care facilities, and other specialist facilities), not all of which have readily available data, and different types of capacity may provide a binding constraint on different occasions. The spare capacity of a hospital will also be substantially determined by the days and times at which consultants are available and willing to practise, and when patients are willing to be seen.
- 4.68 Taking account of the limited scope of KPMG's spare capacity analysis (beds, [≫] and, to a lesser extent, theatres), the fact that it does not cover the availability of specialised equipment, and the conflicting views and actions of those involved in the central London market, on balance, our view is that there are some constraints on overall effective capacity at those providers that could constitute a viable alternative to HCA for PMIs. This 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 in central London.
 - Updating shares of supply
- 4.69 In response to HCA's argument that its share of beds and revenues (based on the February 2015 LaingBuisson report) had fallen since the Final Report, we consider that most, if not all, of the decrease is due to LaingBuisson's inclusion of seven NHS trusts with PPUs in central London that were omitted

⁸⁶ Final Report, paragraph 6.216.

⁸⁷ Final Report, paragraph 6.318.

⁸⁸ For example, [%] Consultants may be allocated more time than they actually use, in order to accommodate their preferences and schedules.

from our calculations in the Final Report, rather than due to any significant change in the underlying position of HCA relative to PPUs and its other competitors since the Final Report. We find that, calculating shares of total revenue using LaingBuisson's data in its February 2016 report but excluding the seven NHS providers that were omitted previously, HCA's share of total revenue is [50-60] % and including PPUs' combined share is [10–20].⁸⁹ These shares are very similar to their counterparts ([50–60]% and [10–20]%) in Table 6 in Appendix 6.10 of the Final Report. This is consistent with our view that there has been relatively little change in HCA's overall share of the market since 2011.

- 4.70 Turning to HCA's point on bed capacity in Greater London, based on published bed numbers in the February 2016 LaingBuisson report,⁹⁰ HCA has a 29% share of beds in Greater London, defined as the county of Greater London.⁹¹ Including four facilities outside Greater London but within the M25, we can replicate HCA's calculation of its share of beds as [20–30]%. However, as we discussed above in relation to spare capacity in central London, we do not regard the number of inpatient beds on its own as a good indicator of effective capacity. Furthermore, we consider that including bed capacity from providers in outer London is likely to overstate the constraint that this capacity places on central London providers, as bed capacity in outer London is unlikely to provide an equivalent constraint to capacity within central London.
- 4.71 As both Bupa and HCA have noted, although we have sought to update our analysis by referring to LaingBuisson's shares of revenue (aggregated across all specialties) and capacity, we have not attempted to collect more up-to-date data on disaggregated shares (at a specialty level) from hospital providers. On the basis of our various estimates of shares of supply using more recent and different data sources, which we discuss in paragraphs 4.33 to 4.40 above, and which were broadly similar to the pattern in 2011, we do not consider that our use of 2011 data for disaggregated shares of admissions would lead us to under- or overestimate shares to an extent that it would materially affect our competitive assessment.

⁸⁹ LaingBuisson may have included revenues from HCA's Harley Street at UCH facility with UCLH's total revenues, rather than with HCA's total revenues as we do in the Final Report.

⁹⁰ CMA analysis, based on LaingBuisson (February 2016), *Private Acute Medical Care in Central London: Market Report, second edition*, Table 3.1, and LaingBuisson (February 2015), *Private Acute Medical Care in Central London: Market Report, first edition*, Appendix 2.

⁹¹ The combined area of the NUTS2 regions Inner London and Outer London.

Conclusions on shares of supply and capacity of private hospitals including PPUs in central London

4.72 On the basis of the evidence above, and triangulating across various approaches and data sources, we consider that the overall pattern of shares of supply in central London remains broadly unchanged since 2011. We remain of the view that central London is a highly concentrated market and that HCA has high shares of supply relative to its competitors. Further, we remain of the view that HCA has a high share of supply by total admissions in many specialties, and that HCA's share is particularly high when considering the potentially more complex segments of the central London market, such as oncology and cardiology (see Table 4.2 above). We remain of the view that HCA operates a high share of private hospital and PPU overnight bed capacity in central London, based on the analysis in the Final Report. We believe that our findings do not depend on our decision to exclude specialist providers and non-inpatient providers from our shares.

HCA's business cases and internal documents on competitive constraints from private hospitals (including PPUs) in central London

- Our conclusions in the Final Report
- 4.73 During the original investigation, we reviewed 20 business cases provided by HCA in response to Question 7 of our Financial Questionnaire, which asked for business cases for all major capital expenditure (in excess of £500,000). We also took into account HCA's summary of several additional business cases.⁹² Our review informed our previous competitive assessment across a range of issues in the Final Report.
- 4.74 On competitive constraints from private hospitals (including PPUs) in central London, based on our previous review of HCA's internal documents, we said in the Final Report that:
 - (a) HCA's business cases did not suggest that PPUs represented a significant constraint on HCA across the full range of treatments/specialties HCA provided (the only exception potentially being ITU services).⁹³
 - (b) Where HCA mentioned central London competitors in its business cases, it only considered a small subset of such competitors to the

⁹² Appendix 7 of HCA's response to the provisional findings of the original investigation.

⁹³ Final Report, paragraph 6.215.

facility in question (as opposed to all of HCA's central London competitors).⁹⁴

- Parties' comments during the remittal
- 4.75 During this remittal, HCA objected to what it viewed as the 'very heavy reliance' that we had placed on our review of HCA's business cases.⁹⁵
 - *(a)* [≫]⁹⁶
 - (b) HCA has also argued that we only reviewed a very limited number of HCA's business cases, and only brief high-level summaries of certain other business cases, and therefore were not in a position to draw general conclusions.⁹⁷ HCA submitted a fuller set of 97 business cases covering the period February 2004 to March 2014, along with a summary table of the cases which record mentions of its competitors.⁹⁸ HCA made a number of arguments on competitive constraints based on this fuller set of business cases, which are presented in the relevant sections below.
- 4.76 Notwithstanding its general criticism of our use of evidence from business cases, HCA also disagreed with both findings outlined in paragraph 4.74 above. On PPUs, it argued that several business cases referred to PPUs and that we only looked at a selection of business cases prior to the lifting of the private patient income cap. After 2011/12, it stated that PPUs featured more prominently in HCA's business cases. HCA also pointed out that a number of its other internal documents, including board presentations and strategy papers, had fully acknowledged the threat which HCA faced from PPUs.⁹⁹ On independent competitors, it argued that its business cases regularly included references to [≫]¹⁰⁰
- 4.77 In its response to the Remittal PFs, HCA reiterated its criticism that, in its view, we relied too heavily on its business cases, most of which dated back several years. HCA was particularly concerned that we appeared to 'dismiss' the competitive constraint from other hospital operators, including [%].¹⁰¹

⁹⁴ Final Report, paragraph 6.217.

⁹⁵ HCA response to comment and submit further evidence, paragraph 4.20(i).

⁹⁶ HCA response to comment and submit further evidence, paragraph 4.20(iv)-(v).

⁹⁷ HCA response to comment and submit further evidence, paragraph 4.21.

⁹⁸ Annex 4 of HCA response to comment and submit further evidence and subsequent HCA update, 30 June 2015.

⁹⁹ HCA response to comment and submit further evidence, paragraphs 4.32–4.34.

¹⁰⁰ HCA response to comment and submit further evidence, paragraph 4.77.

¹⁰¹ HCA response to the Remittal PFs, paragraph 2.49.

- 4.78 HCA objected to our provisional finding, based on our review of its business cases, that HCA did not view PPUs as a significant source of competitive constraint across the full range of treatments/specialties HCA provided.¹⁰² HCA argued [≫], and that these business cases would only be referring to competitors in particular specialisms relevant to them and that it was absurd for the CMA to conclude from this that HCA did not face competitive constraints in other clinical specialties merely because there were fewer business cases in those specialisms.¹⁰³
- 4.79 HCA also objected to our provisional finding that its business cases showed that some NHS hospitals were capacity constrained. In its response to the Remittal PFs, HCA argued that while this may have been an issue in the past (in particular, for the business cases which pre-dated the lifting of the cap on private patient revenues in 2012), there was no evidence that PPU patients were currently encountering difficulty in gaining access to NHS critical care facilities. HCA further pointed to evidence showing that NHS trusts in central London were very keen to diversify and grow their private services, and they had resolved any capacity problems which may previously have existed.¹⁰⁴
 - Our response
 - HCA's criticism of our use of evidence from business cases
- 4.80 We consider that contemporaneous documents, prepared in the normal course of business, are probative in determining the extent to which parties consider various providers as a source of effective competitive constraint. However, we do not accept HCA's submission that we placed unduly heavy reliance on HCA's business cases in our previous assessment, and we note that our review of HCA's business cases was only one aspect of the evidence we considered. We also looked at HCA's other internal documents, and both hospitals and insurers' views on the closeness of competition in Greater London (which are summarised in the Final Report, Appendix 6.10, Annex A, paragraphs 6 to 36).
- 4.81 HCA confirmed that it had submitted a complete set of business cases relating to significant investments in respect of which a formal written

¹⁰² Remittal PFs, paragraph 4.72.

¹⁰³ HCA response to the Remittal PFs, paragraph 2.51.

¹⁰⁴ HCA response to the Remittal PFs, paragraph 2.52.

request for capital was prepared for senior management.¹⁰⁵ We are mindful of the potential for the content of HCA's business cases to be affected by the OFT/CC scrutiny during the latter part of the period covered by HCA's expanded set of business cases. Up to 40 of these cases post-date the start of the OFT's market study in March 2011, and up to 25 post-date the start of the CC's market investigation in April 2012 (see Appendix B for a list of the business cases).¹⁰⁶

- 4.82 In our view, it is reasonable for us to expect HCA to have internal documents which discussed its competition, especially if the competitive constraints that it faced from particular competitors or within particular specialties were significant.
 - Our review of HCA's business cases and internal documents on competitive constraints from private hospitals (including PPUs) in central London
- 4.83 In order to assess HCA's arguments and submissions during this remittal, we have reviewed the fuller set of 97 business cases that HCA submitted, covering the period February 2004 to March 2014. We also discuss some of HCA's internal documents that we reviewed during the original investigation. Our findings on competitive constraints from these reviews are discussed in each of the relevant sections below.
- 4.84 In relation to the competitive constraints imposed by PPUs, we note that around a third of HCA's business cases mention or consider competition from PPUs.¹⁰⁷ In our previous review, only one case out of the 20 that HCA submitted during the original investigation referred to PPUs.
- 4.85 Several cases note that HCA was seeing 'an increased focus on private revenue streams at all of our main NHS competitors', and it expected that the removal of the private patient income cap would accelerate this trend.

¹⁰⁵ HCA initially submitted 93 business cases during this remittal. We asked HCA for clarification on the steps it took to ensure that what it submitted was a comprehensive set of cases for the period February 2004 to March 2014. HCA stated that 'A written business case was not prepared for every capital project at HCA's hospitals, but the 93 business cases listed in Annex 4 all relate to significant investments in respect of which a formal written request for capital was prepared for senior management. There is no centrally held list of business cases for the entire period referred to, but HCA searched the files held by [\gg], currently [\gg], and by [\gg], former [\gg], on 8 April 2014 and this search produced the 93 documents listed in Annex 4.' HCA subsequently submitted four additional cases after further review of its files. HCA confirmed that the 97 business cases were, as far as it had been able to establish having made all reasonable inquiries, a complete set of cases relating to significant investments in respect of which a formal written request for capital was prepared for senior management. ¹⁰⁶ Not every business case was precisely dated.

¹⁰⁷ HCA's own business case summary table states that [≫] out of 97 cases mention specific PPUs or discuss PPUs more generally. However, we do not place too much emphasis on a precise count of mentions, as a number of cases that mention an NHS entity are open to multiple interpretations about whether the case is discussing that entity's PPU or their more general features as a provider of publicly-funded healthcare.

- 4.86 Of the cases that mention PPUs, [most] are about three HCA facilities: Harley Street Clinic ([≫]); London Bridge Hospital ([≫]); and Portland Hospital ([≫]). These cases can be divided into two main groups:
 - (a) The Harley Street Clinic and Portland Hospital cases are generally focused on competition for [≫] services (such as [≫], [≫] and [≫]).
 - (b) The London Bridge Hospital cases contain remarks about the competitive constraints from neighbouring PPUs ([∞], [∞], and [∞]) which are copied in the introductory sections of each case. The London Bridge Hospital cases are not focused on competition within any particular specialties.
- 4.87 [≫],¹⁰⁸ [≫].¹⁰⁹ [≫]
- 4.88 [※]
- 4.89 [≫]. This is consistent with other evidence during our original investigation, and summarised in Appendix 3.1 of the Final Report, that NHS hospitals prioritise NHS patients over their PPU business, and that this could affect PPUs' ability to absorb significant numbers of additional private patients, especially when capacity constraints are present.
- 4.90 [**%**]¹¹⁰, [**%**].
- **4.91** [**≫**].¹¹¹
- 4.92 The business cases show that some NHS hospitals were capacity constrained. [[≫]]. As we stated in paragraph 6.215 of the Final Report, this is in line with our view that NHS hospitals prioritise NHS patients over their PPU business.
- 4.93 In response to HCA's argument that NHS trusts are keen to expand their private services, our view on this point is based on the responses we received from NHS trusts during the original investigation. For instance, King's College Hospital NHS FT told us that priority was given to NHS patients so that NHS care was not compromised, and that PPU patients' access to theatres and intensive care facilities was flexed accordingly. We also note that HCA's internal documents recognise this, [≫].

¹⁰⁸ [≫] ¹⁰⁹ [≫] ¹¹⁰ [≫] ¹¹¹ [≫]

- 4.94 We also considered other internal documents which HCA submitted during the original investigation. In a number of strategy documents, [[∞]].
- 4.95 [≫] HCA appeared to be more concerned that other private hospital operators could secure partnerships with PPUs, rather than that PPUs were effective competitors in their own right.
- 4.96 On the basis of this evidence, our view is that HCA did not regard most PPUs managed by NHS trusts as effective competitors for private patients, although as noted above there were notable exceptions, such as [≫] PPU's strength in oncology and [≫] in paediatrics. For the most part, [≫].
- 4.97 On the basis of the evidence and assessment above, we find that while HCA does view PPUs as a potentially significant source of competitive constraint, we judged that at present a small number of PPUs appear capable of imposing any competitive constraint on HCA, and these tended to be within particular specialties such as paediatrics and oncology because of the PPUs' focus on those specialties.¹¹² Furthermore, some of these PPUs may be capacity constrained, as NHS trusts prioritise their NHS patients over their PPU business. Therefore, on the whole, the constraints that PPUs in aggregate impose are weak.
- 4.98 Turning to private hospital competitors in central London, we find that the two main competitors that HCA considers in its cases are TLC and Bupa Cromwell. All other independent competitors are mentioned far less frequently and, when they are mentioned, are not considered in much detail. In contrast, not only are TLC and Bupa Cromwell more frequently mentioned, but in cases where they are mentioned, the cases consider their actions or features in some detail, and state that these are important, or even the main, reasons why the proposed investment should be made or made quickly.¹¹³
- 4.99 TLC appears to be particularly important. In many instances, and in particular for cancer care, TLC is either the only competitor mentioned,¹¹⁴ one of a few competitors mentioned and/or the main competitor mentioned. For example, TLC is mentioned in more than half of those cases that mention any competitor. It is more frequently mentioned than any other

¹¹² In its response to the Remittal PFs, HCA argued that the cases referred to a wider range of specialties, including gastroenterology, clinical radiology and critical care, and not just paediatrics and oncology (HCA response to the Remittal PFs, paragraph 2.51).

¹¹³ HCA submitted 97 business cases for the period February 2004 to March 2014. Of these, there are 73 cases that mention or discuss competitors, and 63 cases in which a central London competitor was mentioned or discussed. Of these [&] cases, [&] is mentioned in [&] cases, [&] in [&] cases, [&] in [&] cases, and all other independent hospitals in central London are mentioned in fewer than [&] cases each ([&] cases in total). ¹¹⁴ In [&] business cases, [&] is the only competitor that is discussed.

competitor, and it is mentioned in more cases than the combined total number of cases in which any PPU is mentioned. This is consistent with our finding in the Final Report.

- 4.100 In other internal documents submitted during the original investigation, HCA also tended to focus on the actions of TLC and Bupa Cromwell. For instance, in one strategy document, HCA management [≫] in the risk assessment of HCA's strategic business plans.
- 4.101 On the basis of the evidence and assessment above, we find that HCA appears to consider TLC and Bupa Cromwell to be its main competitors and TLC to be its closest competitor. We find that HCA appears to consider other independent central London competitors only to a limited extent.

Competitive constraints from PPUs and other private hospitals in central London

- Parties' comments during the remittal
- 4.102 HCA argued that we had underestimated the scale of the competitive threat which PPUs posed to HCA.¹¹⁵ In addition to the points already outlined above, HCA also made a number of other points on PPUs:
 - *(a)* HCA raised a new argument that central London PPUs had grown a lot since the Final Report,¹¹⁶ and that many had set out strong growth ambitions in their plans.¹¹⁷
 - *(b)* It also reiterated its previous argument that PPUs had several competitive advantages over other private healthcare providers due to their NHS status, such as: their ability to access NHS land and infrastructure; co-location with an NHS hospital which provided an advantage for attracting consultants; not having to contribute to staff pension costs and giving access to NHS pensions; the ability of NHS trusts to raise capital at lower cost; and significant tax advantages, for example no corporation tax liability.¹¹⁸
 - *(c)* Finally, HCA argued that PMIs' 'directional policies', which were products that allowed PMIs to influence patients' choice of hospital or consultant, showed that they viewed PPUs (and indeed, hospitals in

¹¹⁵ HCA response to comment and submit further evidence, paragraph 4.31.

¹¹⁶ HCA response to comment and submit further evidence, paragraph 4.45.

¹¹⁷ HCA response to comment and submit further evidence, paragraph 4.50.

¹¹⁸ HCA response to comment and submit further evidence, paragraphs 4.40 & 4.41.

outer London and the NHS, both discussed below) as effective substitutes for their policyholders.¹¹⁹

- 4.103 HCA also argued that we had failed to take account of the strong competitive pressures from other private healthcare providers in central London.¹²⁰ HCA noted the high number of competing fascias (six) of independent providers in central London operating eight hospitals, excluding PPUs and NHS hospitals. HCA also made a number of points about the advantages its competitors enjoyed, for example: charity status and tax exemptions (TLC, Hospital of St John & St Elizabeth, and King Edward VII's Hospital); and vertical integration with a PMI (Bupa Cromwell).¹²¹ On TLC's charity status in particular, HCA argued that we did not carry out any analysis or present any evidence showing that the VAT savings from charity status were small, and that we were wrong to disregard the effect on insured prices of potential differences in fixed costs between hospital operators.¹²²
- 4.104 HCA also made a broader argument about our approach to our competitive assessment, namely that we largely ignored competition to attract and maintain consultants, which it argued was one of the most significant features of competition between hospital operators. HCA argued that it invested in new services and facilities in order to compete for consultants, who would otherwise practise at rival hospitals in central London.¹²³ HCA argued that consultants' views and behaviour would be relevant to our competitive assessment. For instance, HCA argued that we should consider whether consultants viewed PPUs as close substitutes for private hospitals.¹²⁴
- 4.105 Other parties did not make extensive submissions during this remittal on the competitive constraint from private hospitals and PPUs in central London:
 - (a) In AXA PPP's view, HCA's facilities continued to occupy a 'must have' status and this remained particularly the case for corporate customers and for certain specialties including oncology and cardiology.¹²⁵ AXA PPP stated that there had been no material increase in the constraint provided by NHS facilities.¹²⁶

¹¹⁹ HCA response to comment and submit further evidence, paragraph 4.37.

¹²⁰ HCA response to comment and submit further evidence, paragraph 4.55.

¹²¹ HCA response to comment and submit further evidence, paragraphs 4.55–4.78.

¹²² HCA response to comment and submit further evidence, paragraphs 4.63 & 4.64.

¹²³ HCA response to comment and submit further evidence, paragraphs 4.12–4.14.

¹²⁴ HCA response to comment and submit further evidence, paragraph 4.36.

¹²⁵ AXA PPP response to comment and submit further evidence, p1.

¹²⁶ AXA PPP response to comment and submit further evidence, Q1 p3.

- (b) In Bupa's view, [≫].¹²⁷ Bupa also argued that PPUs did not provide an effective constraint on HCA because they focused only on a niche range of specialisms and continued to face political uncertainty over expansion.¹²⁸ [≫].¹²⁹
- Our response
- 4.106 Before we respond to parties' views on competition within central London during this remittal, we note that parties had presented their views on this matter during the original investigation. We summarised these views in the Final Report, Appendix 6.10, Annex A, and we have taken those views into account in our assessment during this remittal, in addition to the views expressed during this remittal.
- Responding to HCA's arguments on PPUs, we recognise that central 4.107 London PPUs have grown since the Final Report. According to LaingBuisson, central London PPUs' revenue has increased from £240 million in 2011 to £315 million in 2014 (31% growth over three years).¹³⁰ However, we note that their growth has been broadly in line with the overall growth in the private healthcare market in central London over the same period, from £1,082 million in 2011 to £1,376 million in 2014 (27% growth over three years).¹³¹ PPUs' market position relative to independent private hospitals, as indicated by shares of supply and capacity, has not changed significantly since the Final Report, as discussed in paragraph 4.69 above. We also note that while many NHS trusts and FTs have set out ambitious growth plans for their PPUs, the actual extent of PPU expansion continues to remain uncertain and we have seen no evidence that planned PPU expansion is placing any overall competitive constraint on private providers' current behaviour.
- 4.108 Having said this, as noted in Section 5 on barriers to entry, a significant new PPU managed by Nuffield will open at Barts in 2018. This PPU is expected to focus on cardiology, which is a specialty in which HCA currently has a strong position. Also, as noted in HCA's business cases (see paragraph 4.96 above), the fact that this PPU will be managed by a competing private hospital operator may increase the potential competitive constraint that it imposes when it becomes operational. As such, while current constraints are weak and expected entry and expansion does not appear to be exerting a

¹²⁹ Bupa hearing summary.

¹³¹ ibid, Figure 1.5.

¹²⁷ Bupa response to comment and submit further evidence, paragraphs 2.8–2.15.

¹²⁸ Bupa response to comment and submit further evidence, paragraph 2.19.

¹³⁰ LaingBuisson (February 2016), *Private Acute Medical Care in Central London: Market Report, second edition,* Figure 1.5.

constraint on incumbents at present, this may change with future entry, even where this is limited in scope (see paragraphs 12.103 and 12.105).

- 4.109 It is unnecessary for us to examine or conclude on the extent to which PPUs enjoy competitive advantages due to their status as NHS entities. To the extent that PPUs do enjoy such advantages, as HCA has argued, we expect the effect of these advantages to manifest in market outcomes (such as shares of supply) and parties' views on the competitive constraint that they impose, which we have examined (see paragraphs 4.10 to 4.72 and 4.102 to 4.116).¹³²
- 4.110 In our view, the existence of 'directional' policies and strategies (ie PMIs' efforts to influence patients' choice of hospital and consultant) does not demonstrate that PPUs are effective substitutes for private hospitals. While PMIs may indeed consider PPUs to be effective substitutes in terms of clinical outcomes and value for money, patients and consultants may not fully share these views. We note, for instance, that our patient survey indicated that patients typically do not view PPUs as close substitutes for private hospitals.¹³³ In any event, we have seen no evidence that PMIs are able to divert significant numbers of patients from or to specific operators' hospitals as a result of these measures.¹³⁴
- 4.111 With regard to HCA's points on other independent competitors in central London, we considered not only shares of supply, but also parties' views and internal documentary evidence on the competitive constraints they provide. In any event, to the extent that HCA's competitors enjoy advantages, these should be reflected in market outcomes, as measured by shares of supply in central London and profitability.
- 4.112 In relation to HCA's observation of the number of fascias in central London, as we stated in the Final Report, this does not necessarily imply that all these fascias are exerting similar competitive constraints on each other.¹³⁵ This is a widely-recognised limitation of fascia count as a concentration measure.
- 4.113 We have already responded, in the Final Report, to HCA's arguments on the cost advantage that its central London rivals might have due to their charity

¹³² HCA reiterated in its response to Remittal PFs that the strategic advantages which a competitor enjoys must be taken into account. (HCA response to the Remittal PFs, paragraph 2.59).

¹³³ HCA had criticised the framing of the question, arguing that most respondents would not know what a PPU was. We acknowledged this criticism in the Final Report, footnote 121 of paragraph 6.215, but we consider that the results are still informative.

¹³⁴ Final Report, paragraph 6.329.

¹³⁵ Final Report paragraph 6.238.

status, such as corporation tax relief, business rate relief and VAT savings.¹³⁶ We disagree with HCA's view that we did not present evidence showing that the VAT savings associated with charity status are small, as we explicitly estimated that this only accounts for a small proportion of the hospitals' cost bases.¹³⁷ We considered that our analysis had taken account of the relevant cost differences that are likely to be substantive, and any remaining cost differences are likely to be small and/or not affect pricing decisions.138

- 4.114 On HCA's point that the Bupa Cromwell is vertically integrated, we did not discuss this in the Final Report, and we consider that it is unnecessary for us to examine or conclude on the extent to which the Cromwell enjoys competitive advantages due to its vertical integration with Bupa. We expect the effect of any advantage enjoyed by the Cromwell to manifest in market outcomes (such as shares of supply) and parties' views on the competitive constraint that they impose, which we have investigated.¹³⁹
- 4.115 On HCA's point about considering competition for consultants, we agree that hospital operators competing to attract consultants (a scarce input to their services) may lead to beneficial outcomes for patients, such as improved quality and range of treatments. We disagree that we ignored competition to attract consultants in the Final Report. In fact, hospital competition for consultants was the subject of Section 8 of the Final Report, where we found that benefits and incentive schemes whose purpose was to encourage consultant referrals had been widely adopted by hospital operators, and that all such schemes had the capacity to affect clinician conduct.¹⁴⁰
- In response to HCA's suggestion that we should consider whether 4.116 consultants view PPUs as close substitutes for private hospitals, we consider that the available evidence suggests that consultants do not view PPUs as close substitutes for private hospitals, at least in respect of consultants' preferences over where to base their practice and treat patients. Some of HCA's business cases and internal documents considered in the

¹³⁶ Final Report, paragraph 6.367: 'Since corporation tax is applied to net profits and business rates are fixed costs, we would not expect either of these to be relevant for pricing. Regarding VAT, we considered the likely impact that this may have and found it to be small.'

¹³⁷ Final Report, paragraph 6.367, footnote 483, we calculated that 'even if no VAT savings are related to fixed costs ... this only accounts for savings of around [36] per cent of the cost base, which is substantially smaller than the price difference that we have estimated.'

¹³⁸ Final Report, paragraph 6.368.

¹³⁹ HCA reiterated in HCA response to the Remittal PFs that the strategic advantages which a competitor enjoys must be taken into account (paragraph 2.59). HCA further argued that we should consider Bupa Cromwell's vertical integration as, in its view, to rule out other firms' competitive advantages on the basis of existing market shares amounts to assuming the conclusion of an assessment on whether market shares indicate a lack of competition or instead the reward for effective competition (paragraph 2.63)

¹⁴⁰ Final Report, paragraph 8.165.

paragraphs above mention consultants' views on PPUs, and suggest that they do not view PPUs as close substitutes.¹⁴¹ We also note that the OFT commissioned a nationwide survey of consultants and found that almost half (46%) of consultants preferred to work from a privately-owned facility over a PPU and only 17% preferred to work from a PPU over a privately-owned facility.^{142,143} The quality of patient amenities and medical facilities were identified as key reasons why consultants preferred one type of facility over another. Given that the survey was nationwide, we acknowledge that this may not reflect the preferences of consultants in central London.

Competition from non-inpatient facilities in central London

- Parties' views during this remittal
- 4.117 As discussed in Section 3 on market definition, HCA disagreed with our focus on the providers of inpatient care. In addition to these arguments, HCA further submitted that there was a wide range of independent providers of both outpatient and day-case services which competed with private hospitals in central London. HCA also stated that there was a very large number of consulting rooms in central London not owned or operated by private hospitals, in which consultants in all specialties regularly provided outpatient consultations.¹⁴⁴ There was also a wide range of non-inpatient providers that offered imaging and diagnostic services. Some of these providers also provided consulting rooms, outpatient facilities and treatment rooms. According to HCA, there were low material barriers to entry in outpatient and day-case clinics.
- 4.118 HCA objected to our provisional finding that non-inpatient facilities only competed with HCA in central London across a narrow set of services, primarily imaging and diagnostic procedures. HCA argued that while the business cases cited by the CMA related to new investments in imaging and diagnostic equipment and therefore obviously focused on the competitors in this area, that could not be used as an argument that HCA disregarded the

Private Healthcare Among General Practitioners and Medical Consultants, section 3.4.1 & 3.4.2.

 ¹⁴¹ [%]. Similarly, in HCA's strategy documents, HCA's consultants expressed concerns that PPUs have a number of issues, including lack of differentiation from NHS (which private patients don't want), management issues, competition with NHS patients for theatres and other facilities, and poor environment
 ¹⁴² 37% of consultants had no preference. GHK (August 2011), *Programme of Research Exploring Issues of*

¹⁴³ In response to this, HCA argued that the survey suggests that a majority of consultants surveyed (54%) considered that PPUs were a substitute to private hospitals in terms of their own practice; that the survey was nationwide whereas the PPUs in London are a more potent competitive force; and that [\gg] of its own consultants also have practising privileges at NHS PPUs (other than HCA administered PPUs). (HCA response to the Remittal PFs, paragraph 2.64.)

¹⁴⁴ We address this point in paragraph 4.56 on shares of capacity, where we accept that our estimate of HCA's share of consulting rooms is likely to be an overestimate.

competitive constraints from other day-case/outpatient providers. HCA also cited a number of its business cases which showed that it viewed other non-inpatient providers as competitors.¹⁴⁵

- 4.119 In its response to the Remittal PFs, HCA argued that our view that consultants preferred to operate from a single inpatient facility was contradicted by the fact that there was a very wide range of day-case and outpatient clinics which had been successfully established in central London, often owned and managed by consultants. The consultants carrying out day-case/outpatient consultations in these clinics would typically carry out inpatient treatments in central London hospitals.¹⁴⁶
- 4.120 Both AXA PPP and Bupa disagreed that non-inpatient providers imposed significant competitive constraints on private hospital operators in central London, even within day-case and outpatient treatments. AXA PPP submitted that, even if the entirety of certain procedures (such as MRI scans) could, in theory, be moved from inpatient providers to non-inpatient facilities, such an analysis would ignore the effect of the patient journey and the practices of consultants. Both AXA PPP and Bupa made the following points:
 - (a) Both noted that non-inpatient facilities accounted for a very small proportion of their claims and spend in central London in 2011, and that many of the largest and most successful day-case and outpatient-only facilities in central London were part of HCA.
 - (b) In more complex cases, especially in relation to day-case treatments, there would be a risk that inpatient facilities would be required as a result of adverse patient reaction or complications. In practice, a significant number of day-case procedures resulted in one- or two-night stays.¹⁴⁷ Consultants might try to reduce the need to transfer patients between facilities for different treatments or if the need for inpatient back-up arose.
 - (c) Most consultants performed a mix of inpatient, day-case and outpatient work, and preferred to work from a single private facility for a variety of reasons (eg to reduce travelling between facilities, running different practice management systems, and scheduling difficulties). It was much more convenient for surgeons to fit day-case and outpatient work, regardless of its complexity, into the parts of their working week that they

¹⁴⁵ HCA response to the Remittal PFs, paragraph 2.69.

¹⁴⁶ HCA response to the Remittal PFs, paragraph 2.66.

¹⁴⁷ For example, the British Association of Day Surgery's 'Directory of Procedures' shows indicative proportions of patients undergoing day-case procedures requiring one-night stays or more.

spent at a single inpatient facility. Even if an individual treatment or patient did not require inpatient back-up, consultants might still take patients to the facility where they undertook the majority of their work.

- 4.121 AXA PPP further submitted that inpatient providers held an important means of leverage in inpatient services, should a PMI attempt to divert a large amount of non-inpatient spend away from inpatient providers.
 - Our response
- 4.122 As discussed in paragraphs 4.41 to 4.52 above, we estimate that including non-inpatient facilities is likely to have a minimal effect on the overall shares of supply provided by inpatient providers in central London. Non-inpatient facilities have a very small share of Bupa and AXA PPP's admissions¹⁴⁸ and a small share of their revenues. This suggests that non-inpatient providers are not currently providing any material constraint on inpatient providers in central London, across a broad range of specialties and procedures. We also found that, although non-inpatient providers do not impose a competitive constraint across hospital operators' full range of activities, they could potentially do so within the outpatient market in central London, where non-inpatient providers accounted for [≫] of Bupa and AXA PPP's outpatient spend in central London in 2011. (Although we note, as discussed in paragraph 4.49 above, HCA has a sizeable share of Bupa and AXA PPP's spend at non-inpatient facilities).
- 4.123 We found AXA PPP and Bupa's point that consultants prefer to operate from a single inpatient facility convincing, and note that it is consistent with our view that the risk to hospital operators in the event of a major delisting from consultant drag effect is serious, which we discuss in the context of hospital delisting by PMIs in Section 6 on bargaining.
- 4.124 We also reviewed HCA's business cases to determine whether HCA placed much weight on its consideration of the competitive threat from non-inpatient facilities in central London, particularly within the outpatient market. HCA does consider competition from independent imaging facilities in and around Harley Street, [≫].
- 4.125 Given the focus on imaging and diagnostics in HCA's business cases that mention non-inpatient providers, we also looked at recent shares of imaging and diagnostic equipment within central London. According to LaingBuisson, there are an estimated 45 private MRI scanners, 23 CT scanners and five

¹⁴⁸ Inpatient and day-case admissions.

PET/CT scanners in central London, in hospitals and non-inpatient facilities.¹⁴⁹

Table 4.10: Imaging equipment in central London

| | | | Number |
|--------------------------------|-----|----|--------|
| | MRI | СТ | PET/CT |
| Hospitals | 16 | 13 | 2 |
| HCA's hospitals | 7 | 5 | 0 |
| Other independent hospitals | 9 | 8 | 2 |
| Non-inpatient facilities | 29 | 10 | 3 |
| HCA's non-inpatient facilities | 13 | 3 | 2 |
| Other non-inpatient facilities | 16 | 7 | 1 |
| Total | 45 | 23 | 5 |

Source: CMA analysis, based on the LaingBuisson report (February 2015) Tables 3.6 and 5.1.

- 4.126 According to LaingBuisson, HCA owns 20 out of 45 MRI scanners (44%), eight out of 23 CT scanners (35%), and two out of five PET/CT scanners (40%) in central London. We conclude that HCA has a strong position in imaging and diagnostic services in central London.
- 4.127 On the basis of all of this evidence, we consider that non-inpatient facilities do compete with HCA in central London, but only for a narrow set of services, primarily imaging and diagnostic procedures. Even within the imaging and diagnostic segment, in which non-inpatient providers might provide a competitive constraint on hospital operators, HCA has a strong position. We agree with AXA PPP that non-inpatient providers do not currently provide sufficient constraint across a broad range of specialties and procedures, which limits their ability to act as effective alternatives to inpatient providers, particularly for PMIs as insurers and hospital operators negotiate prices across a bundle of outpatient, inpatient and day-case treatments.¹⁵⁰

Conclusions on competitive constraints between private hospitals including PPUs in central London

4.128 On the basis of all the evidence, we remain of the view that HCA faces weak competitive constraints from private hospitals including PPUs located in central London. We remain of the view that PPUs in aggregate currently represent a weak constraint. Similarly, we find that non-inpatient providers in aggregate are also currently a weak constraint. Considering insured patients, and in particular PMIs' corporate clients, the relevant competitive constraints on HCA arise at present from a relatively narrow set of private

¹⁴⁹ LaingBuisson (February 2015), *Private Acute Medical Care in Central London Market Report*, Tables 3.6 & 5.1.

¹⁵⁰ Final Report, paragraphs 6.292: 'rather than negotiating over the price of individual treatments, parties will generally negotiate at renewal over a single percentage increase in prices across all treatments.'

hospitals including PPUs in central London, in particular TLC (and possibly, to a lesser extent, Bupa Cromwell).

Competitive constraints from the NHS

Our conclusions on competitive constraints from the NHS in the Final Report

- 4.129 Our assessment of the constraints from outside of the market from the NHS is set out in paragraphs 6.220 to 6.223 of the Final Report. We considered HCA's internal documents and business cases.
- 4.130 On the basis of this, we found that while HCA did take a general interest in the NHS as a public funder of healthcare services, this interest was not in terms of the NHS as a competitor to HCA but in the context of seeking to create new demand for private hospital services. Overall NHS services were not regarded by HCA as a close substitute for private patient services provided by HCA and the competitive constraints exerted by the NHS on HCA were, if any, very limited.¹⁵¹

Parties' comments during this remittal on competitive constraints from the NHS

- 4.131 As discussed in paragraph 4.75 above, HCA was critical of our reliance on its business cases in general, and particularly of the fact that our conclusion on the NHS was almost entirely based on our review of HCA's business cases.¹⁵²
- 4.132 HCA stated that we did not carry out a detailed assessment of the impact of NHS public healthcare on the private sector in London, and pointed to evidence that it had previously submitted about the correlation between NHS performance and demand for HCA services.¹⁵³
- 4.133 HCA further noted that, in reviewing a full set of its business cases, several of them made references to NHS hospitals as competitors to HCA, and there were regular references to specific NHS hospitals.¹⁵⁴
- 4.134 HCA further argued that the competitive constraints from NHS providers were particularly strong in central London, as London was home to the UK's

¹⁵¹ Final Report, paragraph 6.223.

¹⁵² HCA response to comment and submit further evidence, paragraph 4.20.

¹⁵³ For example, 'how improvements in waiting times for cardiac treatment in the NHS led to a reduction in HCA's patient volumes'. See HCA response to comment and submit further evidence, paragraph 4.16, third bullet.
¹⁵⁴ HCA response to comment and submit further evidence, paragraph 4.20(iii).

major research and teaching hospitals, and the NHS was still seen by patients as the preferred option for complex elective procedures, for example in cancer and cardiac care.¹⁵⁵ It argued that the substantial scale and pace of NHS investment in cancer and cardiac care in London over the next few years would strengthen these constraints.¹⁵⁶

- 4.135 As with its argument on PPUs and PMIs' 'directional policies' (discussed in paragraph 4.102 above), HCA argued that certain PMIs' practice of providing cash benefits to encourage patients to be treated in the NHS rather than make a claim on their policy showed that PMIs viewed the NHS as effective substitutes for their policyholders.¹⁵⁷
- 4.136 Finally, HCA argued that we drew a false distinction between 'creating new demand for private hospital services' and 'competing with the NHS'. HCA argued that it was incentivised to invest in quality and range in order to attract patients who might otherwise choose NHS treatment.¹⁵⁸
- 4.137 AXA PPP stated that it had no initiatives to increase referrals towards NHS providers, and that the NHS's continued difficulty in providing timely services and treatments indicated that this was unlikely to change.¹⁵⁹
- 4.138 Bupa responded to HCA's argument in paragraph 4.135 above by stating that Bupa's NHS Cash Benefits accounted for [≫] of Bupa's total claims spend in each year across the UK. Therefore, the effect on private provider revenues was very small.¹⁶⁰

Our response

- 4.139 We set out our views on HCA's business cases in paragraph 4.80 above. We have reviewed HCA's extended set of business cases covering the period February 2004 to March 2014 to determine whether HCA placed much weight on its consideration of the competitive threat from the NHS as a provider of publicly-funded healthcare services (excluding PPUs).
- 4.140 We found that there are relatively few instances in its business cases where HCA considers the competitive threat from the NHS as a provider of publicly-

¹⁵⁵ HCA response to comment and submit further evidence, paragraph 4.19.

¹⁵⁶ HCA response to comment and submit further evidence, paragraphs 4.22–4.29.

¹⁵⁷ HCA response to comment and submit further evidence, paragraph 4.16, fourth bullet.

¹⁵⁸ HCA response to comment and submit further evidence, paragraph 4.20(vi). HCA reiterated this point in HCA response to the Remittal PFs, paragraph 2.73.

¹⁵⁹ AXA PPP response to comment and submit further evidence, Q1 p2. AXA PPP subsequently clarified that 'in a small number of cases some patients have chosen to forego their indemnity insurance in order to receive other support, including cash payments. In such cases they would revert to the NHS.'

¹⁶⁰ Bupa response to comment and submit further evidence, paragraphs 2.29–2.31.

funded healthcare services, rather than in its capacity as a competitor for private work via PPUs (which we discuss above).¹⁶¹

- 4.141 In a number of cases, [[≫]]. Similar to our findings in our original investigation,¹⁶² we found that, on the whole, HCA's business cases illustrate that HCA considers the NHS to some degree as a benchmark for its product range and to assess its business opportunities.
- 4.142 However, the business cases rarely contain clear instances of HCA investing in order to prevent its private patients from switching to the NHS as a public provider of healthcare. [≫].¹⁶³ [≫].
- 4.143 However, similar to what we found in our original investigation, and as stated in paragraph 6.222 of the Final Report, HCA's range and quality decisions are not indicative of the NHS imposing strong competitive constraints as HCA submitted with respect to HCA's private business. This is in stark contrast to, in particular, the evidence in HCA's business cases which focuses on competition between HCA and TLC surrounding cancer care.
- Responding to HCA's other points, as discussed in the paragraph above, in 4.144 the Final Report we did not consider that PMIs' efforts to steer patients demonstrates that the PMIs' favoured alternatives are effective substitutes for private hospitals. As we discussed in the Final Report, regarding the NHS in particular, even if some PMI policyholders are choosing to be treated on the NHS, it does not mitigate the fact that a PMI will still need to have adequate private hospital provision in central London to sell credible PMI policies. We found no persuasive evidence to suggest that the NHS was a relevant constraint in the context of the substitutes available to PMIs.¹⁶⁴ We further note that, in any event, the impact to date of PMIs' efforts to steer patients to the NHS appears to have been limited, given Bupa's evidence in paragraph 4.138 above. Furthermore, the fact that Bupa has to offer its policyholders a sizeable cash incentive to use publicly-funded healthcare in itself suggests that insured patients do not view the NHS as a close substitute for private healthcare services without a significant cash discount.

¹⁶¹ HCA's own business case summary table states [**X**]. We do not place too much emphasis on a precise count of mentions, as a number of cases that mention an NHS entity are open to multiple interpretations about whether the case is discussing that entity's PPU or its more general features as a provider of publicly-funded healthcare. However, from our reading of the submitted business cases, it seems that HCA may have miscategorised a number of cases that discuss the NHS as a competitor for private work as cases which discuss the NHS as a provider of publicly-funded healthcare. Furthermore, in a number of cases that do discuss the NHS rather than PPUs, [**X**].

¹⁶² Final Report, paragraph 6.222.

¹⁶³ For example, [%].

¹⁶⁴ Final Report, paragraph 6.198.

- 4.145 Finally, while we agree that the existence of publicly-funded NHS services provides a minimum on the value for money that private healthcare must deliver, and that this minimum may be higher in central London than in other parts of the UK due to the presence of major research and teaching hospitals, we still consider that publicly-funded NHS services are not a close substitute for private patient services provided by HCA, particularly in relation to substitutes available to PMIs.
- 4.146 On the basis of this, we conclude that while HCA does take a general interest in the NHS as a public funder of healthcare services, this interest is usually not in terms of the NHS as a competitor to HCA, but in the context of seeking to create new demand for private hospital services. Overall, NHS services are not a close substitute for private patient services provided by HCA and the competitive constraints exerted by the NHS on HCA are limited.
- 4.147 We discuss the competitive constraints from the NHS with respect to selfpay patients in Section 10.

Conclusions on competitive constraints from the NHS

4.148 On the basis of the evidence and analysis above, we remain of the view that NHS services are not a close substitute for private patient services provided by HCA, and the competitive constraints exerted by the NHS on HCA are limited.¹⁶⁵

Competitive constraints from private hospitals and PPUs outside central London

Our conclusion in the Final Report

- 4.149 Our previous assessment of the strength of the competitive constraints exerted by private hospitals and PPUs located in outer London on HCA's central London hospitals is set out in paragraphs 6.224 to 6.228 of the Final Report. We considered: *(a)* patient travel patterns; *(b)* HCA's business cases; and *(c)* shares of admissions and revenue for Greater London hospitals.
- 4.150 On the basis of these considerations, we found that HCA faced weak competitive constraints from outer London hospitals including PPUs and that this was consistent with the views of many parties.¹⁶⁶

¹⁶⁵ Final Report, paragraph 6.223.

¹⁶⁶ Final Report, paragraph 6.228.

Parties' comments in this remittal

- 4.151 We organise and discuss parties' comments under the following headings:
 - (a) Patient travel patterns (paragraphs 4.152 to 4.158).
 - (b) Evidence from HCA's business cases (paragraphs 4.159 to 4.164).
 - (c) Shares of supply including outer London hospitals (paragraphs 4.165 to 4.168).
 - *(d)* Competitive constraints from international providers (paragraphs 4.169 to 4.175).
 - Patient travel patterns
- 4.152 HCA criticised our use of patient travel patterns in support of our argument that hospitals outside central London do not impose significant competitive constraints.¹⁶⁷ In the Final Report, we noted that outer London hospitals attracted patients who travelled much shorter distances than those attending central London hospitals, and just over half of patients resident in outer London and nearly all patients resident in central London had their treatments in central London. We suggested two possible reasons for these phenomena: convenient location due to proximity to work rather than home, and the strong reputation of central London hospitals.¹⁶⁸ HCA argued that we did not test the response of existing patterns of usage of patients in outer London to a small but significant alteration in value (such as guality of care) of central London hospitals, which have a range of local alternatives in outer London. HCA further argued that competitive pressures provided by outer London hospitals benefited all its patients, as HCA could not and did not discriminate between patients on the basis of whether they lived in or outside central London.¹⁶⁹ HCA reiterated all of these points in its response to the Remittal PFs.¹⁷⁰
- 4.153 HCA also pointed out that, with regard to our convenience point, this might be relevant for outpatient appointments, but was unlikely to apply for inpatient procedures (which were the focus of our original investigation) as inpatients were more likely to prefer a hospital that was close to their home.¹⁷¹ On the perception of high quality of care in central London, HCA

¹⁶⁷ HCA response to comment and submit further evidence, paragraph 4.89.

¹⁶⁸ Final Report, paragraph 6.225.

¹⁶⁹ HCA response to comment and submit further evidence, paragraph 4.90.

¹⁷⁰ HCA response to the Remittal PFs, paragraphs 2.75–2.80.

¹⁷¹ HCA response to comment and submit further evidence, paragraph 4.90(ii).

pointed out that we did not carry out a detailed analysis of quality, and that 'the CMA cannot in any event dismiss all [outer] London hospitals collectively as having a lower quality offering'.¹⁷²

- Our response
- 4.154 The significant number of patients living in outer London who travel to central London hospitals, despite having local alternatives, suggests that those alternatives are not effective substitutes. We are not suggesting that the fact that patients resident in central London do not travel into outer London for treatment addresses the competitive constraints in relation to patients resident in outer London. Instead, that fact is relevant to the extent of the competitive constraints exerted by outer London hospitals on central London hospitals in relation to patients resident in central London hospitals in relation to patients resident in Central London hospitals.
- 4.155 In response to HCA's criticism that we did not test how existing patterns of usage of patients in outer London would respond to a small but significant alteration in value, we make the following points. As we stated in the Final Report, we did not include questions in our patient survey that tested patient reactions to a small increase in price or a decrease in quality because:
 - *(a)* questions on small price changes would not apply to insured patients at the point of treatment;
 - (b) it can be difficult reliably to relate questions about reactions to small price changes to PMI policies to the behaviour of the hospital operators. For example, a 5% increase in the price of policies will equate to a much larger price increase for hospital operators; and
 - *(c)* it can be difficult reliably to frame questions on small changes in quality.¹⁷³
- 4.156 Furthermore, it is not straightforward to determine how changes to patients' patterns of usage in response to marginal changes by hospital operators would affect the choices available to PMIs (ie their outside options) when they are designing their networks and negotiating prices. (We discuss PMI negotiations with HCA in more detail in Section 6 on Bargaining.)
- 4.157 On the convenience point, we consider that the convenience of attending an outpatient appointment in central London during the working day could also

¹⁷² HCA response to comment and submit further evidence, paragraph 4.84.

¹⁷³ Final Report, footnote 187 to paragraph 5.13.

have a follow-on impact on inpatient treatments. Once a patient has met a particular consultant, it becomes more likely that they will receive inpatient care at a facility at which that consultant has practising privileges.¹⁷⁴ In the Final Report, we noted [\gg] view that although patients would travel for surgery, they would not travel for a consultation and a lot of consultations happened between 9am and 8pm on Monday to Friday. [\gg].¹⁷⁵ However, as we also noted in the Final Report, [\gg] tried to put outpatient consulting rooms in central London ([\gg]) as a way to attract patients to [\gg], but this was not a success.¹⁷⁶

- 4.158 On the quality point, as discussed in Section 3, even though we could not objectively judge the relative levels of quality, what matters for competitive constraints are patients' and consultants' perceptions of quality. Parties' widespread views suggest that central London hospitals are perceived to be of higher quality and outer London hospitals are not viewed as substitutes for central London hospitals.¹⁷⁷
 - Evidence from HCA's business cases
- 4.159 In the Final Report, we noted that if outer London residents who go to central London for treatments were to consider outer London hospitals to be close substitutes, this should be reflected in HCA's business cases. However, in our original investigation, when looking at 20 high-value business cases, we found only one instance of HCA taking into consideration a competitor from outer London.¹⁷⁸
- 4.160 As discussed in paragraph 4.75 above, HCA objected to what it viewed as our 'very heavy reliance' on a subset of its business cases and submitted a fuller set of its business cases as part of the remittal.
 - Our response
- 4.161 We set out our views on HCA's business cases in paragraphs 4.80 to 4.82 above.
- 4.162 We have reviewed HCA's extended set of business cases covering the period February 2004 to March 2014 to determine whether HCA placed

¹⁷⁴ Final Report, Appendix 6.10, Annex A, paragraph 9.

¹⁷⁵ Final Report, Appendix 6.10, paragraph 25.

¹⁷⁶ Final Report, Appendix 6.10, paragraph 26.

¹⁷⁷ Final Report, Appendix 6.10, paragraphs 6–13, and also Appendix 2.1, paragraph 40.

¹⁷⁸ Final Report, paragraph 6.226.

much weight on its consideration of the competitive threat from private hospitals and PPUs in outer London.

- 4.163 We found that HCA rarely considers providers in outer London.¹⁷⁹ It mainly does so in relation to cases concerning its 'satellite' outpatient diagnostic facilities in [≫], located on the edge of central London, and [≫], or in cases for services which are not provided by any competitors in central London and where the only alternative provider is in outer London.
- 4.164 We also note that HCA appears to consider its central London location to be a source of competitive advantage, relative to outer London providers. For instance, [≫].
 - Shares of supply for Greater London hospitals
- 4.165 In the Final Report, for shares of supply in 2011, we found that, even including hospitals and PPUs in outer London, HCA's shares were still high, with [30–40]% by admissions (inpatient or total), [40–50]% by total revenue and [40–50]% by inpatient revenue. BMI was the second largest operator and TLC was the third.¹⁸⁰
- 4.166 HCA stated that we incorrectly omitted a number of private hospitals in Greater London from our previous shares of supply.¹⁸¹ Also, as discussed in paragraph 4.24(c) above, HCA argued that its share of capacity in Greater London, which in its view was the only correct measure, was only 27.5% of total beds, based on LaingBuisson's published bed numbers.¹⁸²
 - Our response
- 4.167 HCA submitted that we previously omitted four hospitals from our Greater London shares: Aspen Holly House; Ramsay Ashtead; Ramsay North Downs; and Spire Bushey. We had omitted these four facilities because, while all four are located within the M25, they are outside the boundaries of the county of Greater London.
- 4.168 Nevertheless, using 2011 data submitted during our original investigation, we find that HCA's shares of total admissions and total revenues are not

¹⁷⁹ [%]

¹⁸⁰ Table 7, ibid.

¹⁸¹ HCA response to comment and submit further evidence , paragraph 4.96(iv). The omitted hospitals within the M25 from the Final Report, Appendix 6.10, Annex C are: Aspen Holly House; Ramsay Ashtead; Ramsay North Downs; and Spire Bushey. HCA also submitted that 'there are also a number of other hospitals in outer London beyond the M25, such as BMI Princess Margaret and BMI Fawkham Manor.' However, both BMI Princess Margaret and BMI Fawkham Manor are in fact outside Greater London.

¹⁸² HCA response to comment and submit further evidence, paragraph 4.96(i).

significantly changed by including the four facilities (see Table 4.11 below). We continue to find that HCA's share of supply, when including outer London hospitals and these four facilities further afield, is high, especially for inpatient revenue. (We examine HCA's share of overnight bed capacity in paragraph 4.70 above.)

Table 4.11: HCA's aggregate shares of supply in Greater London and within the M25, 2011

| | | | | % |
|----------------|------------|-----------|------------|---------|
| | Inpatient | Inpatient | Total | Total |
| | admissions | revenue | admissions | revenue |
| Greater London | [%] | [%] | [※] | [%] |
| Within M25 | [%] | [%] | [※] | [%] |

Source: CC and CMA analysis.

Note: This table is based on the data collected during our original investigation and omits seven PPUs in central London, as discussed in paragraph 4.36 above.

- Competitive constraints from international competitors
- 4.169 In the Final Report, we found that international providers do not constrain HCA's actions with regard to range and quality (and price) for its UK private business. We stated that it was significant that only a very small number of business cases took into consideration business from abroad and that not a single business case we reviewed mentioned competitors from abroad.¹⁸³
- 4.170 HCA argued that overseas patients were an important source of revenue for HCA,¹⁸⁴ and that there was a wide range of private hospitals overseas which competed for these patients. HCA argued that competition from overseas providers led to improvements in quality and range to the benefit of both overseas and UK patients. Finally, HCA repeated its criticism of our reliance on a subset of its business cases, and noted that [some] of its business cases and various strategy documents expressly referred to overseas competitors.¹⁸⁵
- 4.171 HCA objected to our provisional finding that HCA did compete to some extent with international providers for overseas patients, but that this was mainly in relation to a couple of specialties. HCA argued that it faced competition over a wide range of specialties for international patients.¹⁸⁶

¹⁸³ Final Report, paragraph 6.406(b).

¹⁸⁴ To provide context, $[\aleph]$ % of HCA's revenue in FY11 was from overseas patients. See the Final Report, Table 3.3.

¹⁸⁵ HCA response to comment and submit further evidence, paragraphs 4.111–4.116.

¹⁸⁶ HCA response to the Remittal PFs, paragraph 2.87.

- Our response
- 4.172 We have reviewed a fuller set of 97 HCA business cases, and found that HCA considered international competitors very rarely and only for a very limited number of specialties, in particular [≫] and [≫].
- 4.173 [※]
- 4.174 Responding to HCA's non-discrimination point, we acknowledge that HCA may be unable to discriminate between UK and overseas patients in quality and range. However, HCA is able to discriminate on price, as evidenced by the fact that self-pay prices on its UK website are 'For UK Residents Only'.¹⁸⁷ Therefore, competition for overseas patients would not protect UK patients from higher prices. Finally, as we discuss in Section 7, the fact that there may be competition over quality and range is not inconsistent with a finding that there is a lack of competition over price in this particular market, particularly in relation to insured patients.
- 4.175 On the basis of this evidence, we believe that HCA does compete to some extent with international providers for overseas patients, and this competition does not benefit other UK patients and customers in terms of price. As HCA is able to price discriminate between UK self-pay patients, PMIs, and overseas patients, even if competition were to work well for overseas patients, we do not consider that the benefits of this competition extend to other customer groups or impose a constraint on pricing to UK self-pay patients and PMIs.

Conclusions on competitive constraints from private hospitals and PPUs outside central London

4.176 On the basis of all the evidence and the analysis above, we consider that HCA is weakly constrained by private hospitals and PPUs in outer London, particularly in relation to insured patients and PMIs' corporate clients. We do not conclude on whether HCA faces strong competitive constraints from international providers, but note that even if HCA were competitively constrained with respect to overseas patients, we do not consider that the benefits of this competition extend to other customer groups in the UK due to HCA's ability to price discriminate.

¹⁸⁷ HCA website, accessed on 19 June 2015.

HCA's vertical integration in GP practices

- 4.177 We previously also considered whether the vertical integration between HCA and certain GP practices was likely to lead to significant harm to competition in central London (see the Final Report, paragraphs 6.229 and 6.230).
- 4.178 We found that the vertical relationships between HCA and GP practices were limited in scale and did not appear to have influenced GP referral rates. We considered that this evidence did not indicate that HCA's vertical integration in GP practices was (at the time of the Final Report) likely to lead to foreclosure of its rivals from patients.
- 4.179 During the remittal, several parties reiterated their concern about HCA's ownership of Blossoms and Roodlane, including Bupa¹⁸⁸ and TLC. However, we have not seen any evidence to suggest that the scale of HCA's vertical integration or those GPs' referral practices have changed since our original investigation.
- 4.180 Therefore, our views on this issue remain unchanged, and we readopt our findings and points in paragraph 6.230 of the Final Report.

Conclusions on competitive constraints in central London

- 4.181 On the basis of the evidence and analysis in the Final Report, and the additional evidence and analysis in this remittal, we conclude that:
 - the competitive constraints exerted on HCA by other private hospitals including PPUs located in central London are currently weak (see paragraph 6.218 of the Final Report, and paragraph 4.128 above);
 - PPUs in aggregate are currently a weak constraint (see paragraph 6.242 of the Final Report, and paragraph 4.128 above).
 - Considering insured patients, and in particular PMIs' corporate clients, the relevant competitive constraints on HCA currently arise from a narrower set of private hospitals including PPUs in central London, in particular from TLC, and these constraints are weak (see paragraph 6.218 of the Final Report, and paragraph 4.128 above).
 - We also found that outer London private hospitals including PPUs impose weak competitive constraints on HCA and that the NHS imposes, if any,

¹⁸⁸ Bupa response to comment and submit further evidence, paragraph 2.22(ii).

very limited competitive constraints on HCA (see paragraphs 6.223 and 6.228 of the Final Report, and paragraphs 4.148 and 4.176 above).

 Further acquisitions of GP practices by HCA, in particular in key central London locations for PMIs' corporate clients, could raise vertical competition concerns by increasing the scale of HCA's vertical relationships with such GP practices (see paragraph 6.230 of the Final Report, and paragraph 4.180 above).

5. Barriers to entry and expansion in central London

Introduction

5.1 Our Guidance highlights the reasons we examine barriers to entry and expansion in a market investigation and the criteria against which we assess the existence of any barriers to entry or expansion when considering whether there is an AEC. It states that:

The prospect of entry or expansion... — and therefore of stronger competition in the longer term — may also sometimes offset competitive harm that may otherwise arise, if there are no significant barriers to entry or expansion and the [CMA] judges that:

- (a) actual entry or expansion is likely, of sufficient scale and swift enough to constrain incumbent firms in the near future;¹ or
- (b) the threat of potential entry or expansion is sufficient to exercise a constraint even though no actual entry of sufficient scale has been observed in the recent past (smallscale past entry does not demonstrate the absence of entry barriers...; such a constraint could arise when entry would be swift and low-cost so as to exploit any commercial opportunity in the market.²
- 5.2 We have focused in this section on barriers to entry relevant to consideration of an AEC – that is, barriers to entry within the near future, which we have assumed to be two years. However, the possibility of entry over the longer term is relevant to our assessment of proportionality of remedies, and are discussed in Section 12 (Remedies).
- 5.3 In the Final Report we examined the extent to which incumbent private hospitals were constrained by the threat of entry and expansion. The evidence and assessment on which we based our previous findings on barriers to entry and expansion is set out in paragraphs 6.8 to 6.141 of the Final Report. We considered briefly an overview of entry and expansion since the mid-2000s, carried on three case studies where entry or expansion had been attempted, one of which related to central London (see Appendix 6.2 of the Final Report), summarised the evidence we received from parties

¹ For the purpose of this investigation we have treated 'near future' as the next two years.

² CC3, paragraph 175.

and set out our assessment of a number of potential barriers to entry or expansion.

- 5.4 Our conclusions were set out in paragraphs 6.142 to 6.144 of the Final Report. We found that significant barriers to entry and expansion existed. In particular, we concluded that:
 - *(a)* in all local areas, including central London, a combination of high sunk costs and long lead times associated with setting up a private hospital together constituted a significant barrier to entry and expansion; and
 - *(b)* in addition, in central London, the lack of availability of suitable sites from which to operate a private hospital and difficulty in obtaining planning permission for a private hospital were further significant barriers to entry and expansion.
- 5.5 In this section, we examine the extent to which barriers to entry or expansion still exist in the central London market. We summarise the evidence received from parties and set out our assessment of a number of potential barriers to entry or expansion.

Parties' comments on barriers to entry and expansion during the remittal

- 5.6 During the remittal, we received submissions on barriers to entry and expansion in central London from HCA, TLC, Bupa and AXA PPP. In order to evaluate these submissions, we requested information from a number of other parties, including Cleveland Clinic, Spire, VPS Healthcare, a number of NHS trusts and Westminster City Council (WCC). We have categorised the comments under the following headings:
 - (a) high sunk costs and long lead times;
 - (b) availability of suitable sites;
 - (c) planning policy; and
 - (d) recent and potential future new entry.

High sunk costs and long lead times

Our findings in the Final Report

5.7 In the Final Report, we made the following findings in relation to the sunk costs and lead times associated with entering the central London market:

- (a) The costs of entry or (significant) expansion in central London were high, with TLC spending around £90 million on developing its Cancer Centre (Final Report, paragraphs 6.43 to 6.44).
- (b) A hospital operator's ability to recoup these costs in the event that attempted entry is unsuccessful, was generally very limited (Final Report, paragraph 6.45).
- (c) The lead times associated with a new hospital launch were significant, usually at least three years. For example, it took TLC three and a half years to complete its Cancer Centre. Similarly, the expansion of the King Edward VII Hospital with the creation of up to 40,000 sq feet will take four to five years (Final Report, paragraph 6.69).

Parties' views

- HCA
- 5.8 HCA made two, interrelated arguments in relation to the CMA's findings of high sunk costs and long lead times. First, HCA referred to paragraph 6.56 of the Final Report, noting that the CMA had argued that the high sunk costs of developing a new private hospital made new entry unlikely in local markets where 'demand was relatively limited and/or not growing', since there would be insufficient private patient revenue to justify new entry.³ However, the CMA had also recognised that 'expenditure on acute private medical care services in London was large and had been growing'. Therefore, HCA argued, the CMA should not have found sunk costs to be a barrier to entry in central London as the market in London was not characterised by limited demand or lack of growth which would deter operators from investing in new facilities.⁴
- 5.9 HCA highlighted various sources which indicated that growth in the central London market had been significant over the period of review, including:
 - (a) the CMA's comments in the Final Report that 'expenditure on acute private medical care services in London was large [...] and had been growing', that providers were 'aware of the higher growth rate and profitability of more complex specialisms and would be likely to continue

³ HCA response to comment and submit further evidence, paragraph 3.6.

⁴ HCA response to comment and submit further evidence, paragraph 3.7.

to invest in them', and that TLC's new cancer facility 'illustrates the willingness of some providers [...] to make significant investments';

- *(b)* the CMA's evidence in the Final Report of revenue growth of an 8% compound annual growth rate (CAGR);⁵ and
- (c) evidence from a LaingBuisson report (2015) that indicated annual revenue growth of 9.4% and 9.0% in 2012 and 2013 respectively.
- 5.10 Second, HCA argued that sunk costs were not in themselves a barrier to entry but only acted as a barrier in combination with economies of scale and a small market (relative to the efficient scale of a new hospital), or one which was stagnant or declining and where the entrant could not secure demand by contracting with a PMI before entry. HCA stated that sunk costs were much less relevant in a large or growing market, and that the larger the market, the smaller the proportion of that market that was needed to achieve economies of scale. In a growing market, demand could be found more easily. Thus, in HCA's view, market growth limited any barrier due to economies of scale.⁶
- 5.11 HCA stated that the costs of entry and any economies of scale in the case of London did not give rise to a barrier to entry, noting the following:
 - (a) The majority of the costs of a new private hospital were not sunk; rather it would be possible for an entrant to recoup the costs incurred through the sale of the assets created or acquired through investment. For example, HCA estimated (based on CMA analysis) that the proportion of its capital employed attributable to land, buildings and equipment in 2011 was over [≫]% of total capital employed and that these assets would have a resale value.
 - (b) The CMA had not established that the fixed costs were large relative to the market.
 - *(c)* The risk of expansion was limited by strong market growth and the ability of PMIs to manage the entry process by granting recognition to new competitors and denying it to existing providers considered to be 'too strong'.⁷

⁵ The average annual rate of growth over a period of time.

⁶ HCA response to comment and submit further evidence, paragraph 3.19.

⁷ HCA response to comment and submit further evidence, paragraph 3.21.

- 5.12 In its response to the Remittal PFs, HCA noted our conclusion that the sunk costs required for entry into private healthcare in central London were likely to be 'high'. However, HCA repeated a point that it made earlier in the remittal that it was not the absolute size of any sunk costs which was important, but rather the relative size of any sunk costs set against the market size and the likely profit that would be achieved upon entry.⁸
- 5.13 In addition, HCA stated that long lead times did not impede entry or expansion. HCA referred to our 20-year time horizon used in the Final Report when assessing the divestiture remedy and suggested that we should consider existing initiatives and development opportunities which, in HCA's view, pointed to a very significant potential for new entry and expansion over the next few years.⁹
- 5.14 HCA suggested that the lack of new entry to the central London market in the last five years was not indicative of barriers to entry, but rather reflected the slow economic recovery since 2008 (which HCA noted had since improved, with economic conditions now more favourable) and factors specific to its competitors (such as, in the case of two hospital operators, difficulty in obtaining finance). HCA also claimed that planned entry and recent expansion demonstrated that high sunk costs and long lead times were not a barrier to entry.¹⁰
 - Cleveland Clinic
- 5.15 Cleveland Clinic told us that its interest in operating a private hospital facility in central London was renewed in 2014.¹¹ In May 2015, Cleveland Clinic appointed Cushman & Wakefield to advise it on identifying and acquiring a suitable site for a private hospital. Cleveland Clinic's business plan indicated that it would take the hospital group approximately three to four years from planning permission application to being able to treat its first patient in central London. Cleveland Clinic's board paper showed that this lead time was required due to (i) the length of the planning permission application process and (ii) the time needed to refurbish and fit out the building. At that time, Cleveland Clinic expected to start treating patients at this new facility in late 2019 or early 2020.
- 5.16 In late 2015, Cleveland Clinic acquired a long-term lease of a 191,000 sq ft site at 33 Grosvenor Place in Belgravia, central London for £[≫] million. In

¹¹ [**※**].

⁸ HCA response to the Remittal PFs, paragraph 3.3.

⁹ HCA response to comment and submit further evidence, paragraph 3.22.

¹⁰ HCA response to comment and submit further evidence, paragraphs 3.23 & 3.24.

its board paper dated September 2015, Cleveland Clinic estimated that the conversion and office fit-out would cost the group approximately $\pounds[\gg]$ million between now and 2019 when Cleveland Clinic is expecting to treat its first patient. In Cleveland Clinic's view, the hospital fit out costs would be in the region of $\pounds[\gg]$ million during the same period. Cleveland Clinic estimated the overall cost to be in the region of $\pounds[\gg]$ million to start up its central London hospital. However, these were the estimates at the time of the board paper in September 2015 and current estimates may differ somewhat.

5.17 Cleveland Clinic expected the planning application to be submitted in March 2016 but, at the time of publishing this document, it has not been submitted and does not appear imminent (please see Endnote for an update). [≫] Discussions were continuing, but it could not offer any indication of timing or certainty of reaching an acceptable agreement.

Our assessment

5.18 We agree with HCA that the central London market has been growing such that a lack of growth does not create a barrier to entry in this market. This is consistent with our conclusions in the Final Report, where we stated that:

a combination of high sunk costs and long lead times associated with setting up a private hospital together constituted a significant barrier to entry and expansion. We concluded that this was likely to be **particularly evident** where there was overcapacity in the local area or if demand was small, flat or contracting.¹²

- 5.19 The Final Report did not state, as HCA suggested, that the combination of high sunk costs and long lead times constituted a barrier to entry only where there was over-capacity or demand was small, flat or contracting. It stated that the existence of over-capacity or small, flat or contracting demand were factors that could serve to exacerbate the barrier to entry of sunk costs. Having taken into account HCA's submissions on this matter, we continue to find high sunk costs and long lead times serve to create barriers to entry even where demand is large and growing, as is the case in central London.
- 5.20 We next considered HCA's argument that the majority of the costs of entry are not sunk in this sector. We reasoned that an unsuccessful entrant to the central London market would have two (broad) exit routes. First, it could seek to sell the building (or assign the lease) to a purchaser who would use

¹² Final Report, paragraph 6.143.

it for some alternative purpose. In this case, the equipment would be sold (second-hand) to another hospital operator. The second exit route would be via the sale of the hospital (business) to another hospital operator.

- 5.21 In the case of a firm following the first exit route, we agree with HCA that any building purchased could be resold with an entrant being unlikely to incur a significant loss on this element of its investment. However, an entrant could expect to lose a significant proportion of the value of its equipment if the latter were to be sold second-hand, particularly once the costs of removing the equipment and transporting it to a new location were taken into account.¹³ Similarly, we reasoned that the large majority of the costs incurred in redeveloping/refurbishing a building as a hospital (as opposed to purchasing a building) would also be lost in the case that the building was sold for an alternative use. Evidence provided by C&C Alpha,¹⁴ during the original investigation, in relation to its planned redevelopment of the Ravenscourt Park hospital indicated that the costs of refurbishing and fitting out the hospital were expected to be around $\pounds[\infty]$ million, comprising $\mathfrak{L}[\mathbb{K}]$ million of construction costs, $\mathfrak{L}[\mathbb{K}]$ million for medical equipment ($[\mathbb{K}]$). hence only $\mathfrak{L}[\mathbb{K}]$ million net cost) and $\mathfrak{L}[\mathbb{K}]$ million of operating start-up costs. We observed that these costs were substantial. Moreover, in the case where entry was unsuccessful, the nature of the costs was such that C&C Alpha would have been likely to lose the large majority of its investment. Therefore, while the proportion of total investment costs that may be sunk will depend on whether an entrant chooses to purchase or to lease a building, in either case it is likely to incur significant sunk costs in redeveloping and fitting out the building as a hospital (and therefore risk in entering the market).
- 5.22 Similarly, evidence received from Cleveland Clinic, in December 2015, in relation to its acquisition of 33 Grosvenor Place indicated that refurbishment and fitting-out costs were substantial. In the case where entry was unsuccessful, Cleveland Clinic could potentially sell off the building, in this way recovering most or all of its £[≫] million investment. However, it is likely that a large proportion of the fit-out and refurbishment costs already spent will be lost. Therefore, we note that high sunk costs exist in entering the central London market and together with long lead times, these are exacerbating the risk of entering this market.

¹³ Evidence on the costs of second-hand medical equipment is incomplete. However, a review of sales/auction websites, indicates that equipment tends to sell for a discount of at least 50%. For example, see the Living made easy and Avensys websites.

¹⁴ C&C Alpha is an international private equity firm with its headquarters in London. C&C Alpha is the owner of Ravenscourt Park Hospital building.

- 5.23 In relation to the second potential exit route, we observed that the example of unsuccessful entry would generally limit the price that another operator would be prepared to pay for the trade and assets of the hospital on the basis that, if one operator had been unable to enter successfully, other potential entrants would also be likely to find entry difficult. While it is not possible to estimate the exact losses that an unsuccessful entrant would face in this case, we judged that they were likely to be material.
- 5.24 We note HCA's comments in relation to sunk costs. HCA stated that relative size of sunk costs should be set against the likely profit achieved upon entry. In relation to sunk costs, we note the Cleveland Clinic business case in which it assumed that £[≫] million would be spent between now and 2019 to purchase and fit out the Grosvenor Place building. The group envisaged a pay-back period for its investment of [≫] years at an Internal Rate of Return (IRR) of [≫]%. Both the payback period and IRR are calculated assuming that that Cleveland Clinic will undercut HCA's prices by approximately [≫]%. The evidence from Cleveland Clinic suggests, contrary to HCA's view,that sunk costs are large and profits are not expected to be particularly high in the central London market.
- 5.25 On this basis, we readopt the conclusion from the Final Report that an unsuccessful entrant would face significant sunk costs on exit. We note that the evidence we have collected, as part of the remittal, indicates that this would be the case in central London as well as elsewhere in the UK.
- 5.26 A further strand of HCA's argument is that the existence of sunk costs is not, on its own, a barrier to entry. Our Guidance states that:

Firms entering a market unavoidably incur costs, These costs can sometimes in effect be 'natural' or 'intrinsic' barriers to entry, and may include the cost of putting the production process in place, gaining access to essential facilities or inputs and the acquisition of any necessary intellectual property rights (IPRs). Important considerations in evaluating the effects of such costs on the ability of firms to enter the market are the nature of the costs and the extent to which the costs are 'sunk', ie investments that cannot be recovered upon exit and hence would serve to commit a firm or firms to staying in the market. Sunk costs may include, for example, some specific asset investments, advertising, R&D and, in some markets, the costs of acquiring a reputation (for example, for producing quality products).¹⁵

- Where an entrant must incur significant costs in order to enter a market and 5.27 will not be able to recover these costs on exit, this will substantially increase the risks of entry and therefore act as a barrier to entry.¹⁶ On this basis, we disagree with HCA's argument that sunk costs are not, on their own, a barrier to entry but only create such a barrier in combination with economies of scale and a small market.¹⁷ However, we agree that the extent to which such costs create a barrier to entry or expansion depends on the size of those costs. As set out in paragraphs 5.21 to 5.24 above, we concluded that these costs were likely to be significant.¹⁸ During the original investigation, [%] told us that they required (or would require) external funding in order to undertake investments of this size, ie the capital costs of entry were high. VPS and Cleveland Clinic¹⁹ made similar submissions to us during this remittal.²⁰ We have concluded that the 'sunk costs' associated with entering the central London market are high and therefore create a barrier to entry. This finding is consistent with our conclusions in the Final Report.
- 5.28 Next, we considered HCA's view that an entrant could mitigate the barrier of sunk costs by securing demand through contracting with a PMI before entry (see paragraph 5.11). We agree that this approach could, in principle, reduce the risks associated with entry. However, obtaining PMI recognition does not 'secure demand' in this industry, as HCA suggests, as contracts do not contain any volume commitments. By signing a contract with a PMI, a hospital operator is only able to ensure that it can treat patients who are insured by that PMI, not necessarily that it will treat any given volume of patients. We noted that the growth of open referral policies may increase insurers' ability to direct patients in the future and therefore their ability to sign contracts with 'guaranteed' volumes. However, to date, we are not

¹⁷ We also disagreed with HCA's interpretation of our guidance.

¹⁵ CC3, paragraph 211. We note that HCA referred to paragraph 212 of our guidance which states that '[e]conomies of scale, in combination with sunk investment costs, can constitute a barrier in cases where these relate to the cost of getting into or expanding in the market' in order to support its view that sunk costs are only a barrier to entry in combination with economies of scale. As the text from paragraph 211 shows, our guidance also explains that sunk costs on their own can create a barrier to entry.

¹⁶ Our Guidance highlights that a barrier to entry does not have to be an absolute barrier but may also be another aspect of the market that deters entry: 'A major source of competitive discipline is... generally eliminated or reduced if there is any barrier to market entry and expansion, whether an absolute barrier or some other form of restriction such as aspects of the market that deter entry.' CC3, paragraph 207.

¹⁸ In this respect, we also note the evidence set out in the Final Report of TLC's investment in its Cancer Centre (£90 million).

¹⁹ Cleveland Clinic told us that it had engaged Moody's in discussions regarding its financing strategy for entry into the central London market. Cleveland Clinic was Aa2 rated by Moody's and AA– by S&P. The acquisition of 33 Grosvenor Place was completed in part through [³].

²⁰ VPS is a hospital operator with plans to enter the central London market (see paragraph 5.81).

aware of any such contracts being agreed between hospital operators and insurers.

- 5.29 Furthermore, during the original investigation, we did not identify any situations in which entry had been facilitated by PMIs agreeing contracts (even without volumes) with private hospital operators significantly prior to entry. In the case of Circle Bath, it took more than a year for the new entrant to obtain recognition (see the Final Report, paragraph 6.27). New evidence, collected as part of the remittal, indicated that some insurers were now agreeing to recognise new facilities opened by hospital operators in central London, prior to such facilities being opened (or even under construction).²¹ We would expect this change in behaviour to mitigate the barrier to entry arising from the existence of sunk costs to an extent, as it reduces some of the risks of entry. However, in the absence of contracts with both pricing and volume commitments lasting for an extended period of time (given the long asset life of hospitals), we conclude that the existence of substantial sunk costs will continue to create a barrier to entry in central London.
- 5.30 In relation to long lead times, HCA argued that these did not impede entry or expansion. However, as set out in paragraph 5.1, the criteria against which we assess the existence of barriers to entry or expansion when considering whether there is an AEC is whether 'actual entry or expansion is likely, of sufficient scale and swift enough to constrain incumbent firms in the near future'. When assessing the likelihood of entry constraining an incumbent firm, we consider whether actual or threatened entry or expansion is likely to constrain the behaviour of an incumbent firm within the next one to two years. Given the relatively long lead times associated with opening a new hospital in central London,²² including locating a suitable site, obtaining planning permission and constructing a building, we note that any hospital that is not already at the stage of construction is unlikely to exert a competitive constraint within this time frame. We note Cleveland Clinic's building in 33 Grosvenor Place, which Cleveland Clinic told us was expected to take at least three to four years to be fully operational due to the need to obtain planning permission and then to refurbish and fit out the building as a private hospital.²³ Moreover, we thought it likely that when a hospital was new to a market, it would also take time to get its referral pathways in place and therefore to compete effectively. Therefore, we conclude that the long

²¹ [%]

²² In the Final Report, we referred to evidence from TLC that its Cancer Centre took 3.5 years to develop and King Edward VII's Hospital told us that its expansion would take four to five years.

²³ As noted in Appendix H, Cleveland Clinic's plans have been delayed.

lead times associated with entering at a sufficient scale to constrain the incumbent creates a barrier to entry and expansion in central London.

Our conclusions on high sunk costs and long lead times

- 5.31 Following the submissions received from parties and our assessment above, we came to the following conclusions concerning the existence of high sunk costs and long lead times associated with entering the central London market:
 - (a) Long lead times associated with entering at a sufficient scale to constrain the incumbents create a barrier to entry and expansion.
 - (b) We readopted the conclusion from the Final Report that an unsuccessful entrant would face significant sunk costs on exit; therefore, we concluded that the existence of substantial sunk costs will continue to create a barrier to entry in central London.

Availability of suitable sites

Our findings in the Final Report

- 5.32 In the Final Report, we made the following findings in relation to the availability of suitable sites:
 - *(a)* There were no examples of new hospital openings in central London and few instances of expansion over the last ten years.
 - (b) Where expansion had taken place, it had taken (or was expected to take) several years from planning to opening.
 - (c) All the parties that expressed a view on this, with the exception of HCA, told us that finding an appropriate site for a hospital in central London was very difficult; and
 - (*d*) We concluded that the non-availability within a short time of sites that were of sufficient size and suitably configured, or capable of adaptation, for use as a hospital offering a broad range of specialisms and inpatient facilities, was a barrier to entry in central London.

Parties' views

- HCA
- 5.33 HCA argued that there was no evidence that there was a lack of available sites or new hospital developments in central London, or that this factor was deterring new entry and expansion. HCA stated that the Final Report provided numerous examples of new sites that had been used by hospital operators, including TLC's cancer centre, the expansion of the King Edward VII Hospital on a site in Beaumont Street and BMI's expansion of its Fitzroy Square hospital in 2011 and its development of the Weymouth hospital in 2010.²⁴
- 5.34 HCA submitted an updated version of a McKinsey report²⁵ identifying a number of sites in central London that it considered had the potential for private hospital use. In particular, the report identified four NHS sites as being available in 2015 and a further eight NHS sites which the authors believed it was 'highly likely' would be available by 2017. In addition to these sites, the report identified a further 2.4 million sq ft of space in NHS hospitals that was either unoccupied or underutilised at present and which may become available in the future as cost pressures on the NHS were encouraging efficiency savings. However, the report noted that there was currently no commitment to make this additional space available nor a time frame to do so.
- 5.35 The McKinsey report also stated that there were 18 commercial buildings under construction which were similar to or bigger than HCA's clinic in the Shard (of approximately 70,000 sq ft) and a further 36 commercial properties over 50,000 sq ft under construction, all of which would be available by 2016. HCA stated that the Shard example demonstrated that conventional office buildings could be repurposed to create clinics.²⁶
- 5.36 The McKinsey report also noted the announcement in the 2015 budget that public sector freehold owners would be required to charge market level rents and that this could be expected to incentivise the NHS to dispose of surplus sites.

²⁴ HCA response to comment and submit further evidence, paragraphs 3.26–3.31. HCA suggested that the CMA consult with land owners, developers and agents in London to confirm the general availability of sites suitable for hospital development and expansion. To that end, HCA referred to evidence supplied to the CMA by the Howard de Walden Estate, which had set out a number of properties that could be used for future hospital development.
²⁵ Dated 27 March 2015.

²⁶ HCA response to comment and submit further evidence, paragraph 3.36 and McKinsey Report (1 May 2015).

- 5.37 HCA also noted that PPUs provided a means of entry in which site selection was not likely to be a constraint since NHS trusts had significant land holdings in central London and were able to utilise such space for private patient services following the lifting of the private patient income cap under the Health and Social Care Act 2012. HCA provided evidence in the form of a contract notice for the tender of the PPU at Barts to support the argument that this would lead to new entry to the central London market in the short term.²⁷
- 5.38 HCA told us that evidence from Spire's recent 2015 annual report indicated that its entry into central London was both 'concrete and imminent', with two sites in central London in the early stages of planning, potentially opening in 2018.
- 5.39 HCA highlighted that planning permission had been granted in respect of an outline application for a large-scale redevelopment of the Earls Court 2 Exhibition Centre and adjoining land. The site will be subject to a mixed-use redevelopment, including residential, retail and leisure buildings. Class C2²⁸ permission has been granted for the development of a new private hospital located in this development, with around 125,000 sq ft of space allocated to this use. Alongside this, around 196,000 sq ft of Class D1 space has also been granted. ²⁹ As a result, this site could be used by an entrant.
- 5.40 HCA told us that it was also planning to expand its Portland Hospital on an adjacent site in Argosy House. It explained that it added floors 2 to 6 in Argosy House, where it previously leased only two floors. Argosy House is used as offices and medical consulting rooms, with a total floor space of 32,000 sq ft. HCA planned to use the additional space for further inpatient bedroom suites, consulting and diagnostic facilities, and a special rehabilitation and treatment area for long-stay sick children (see paragraph 5.64 for HCA's evidence on obtaining planning).
- 5.41 HCA noted that a number of its competitors had expanded in recent years, indicating that there was no lack of available properties to prevent them from doing so. In particular, HCA pointed to:

²⁷ HCA response to comment and submit further evidence, paragraph 3.43.

²⁸ Class C2 is used as provision of residential accommodation and care to people in need of care (other than a use within class C3 (dwelling houses)). This includes a hospital or nursing home or a residential school, college or training centre.

²⁹ The D1 class includes use types institutional in character such as those relating to educational, religious and medical with the key element being that these should be non-residential. If a residential element exists such as a boarding school, convent or hospital then the use and property will fall into a C2 use class.

- (a) BMI's £3.8 million upgrade to its theatres and critical care provision at its Blackheath hospital and the increase in the number of consulting rooms at its London Independent Hospital (from 10 to 19);³⁰
- (b) The Bupa Cromwell's major redevelopment programme; ³¹
- *(c)* The Hospital of St John & St Elizabeth's new urgent care centre (2011) and the expansion of its imaging department; ³²
- (d) Aspen's expansion of its Highgate Hospital in 2013, constructing a new diagnostic centre. HCA noted that this involved a £13 million investment which provided 43 new patient rooms, a high-dependency unit, four operating theatres, an endoscopy suite and 15 new outpatient rooms; ³³ and
- *(e)* The Royal Marsden's new Reubens Foundation Imaging Centre (funded by the Reubens Foundation), new Rapid Diagnostic Assessment Centre (RDAC) opened at its Surrey site, and the upcoming development of a new International Patient Centre. ³⁴
- 5.42 In addition, HCA noted Cleveland Clinic's recent acquisition of 33 Grosvenor Place. HCA stated that this was the most recent example of the availability of commercial sites for hospital development in central London. Furthermore, HCA said that it regularly assessed commercial sites for hospital expansion, such as Harcourt House, and, in its view, similar opportunities were available to any other new entrant.³⁵
 - Spire
- 5.43 We asked Spire Healthcare (Spire) about its plans to enter the central London market, including whether it was considering entry through the sites being sold by NHS trusts.
- 5.44 During our original investigation, Spire told us that it was searching for a suitable site in central London in which to open a hospital.³⁶ Spire's strategy,

³⁰ £3.8 million development plan will deliver new theatre department at BMI The Blackheath Hospital.

³¹ An exciting two-year redevelopment project.

³² State Of The Art St Andrew's Ward Now Open.

³³ Highgate Hospital 2013 – £13 million redevelopment and expansion project.

³⁴ Reuben Foundation Imaging Centre at Royal Marsden Hospital.

³⁵ HCA response to the Remittal PFs, paragraph 3.19.

³⁶ Final Report, paragraphs 3.10–3.14.

as communicated to its investors, is to open two large-scale hospitals in central London.³⁷ [\gg]

- 5.45 [※]
- 5.46 [%]. This contract runs until March 2021.³⁸
 - Cleveland Clinic
- 5.47 We have collected evidence from Cleveland Clinic on current site availability in central London. Cleveland Clinic commissioned a report from Cushman & Wakefield (C&W) in May 2015, which looked at the availability of large commercial properties in central London which could be converted to private hospital use. C&W identified approximately 40 properties that fitted Cleveland Clinic's requirements for location (within central London) and size. Cleveland Clinic told us that it met with the owners of several of these but many of them were not in fact available to be acquired for conversion to private hospital use, either due to incumbent tenants or landlords' desire to use the site for alternative purposes. However, Cleveland Clinic identified and acquired 33 Grosvenor Place within one year of searching for a suitable site in central London.
 - Schön Klinik
- 5.48 During February 2016, Howard de Walden Estates³⁹ told us that a large European hospital group intended to open a private hospital in central London (on Wigmore Street, in close proximity to Harley Street). Howard de Walden said that the hospital would be 54,500 sq ft, and would specialise in spinal treatments and neurology. However, on its website Schön Klinik mentions that the London hospital will be 16,000 sq ft.⁴⁰ The hospital is expected to take 15 months to establish from the grant of the planning permission.⁴¹
- 5.49 Schön Klinik, the fifth largest German private hospital operator, applied on 11 April 2016 for planning permission to open an orthopaedic and back pain unit in Wigmore Street.

³⁷ See financial investors' reports.

³⁸ Remittal PFs, paragraph 5.21.

³⁹ The Howard de Walden Estate owns and manages a large property portfolio in Marylebone.

⁴⁰ Press release *Tailored Medical Care*.

⁴¹ The planning permission application was submitted on 11 April 2016.

Our assessment

5.50 We considered each of the potential new sites put forward by HCA in turn. For each of the NHS sites, we contacted the relevant NHS trust to request information on the trust's current use and future intentions for the site. The responses are set out in Table 5.1.

| Site | HCA submission | NHS trust response |
|---|----------------|--------------------|
| London Heart Hospital | [%] | [≫] |
| The Royal London | [%] | [≫] |
| The London Chest Hospital | [%] | [≫] |
| Whipps Cross University Hospital | [≫] | [≫] |
| Whittington Hospital | [%] | [≫] |
| Royal Brompton (Chelsea) | [%] | [≫] |
| Western Eye Hospital (Marylebone) Charing Cross Hospital | [≫] | [≫] |
| Royal National Throat, Nose and Ear Hospital and the Eastman Dental Hospital | [≫] | [≫] |
| Moorfields Eye Hospital | [≫] | No response* |
| St Charles Hospital (North Kensington) | [≫] | No response* |

Source: HCA and NHS trusts.

*We contacted the relevant NHS trusts but have not received a response.

- 5.51 The evidence provided by NHS Hospitals (during the remittal) in relation to the likely availability of suitable sites over the next few years was mixed. In the case of the [≫], this evidence contradicted HCA's assertions that the site would become available. In other cases, the timing of sites becoming available was both uncertain and, in any case, likely to be longer than suggested by HCA, for example the [≫] and [≫]. In the case of the latter two hospitals, we observed that services would need to be moved to newly constructed buildings before the services provided in the existing buildings could be transferred and the buildings then sold. With construction only expected to be completed in 2019/20, this suggested that the sale of the vacated buildings was not imminent.⁴²
- 5.52 The evidence from the [≫] and [≫] indicated that these sites were unlikely to be used for private hospital purposes but rather for residential or NHS use and hence do not provide a means of entry for a hospital operator. Finally, in the case of the [≫], parts of the [≫] and the [≫], the evidence supports the view that these sites are likely to become available in 2016/17.
- 5.53 We noted that several of the examples of expansion given by HCA related to the upgrading of facilities rather than material expansion in terms of the size of the hospital (for example, Bupa Cromwell hospital, BMI Blackheath, Reubens Foundation imaging centre, the Royal Marsden's (proposed) international patient centre, and BMI London Independent).⁴³ In other cases, such as Aspen's Highgate hospital, we noted that the expansion was more limited than HCA asserted. In that case, we observed that Highgate Hospital would not increase the number of patient rooms (the hospital reported having 43 rooms as of 2012), the number of theatres will increase by one, to a total of four, and the number of consulting rooms will increase by three, to a total of 15. The main element of the expansion at Highgate Hospital was the new imaging/ diagnostic suite together with the refurbishment of the

⁴² In addition, while there could be advantages in terms of operational efficiency in consolidating services on to fewer sites, we noted that the decision by the NHS to sell off existing hospital buildings and to build new hospitals raised some questions about the cost-effectiveness of converting these old buildings into modern hospitals, for example, due to buildings being listed etc. For example, Moorfields stated in its annual report 2013-14 (p20): 'We need a new facility for several reasons. Most of our existing buildings in City Road are more than 100 years old and were built at a time when hospital care was provided very differently to how it is now, and they are no longer suited to the provision of 21st-century clinical care, research or education. Our ageing infrastructure is also growing increasingly difficult and costly to maintain. At the same time, the configuration of our existing buildings offers little scope for true integration between the clinical, research and teaching elements of our work. Although intermediate refurbishments go some way to improving the environment for our patients and staff, they are no substitute for purpose-built accommodation.'

⁴³ Bupa Cromwell hospital website. Article submitted by BMI in *building construction design* (25 November 2013), '£3.8 million development plan will deliver new theatre department at BMI The Blackheath Hospital'. Article in *Building Better Healthcare* (14 October 2013), 'New outpatient department takes shape at private London hospital'. We note that the RDAC referred to by HCA is located at the Royal Marsden's Sutton site, outside central London. The Royal Marsden is planning to develop a new International Patient Centre on its existing hospital site, hence this does not provide evidence relating to site availability in central London.

hospital's facilities.⁴⁴ Given the relatively small size of these improvements/ extensions, we did not consider that they were material to the question of whether site availability posed a barrier to entry or expansion.

- 5.54 In the case of HCA's expansion of the Portland Hospital, our view is that this was relatively minor in terms of the incremental space made available for the provision of private healthcare (at just under 20,000 sq ft).⁴⁵ While such a site may be suitable for (relatively small-scale) expansion by existing operators, it did not provide evidence relating to the availability of suitable sites for large-scale (new) entry or expansion.
- 5.55 The evidence provided by Spire indicated that Spire had been looking to enter the central London market for a number of years [≫]. In light of the evidence provided by Spire, our view is that it was still interested in entering the central London market, but [≫] the time frame over which such entry may take place remain uncertain. On this basis, we have concluded that the probability of Spire entering the market within the next two years is low.⁴⁶
- 5.56 We agree with HCA that PPUs in central London do provide a means of entry where site availability is not likely to be a constraint as they are generally located on the sites of existing NHS hospitals. However, we observe that the number of PPU contracts tendered is very limited and the size of PPUs is often limited. The scarcity of such contracts means that this entry route does not materially increase the availability of sites for entrants.
- 5.57 We noted that the granting of outline planning permission for use of part of the redeveloped Earls Court site as a private hospital does not represent firm plans on the part of a hospital operator to enter the market. The permission has been obtained by the developer for a broad range of potential uses, including residential, retail, business, hotel, leisure, education and community purposes. It does not represent a commitment to use the site for private hospital use.⁴⁷ In addition, we observed that the first phase of the development was focused on residential uses⁴⁸ and it was, therefore, unlikely that any hospital operator would be able to use a plot within this development to enter the central London market in the next two years.
- 5.58 Finally, we considered HCA's arguments that commercial buildings could be used to provide hospital services and, therefore, provided numerous suitable

⁴⁴ Highgate Private Hospital website.

⁴⁵ The total floor space used by HCA in Argosy House will be 32,000 sq ft over five floors. HCA was already offering medical services from two of those floors, suggesting an overall increase of less than 20,000 sq ft.
⁴⁶ Spire's strategy is to open two large-scale hospitals in central London – see financial investors' reports.

⁴⁷ Planning decision.

⁴⁸ Earls Court Development.

sites for entrants. We noted that while the commercial buildings that HCA told us were available were significantly smaller than the size of building that certain potential entrants, [\gg],⁴⁹ there were likely to be other office buildings in central London that could, at least in some cases, be converted to provide suitable sites for private hospitals. For example, we observed that Cleveland Clinic had recently acquired an office building in Grosvenor Place, which it intends to convert to hospital use.⁵⁰ However, despite identifying a large number of potential sites, evidence from Cleveland Clinic stated that not many sites were available for conversion to private hospital use, either due to incumbent tenants or landlords' desire to use sites for alternative purposes. The evidence provided by [\gg] regarding the difficulties of finding a suitable site, indicated that the speed with which private hospital operators are able to enter the central London market is significantly reduced by the limited availability of suitable sites.

- 5.59 While, in our view, the evidence we collected does not support HCA's submissions on the current level of site availability in central London, we think that the reorganisation of many NHS trusts' estates assuming that it goes ahead⁵¹ has the potential to ease constraints on the availability of suitable sites for entry/expansion by private hospital operators over the next five years. Therefore, our view is that this is unlikely to take place in a sufficiently timely manner to facilitate the new entry of private hospital operators that could constrain HCA in the near future.
- 5.60 The approach adopted by Cleveland Clinic and [≫] indicates that it may be possible, in certain cases, to find suitable commercial spaces for conversion to hospital use. However, the experience of Cleveland Clinic suggests that not many potentially suitable sites in central London are available for conversion to private hospital use due to restrictions from landlords or incumbent tenants. Our conclusion is therefore that limited site availability continues to be a factor contributing to barriers to entry in central London insofar as it exacerbates the long lead times associated with entering the market.

Our conclusions on the availability of suitable sites

5.61 After considering the evidence submitted during the remittal, we conclude that:

⁴⁹ Final Report, paragraphs 6.73 & 6.76.

⁵⁰ Article in PropertyWeek.com (15 October 2015).

⁵¹ We observe that several NHS trusts have considered reorganising their operations and disposing of sites but later decided not to do so.

- (a) recent examples of expansion (cited by HCA) involved upgrades, refurbishments and minor extensions to existing facilities, rather than the development of significant new capacity and, therefore, did not provide evidence as to the availability of suitable sites for the large-scale entry that would be required to provide an effective competitive constraint on HCA;
- (b) the reorganisation of NHS estates, assuming it went ahead, may increase the availability of suitable sites for a large-scale private hospital entrant in the future but this was unlikely to take place in a sufficiently timely manner to facilitate new entry that could constrain HCA in the near future; and
- (c) limited site availability continues to be a factor contributing to barriers to entry in central London insofar as it exacerbates the long lead times associated with entering the market.

Planning policy

Our findings in the Final Report

- 5.62 In the Final Report, we made the following findings in relation to the impact of planning policy on entry and expansion in central London:
 - *(a)* The evidence from the small number of instances of expansion that had taken place indicated that difficulties in obtaining planning permission tended to centre on applications for change of use. This was particularly evident in the Special Policy Area around Harley Street. Where an expansion of medical facilities would reduce residential accommodation it would be necessary to arrange use swaps, which in our view would be difficult for an entrant to execute.⁵²
 - (b) Because of the special circumstances of the case, we did not consider that the granting of consent for a change of use of three floors of the Shard from B1 to C2 altered our general conclusion on the difficulty of obtaining planning permission for new hospitals in central London.⁵³
 - *(c)* We concluded that planning regulations constituted a barrier to entry and expansion in central London.⁵⁴

⁵² Final Report, paragraph 6.105.

⁵³ Final Report, paragraph 6.105.

⁵⁴ Final Report, paragraph 6.106.

- HCA
- 5.63 HCA argued that planning regulations did not constitute a barrier to entry in central London. It also made a number of points about 'use swaps':⁵⁵
 - (a) The need for use swaps applied only in the Harley Street area and not in other areas of London. HCA observed that both it and its competitors had been able to expand in other areas of London without the need for use swaps, including in the Harley Street area.⁵⁶
 - (b) The need for use swaps arose only in the context of a change of residential to medical use, not a change from office/commercial to medical use.
 - (c) Use swaps were easier to arrange than the Final Report suggested, with evidence from Howard de Walden Estates stating that new entrants could either convert part of a development to retain a proportion for residential use, or alternatively buy additional space and convert it for residential use.
 - (d) It was possible to make a payment in lieu of arranging a use swap.⁵⁷
- 5.64 HCA stated that its own experience in obtaining permission for the Platinum Medical Centre expansion at the Wellington hospital demonstrated that planning consent was not difficult to obtain. It noted that the process of gaining consent took nine weeks.⁵⁸ HCA told us that its experience of securing planning consent for the conversion of part of Argosy House (for C2 and D1 use) was similarly straightforward.⁵⁹
- 5.65 HCA put forward the view that the Final Report demonstrated a misunderstanding of the planning process and had, therefore, incorrectly dismissed the example of HCA obtaining planning permission for three floors of the Shard. The Final Report noted that the consent was on a 'personal' basis

⁵⁵ 'Use swaps' are where, in order to obtain planning permission to convert a building from one use to another, for example, from residential use to medical use, the applicant must be able to secure the conversion of another building (in the same area) from medical to residential use in order to maintain the overall balance of uses in the area.

⁵⁶ HCA referred to the planning permission it had received to develop Argosy House, which is on Great Portland Street.

⁵⁷ HCA response to comment and submit further evidence, paragraphs 3.46–3.53.

⁵⁸ HCA response to comment and submit further evidence, paragraph 3.55.

⁵⁹ HCA obtained the necessary planning permission within six months of its application, which included a change of use request (to class C2) and the construction of a link bridge to connect the building to the Portland Hospital.

and that it was unlikely a new entrant would have been able to obtain equivalent planning consent. HCA told us that the 'personal' nature of the consent only required the applicant to meet certain undertakings, for example in respect of local employment, and that new entrants would be equally able to meet these. HCA also highlighted that the consent permitted inpatient use, which was the key point in terms of planning, with HCA's actual use of the building being irrelevant.⁶⁰

- 5.66 HCA put forward the view that the planning regime in London promoted rather than restricted the development of private healthcare facilities. It highlighted:
 - (a) the London Mayor's 'London plan' which set out the Mayor's development strategy for London and noted that 'Boroughs should promote a continued role in enhancement of London as a national and international centre of medical excellence and specialised facilities'; and
 - *(b)* the Harley Street Special Policy Area framework which 'encourages and protects the dual medical and residential character of the area'.⁶¹
- 5.67 HCA argued that policy changes announced by Westminster County Council (WCC) in relation to its planning framework constituted a material change in circumstance with respect to site availability and planning policy. HCA provided consultation documents from WCC, which it argued showed that WCC was in the process of updating its planning policy. Key changes set out in the consultation materials included proposals to:
 - (a) require that existing social and community sites being sold, including those designated for private hospital use, must initially be marketed for 12 months on reasonable market terms (including price) for use within the same use category;
 - *(b)* promote the development of new medical and complementary facility developments in and around the Harley Street area;
 - *(c)* designate development sites in Westminster to provide social and community facilities (including healthcare facilities);
 - (d) impose restrictions on future commercial-to-residential conversions; and

⁶⁰ HCA response to comment and submit further evidence, paragraph 3.56.

⁶¹ HCA response to comment and submit further evidence, paragraph 3.58.

- *(e)* relax rules on requiring equivalent residential development when developing commercial sites.
- 5.68 HCA stated that these reforms were expected to be implemented in 2016 and would have the effect of preserving sites with existing medical use permission and improving the availability of sites for hospital operators by reducing the ability of owners/developers to convert sites to residential use.⁶²
- 5.69 During the remittal, HCA also brought to our attention that the Royal Borough of Kensington and Chelsea had recently granted planning permission to the Royal Marsden for a change of use to Class C2 (hospital use) for a large site adjacent to its existing hospital on Fulham Road. We understand that this site incorporates Stewart's House, Stewart's Grove and the ground floor and basement of 191-193 Fulham Road, part of Avenue House. The planning authority has consented to a change of use from residential and retail to hospital use for these buildings.
 - Westminster City Council
- 5.70 We requested information from WCC on the proposed changes to its planning policies highlighted by HCA, including:
 - (a) the February 2014 consultation regarding:
 - (i) Social And Community Infrastructure (Policy S34); and
 - (ii) Harley Street Special Policy Area (Policy CM2.1); and
 - (b) the December 2014 consultation regarding:
 - (i) Mixed Use In The Central Activities Zone (Policy S1);
 - (ii) Land Use Swaps And Packages (Policy CM49.2);
 - (iii) Credits (Policy CM49.3); and
 - (iv) Offices And Other B Use Business Floorspace (Policy S20).
- 5.71 WCC told us that the consultations referred to by HCA were informal, nonstatutory consultations which, as such, had 'extremely limited material weight in the determination of planning permissions generally'. It noted that the policies referred to under (b) were subject to a Regulation 19 consultation, which was the formal consultation stage prior to submission of

⁶² HCA submission on material change in circumstances affecting planning regime, 15 June 2015.

the document to the Secretary of State for independent examination, while those referred to under (a) would be subject to an early revision before being published for Regulation 19 consultation. However, WCC indicated that it had taken the view that its current approach to offices was out of date due to significant losses in office space in recent years and that it was, therefore, seeking to halt office-to-residential conversions on an interim basis in advance of the adoption of the policies referred to in (b).

- 5.72 The C&W report commissioned by Cleveland Clinic (see paragraph 5.47) indicated that there was a substantial increase in the rate of conversion of commercial properties to residential use (in Westminster) between 2009 and 2012.⁶³ WCC suggested that this was the result of strong growth in the value of residential property in recent years (relative to the value of commercial property), which had made it more attractive to convert buildings from commercial use.⁶⁴
- 5.73 During the remittal, we asked WCC about the standard timeline for planning permission approval for change of use in central London. WCC told us that it would expect most applications for major works to take around 16 weeks from formal application to a committee determination. However, where there were concerns around the viability of the site for the use proposed – and WCC told us that there often were – this could be 20 weeks instead of 16. WCC also told us that it tried to pre-empt any issues relating to section 106 (a legal agreement to secure the necessary planning obligations from the development) by negotiating with the parties in tandem with the application itself. Particular issues that tended to arise in such cases related to parking, traffic and servicing if they were significantly different from the current use, ie for private hospitals these were drop-off of patients, employees' - including consultants - dedicated parking, and private ambulances. The WCC planning portal indicated that the conversion to 'medical use' was an allowable 'change of use' within the Westminster area.65

Our assessment

5.74 We considered HCA's submissions on the functioning of the use swap system but concluded that no new evidence had been provided in this

⁶³ Cushman & Wakefield Report, 27 May 2015, submitted by the Cleveland Clinic on 14 January 2016. This report showed that in 2009, 66 buildings in Westminster were converted from commercial to residential use, while in 2012, the number of commercial to residential conversions increased to 120.
⁶⁴ WCC Report, slide 4.

⁶⁵ Planning Portal – Change of use.

respect to lead us to change our findings.⁶⁶ HCA referred to evidence that it collected from Howard de Walden Estates and submitted as part of the original investigation. However, as set out in the Final Report, evidence provided by Howard de Walden Estates to the CMA indicated that the use swap system made the development and rationalisation of buildings 'tortuous' and meant that only landlords with a number of properties could realistically employ use swaps.⁶⁷ However, we agreed with HCA that the need to obtain use swaps only applied in the Harley Street Special Policy Area and not in the rest of central London. We noted HCA's evidence that obtaining planning permission for the Platinum Medical Centre and for the conversion of part of Argosy House to medical use had been unproblematic.

5.75 We note that HCA did not provide any evidence to support its arguments that the CMA's reasoning set out in the Final Report in relation to the planning consent on the Shard represented a misunderstanding of the evidence or that a new entrant would have been able to obtain equivalent planning consent. The Final Report explained that:

The case officer's report on the application referred to the 'exceptional circumstances' of HCA in that it operated the nearby London Bridge hospital and had links with the Guy's and St Thomas' trust and that this justified the granting of the permission on a 'personal' basis to HCA. The report noted that since it was a personal planning permission 'any other healthcare/medical facilities operators wishing to occupy these levels would not be permitted'.⁶⁸

In our view, the case officer's report was clear and unequivocal that HCA had been granted planning permission in the Shard for reasons that were exceptional and that such permission would not have been forthcoming for another healthcare/medical facilities operator.

5.76 The evidence from the Royal Marsden Hospital indicated that the reason for applying for a change of use related to Cadogan Estates' (current landlord) plan to refurbish Royal Marsden's current office accommodation in Frieze Green House and convert it to residential accommodation. Royal Marsden noted that as more space was converted into residential accommodation in London, there was a shortage of office accommodation, especially in central London. The properties mentioned by HCA (in paragraph 5.41) are currently

⁶⁶ We considered HCA's evidence on the development of the Platinum Medical Centre in paragraph 6.101 of the Final Report.

⁶⁷ Final Report, paragraph 6.104.

⁶⁸ Final Report, paragraph 6.87.

residential accommodation. Royal Marsden's change-of-use application and planning permission relates to its need to provide office accommodation for its Marketing and Communications, Finance and Human Resources Departments, as well as the Royal Marsden Charity. Royal Marsden noted that the Council understood that the building was for its office support functions, however, it had granted a C2 (hospital use) classification.

- 5.77 WCC's evidence indicated that the proposed changes to the planning regime were at the consultation stage and had not yet been agreed or implemented. As a result, it is unclear which changes, if any, will be implemented in the future. We do not agree, therefore, with HCA's view that these constitute a material change in relation to planning. We note that WCC's interim approach of halting office-to-residential conversions is not of direct relevance to hospital operators since the aim is specifically to protect office use, rather than other social and community uses.⁶⁹ We consider that this change in approach is not likely materially to reduce the planning constraints that hospital operators face when seeking to develop sites in central London.
- 5.78 On the basis of this evidence, our finding is that planning constraints in central London are a factor contributing to the limited availability of suitable sites for private hospitals, thereby increasing the barriers to entry facing hospital operators. However, we observe that the extent to which planning constraints create a barrier to entry or expansion varies across different areas of central London, with the most acute constraint existing where use swaps are required.

Our conclusions

5.79 After considering the evidence provided to us during the remittal, we still conclude that planning constraints in central London are a factor contributing to the limited availability of suitable sites for private hospitals, thereby increasing the barriers to entry facing hospital operators.

Recent and potential future new entry

Parties' views

- HCA
- 5.80 HCA told us that the central London market had continued to grow since the date of our Final Report, with further instances of entry, expansion and

⁶⁹ Westminster City Council approach to office to residential conversion, 22 July 2015.

development opportunities. HCA suggested that these examples further illustrated the dynamism of the market and undermined the CMA's case for barriers to entry and expansion, particularly in regard to site availability and planning regulations. HCA provided a number of examples of recent and planned entry and expansion (ie since the date of the Final Report), including the following:

- (a) BMI London Independent opening a new ITU in December 2014, including six level 3 critical care beds.
- *(b)* BMI Blackheath's refurbishment works relating to, among other things, its ITU in autumn 2014.
- (c) The Bupa Cromwell opened a new paediatric walk-in centre in April 2014 as part of its redevelopment.
- (*d*) TLC is undertaking a major programme of refurbishment and improvements, including renovating the main hospital building.
- (e) Advanced Oncotherapy announced that it applied for planning permission for the development of a proton beam therapy centre for the treatment of cancer and has acquired a lease for an 8,000 sq ft building on Harley Street, which is due to be completed by the end of 2017. This project is a joint venture with Circle Health.⁷⁰
- (f) Nuada Medical Group, an outpatient and diagnostic provider has recently launched a new urology unit and entered into an arrangement with BMI Weymouth Hospital to lease hospital space and therefore offer inpatient treatments. In addition, it has leased facilities with two operating theatres, a full imaging suite and 12 consulting rooms on Harley Street from Renaissance Healthcare. This facility will treat patients on a day-case basis.
- (g) Optegra is planning to open a new eye clinic near Harley Street next year.
- *(h)* Fortius Clinic is in the process of establishing a new 9,700 sq ft orthopaedic outpatient clinic in the City and a surgical centre of 12,500 sq ft with two theatres, 15 day beds and inpatient facilities for up to four patients on Bentinck Street.⁷¹

⁷⁰ Advanced Oncotherapy press release (28 January 2015): 'London Harley Street Proton Therapy Centre'.

⁷¹ HCA response to comment and submit further evidence, paragraph 3.63, and HCA's letters to the CMA, 24 & 26 August 2015.

- *(i)* Proton Partners International has announced plans to enter the London market in 2017 with a facility offering radiotherapy, chemotherapy and proton beam therapy.
- (j) The opening of a new ophthalmology clinic, the Harley Street Eye Clinic.
- (*k*) The planned entry of the Cleveland Clinic into the central London market via a 192,000 sq ft site at 33 Grosvenor Place.
- 5.81 HCA noted that Spire was planning to enter the central London market by 2018 (see paragraph [5.38]). In addition, HCA highlighted the planned entry of VPS Healthcare on the site of the Ravenscourt Park Hospital in 2017. At the date of the remittal FR, the Ravenscourt Park site was owned by C&C Alpha. HCA highlighted that VPS's plans were to open a 150-bed hospital (190,000 sq ft), which would specialise in the treatment of cancer and conditions of the heart and brain as well as in other clinical fields. The intention was that the hospital would be the first private facility in the UK to offer proton beam therapy.⁷² However, at the time of the remittal FR, we understand that VPS has abandoned its plans to refurbish and redevelop the Ravenscourt Park site.
- 5.82 HCA also provided examples of recent and projected expansion of private patient facilities provided by the NHS, including the following:
 - (a) Chelsea and Westminster NHS Foundation Trust augmented its private maternity wing in August 2014 with a luxury postnatal maternity suite, which had 14 bedrooms and on-site ITU facilities.
 - (b) The Royal Brompton and Harefield NHS Foundation Trust had announced that it opened a new outpatient facility in Wimpole Street to expand private patient activities and was seeking other off-site opportunities to add more private inpatient capacity.⁷³
 - (c) Barts Health NHS Trust has invited tenders for the development and operation of a new private patient facility. HCA stated that this was a significant opportunity for a new entrant, that Barts already had the necessary land, buildings and planning consents and that this was likely to be completed in the next two years.

⁷² VPS Healthcare to invest £105 million on new London cancer care hospital.

⁷³ 77 Wimpole Street.

- (*d*) King's College had announced its intention to seek a strategic partner for a new PPU to provide a range of tertiary services, including liver surgery, bone marrow transplants and neurosciences.
- 5.83 Finally, HCA provided details of potential private and NHS hospital developments, including the following:
 - *(a)* Barts Hospital had been granted planning permission for the construction of a new cancer centre facility of just under 6,000 sq ft (D1 use).⁷⁴
 - (b) UCLH NHS Foundation Trust had been granted planning permission for the redevelopment of a former cinema and adjoining building to create a Proton Beam Therapy cancer treatment facility, in-patient haematology medical facilities and day surgery facilities. The total development will be approximately 375,000 sq ft
 - *(c)* Chelsea and Westminster hospital had plans to extend roof-level accommodation to create a 20-bed intensive care unit with additional ancillary accommodation.⁷⁵
- 5.84 HCA argued that these instances of entry and expansion were counterexamples to the Final Report's finding that it was 'unlikely that there would be substantial new entry into the central London market in the next two years and that entry after that period was uncertain'.
- 5.85 HCA dismissed CMA's assertion that the new Barts PPU was 'mid-sized' in paragraph 5.68(e) of the Remittal PFs. HCA said that the new PPU was expected to be a significant new competitor in the fields in which it specialised.
- 5.86 HCA noted that VPS and Cleveland Clinic's plans to enter the market were substantial and, in its view, this was evidence that undermined the CMA's assessment of the existence of significant barriers to entry and expansion which were deterring new entrants in central London.⁷⁶ During the December 2015 hearings, HCA also noted that new entry would impact on its negotiations with PMIs where it expected Bupa and AXA PPP to drive prices down, citing entry by Cleveland Clinic and VPS. In HCA's view, this was likely to happen at the next contracting period before the new hospital was up and running.

⁷⁴ D1 use is use for non-residential institutions – clinics, health centres, crèches, day nurseries, day centres, schools, art galleries (other than for sale or hire), museums, libraries, halls, places of worship, church halls, law court. Non-residential education and training centres.

⁷⁵ HCA response to comment and submit further evidence, paragraph 3.67.

⁷⁶ HCA response to the Remittal PFs, paragraphs 3.25–3.61.

- Bupa
- 5.87 Bupa put forward the view that barriers to entry and expansion in central London remained high, with no substantive entry by new players observed since April 2014. However, it noted that HCA had expanded its existing portfolio through its agreement with Guy's and St Thomas', its lease on the Shard, an advanced screening/diagnostic clinic (in Devonshire Street) and an expansion of the Portland Hospital into an adjacent building.
- 5.88 In relation to the possible new entry of the Cleveland Clinic into central London, Bupa told us that it did not consider that this would significantly change competition in the central London market. In Bupa's view, the time it would take Cleveland Clinic to set up, coupled with the Grosvenor Place location, would not provide any competitive constraint on HCA in the near future. Furthermore, Cleveland Clinic would not constrain London Bridge because it was unlikely to provide oncology services, meaning that HCA would continue to have a dominant position in that market. Bupa also noted that the proposed new entrant hospital would not be big enough to make a difference to the market on its own.
- 5.89 Bupa indicated that [≫] and [≫] had discussed their plans to expand with Bupa but had not yet done so. Finally, Bupa stated that HCA was seeking to increase the barriers to entry for new players through seeking to [≫], via its acquisition of GPs' practices and via partnerships with clinicians (such as Robotic Radiosurgery LLP).
- 5.90 Bupa told us that it had not had any contact with VPS in relation to its potential entry into the central London market. Bupa highlighted that the location of the hospital, in Ravenscourt Park, ⁷⁷ meant that it was likely to be less attractive to corporate customers than other central London hospitals. Bupa also noted that it had been told by Spire that it did not have a London site at the moment.
 - AXA PPP
- 5.91 AXA PPP told us that, with the exception of HCA's continued growth, there had been no material entry or expansion of private hospital providers in central London. AXA PPP noted that HCA had started to provide radiotherapy services in a new purpose-built centre in accommodation leased from Guy's and St Thomas' hospital (marketed as a 'sister site' to the London Bridge hospital under the name 'The London Radiotherapy Centre')

⁷⁷ Located in Hammersmith.

and that its full-service oncology facility (forming part of Guy's and St Thomas' new 12-storey cancer centre) was due for completion next year. AXA PPP also noted the opening of HCA's diagnostic clinic on Devonshire Street. Finally, AXA PPP understood that the contract for a PPU at St George's hospital in Tooting had also been awarded to HCA.⁷⁸

- 5.92 AXA PPP told us that it had not had any formal discussions with VPS regarding recognition of the Ravenscourt Park hospital. AXA PPP expressed the view that the fact that it was a Middle Eastern backed company and was located relatively close to Heathrow Airport, suggested that the hospital would plan to attract international business. AXA PPP also questioned whether there was a need for more than one or possibly two proton beam accelerators for the entire population of the UK, whether insured or NHS-funded, and noted that the NHS already had plans to build two proton beam accelerators (one at UCL and the other at the Christie hospital in Manchester). On this basis, it questioned the viability of investing further in such technology. AXA PPP did not consider that the Ravenscourt Park site would, because of its location, have any impact on competition between private healthcare providers in central London.
- 5.93 AXA PPP told us that it was not familiar with Cleveland Clinic and that it had not been approached by Cleveland Clinic to discuss any potential facility in central London or elsewhere. AXA PPP stated that there was no guarantee that the facility would be sufficient in size and services to constrain HCA to a sufficient extent in the future. Furthermore, AXA PPP told us that it anticipated that it would take some time to persuade corporate customers that Cleveland Clinic would represent an effective alternative to HCA.⁷⁹
 - TLC
- 5.94 TLC told us that it welcomed more competition in the market. TLC considered that Cleveland Clinic was a credible entrant with a good reputation. However, in TLC's view, the Cleveland Clinic was likely to take up to ten years to open. TLC told us that it was not possible for Cleveland Clinic to open by 2018, due to difficulties in obtaining planning permission and construction of its hospital, negotiations with PMIs, and attracting suitable consultants.⁸⁰

⁷⁸ AXA PPP response to the Remittal PFs.

⁷⁹ AXA PPP response to the Remittal PFs.

⁸⁰ TLC response to the Remittal PFs and TLC response to Remittal PDR.

- 5.95 TLC said that it was aware of smaller-scale entrants coming into the market on a more specialised basis, focusing on specialties such as day-case surgery and ophthalmology. In TLC's view, historical evidence of actual entry must carry the most weight in a determination of the constraint posed by new market entry, and, in its view, there had not been any large-scale entry into the private hospital market in the last decade.⁸¹
- 5.96 TLC said that Spire remained 'very keen' to enter the central London market. It added that it was not easy to enter the central London market with a new build.
 - Cleveland Clinic
- 5.97 As mentioned above, in late 2015, Cleveland Clinic, a US-based, not-for-profit⁸² private healthcare provider, acquired a long-term lease of a 191,000 sq ft site at 33 Grosvenor Place in Belgravia, central London for £[≫] million. Cleveland Clinic intends to convert 33 Grosvenor Place, which is currently used as office space, for use as a private hospital. The expected capacity of the new facility would be around 215 beds, of which approximately 40 would be intensive care beds.
- 5.98 Cleveland Clinic's plans for the site depended on obtaining planning permission to convert the building. Cleveland Clinic believed that it would take three years from the grant of planning permission until it would be able to treat its first patient. [%]
- 5.99 However, Cleveland Clinic told us that the planning application was not submitted in March 2016 (as initially planned) and, at the time of publishing this document, has not been submitted and does not appear imminent (please see Endnote for an update). [≫]. Discussions were continuing, but it could not offer any indication of timing or certainty of reaching an acceptable agreement.
- 5.100 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 real prospect of entry by Cleveland Clinic within the next 7 to 12 years.

⁸¹ TLC response to the Remittal PFs and TLC response to Remittal PDR.

⁸² Cleveland Clinic is a non-profit multi-specialty academic medical centre that integrates clinical and hospital care with research and education, according to its website.

- VPS
- 5.101 In July 2015, VPS announced plans to enter the central London market via the purchase of the (currently disused) Ravenscourt Park hospital.⁸³ VPS manages 16 fully operational hospitals across the UAE, Oman and India, as well as pharmaceutical manufacturing, a pharmacy retail chain, and primary, secondary and tertiary care clinics.
- 5.102 In a press release dated July 2015, VPS stated that Ravenscourt Park hospital was expected to have capacity of 150 beds.⁸⁴ During the summer of 2015, VPS told us that it planned to open the refurbished hospital in 2017. Its plan for the site was as a full-service, tertiary hospital. VPS told us that it would be the first private hospital in the UK to offer proton beam therapy, a kind of radiotherapy, used in cancer treatment.
- 5.103 C&C Alpha Group, the current owner of the tenant company for Ravenscourt Park hospital, told us that after months of active discussions with VPS and Imperial College NHS Trust over a revised Share Purchase Agreement for the company holding the lease of Ravenscourt Park Hospital, no agreement had been reached and negotiations halted after being delayed on a number of occasions. C&C Alpha Group told us that the planning permission for the site had been secured, as shown by a copy of its Certificate of Lawfulness of Use or Development submitted to us. However, we understand that VPS has abandoned the plans to refurbish and redevelop the site.
 - Spire
- 5.104 During our original investigation, Spire told us that it was searching for a suitable site in central London in which to open a hospital.⁸⁵ [%]
- 5.105 [※]
- 5.106 [**※**].⁸⁶

⁸³ Article in *The National* (27 July 2015): 'VPS Healthcare to invest £105 million on new London cancer care hospital'. The Ravenscourt Park Hospital is located in Hammersmith. It was leased by the NHS between 2002 and 2006, and used to treat NHS patients. BBC news article (29 August 2006): 'Hospital closes after four years'. The site was acquired by C&C Alpha Group in 2007, which intended to refurbish the site and open it as a private hospital (the London International Hospital). See Final Report, paragraph 6.73.

⁸⁴ Article in *The National*, op cit. The Ravenscourt Park hospital has around 185,000 sq ft of space.

⁸⁵ Final Report, paragraphs 3.10–3.14.

⁸⁶ Remittal PFs, paragraph 5.21.

- Entry by others
- 5.107 During February 2016, Howard de Walden Estates⁸⁷ told us that a large European hospital group (later identified as Schön Klinik) intended to open a private hospital in central London (on Wigmore Street, in close proximity to Harley Street). The hospital would be 16,000 sq ft, and would specialise in spinal treatments and neurology. Howard de Walden Estates told us that the new entrant was attracted to central London due to the market's attractiveness to overseas patients. However, the new entrant planned to attract UK insured and self-pay patients as well. The hospital was expected to take 15 months to establish from the grant of the planning permission. The application for planning permission was submitted on 11 April 2016.

Our assessment

- 5.108 We have categorised the evidence above into six groups or types of recent and planned entry and expansion, and assessed their impact on whether we should change our views on whether there are barriers to entry/expansion in central London:
 - (a) The first group comprises upgrades, refurbishments or minor extensions to existing facilities, (for example, BMI, Bupa Cromwell, TLC, and Chelsea and Westminster projects), rather than the development of significant new capacity. As a result, we do not consider that this is material to the question of whether there are barriers to entry/expansion in central London.
 - (b) The second group includes companies that are expanding through the purchase of healthcare facilities from other operators (for example, Nuada). This does not represent overall expansion in the industry but rather the change of ownership of private healthcare facilities.
 - (c) The third group comprises NHS hospitals expanding their capacity to treat NHS patients (for example, Barts, UCLH, and Chelsea and Westminster expansions). This capacity is not used to compete with private hospitals and, therefore, is not material to the issue of barriers to entry or expansion into the private healthcare market.
 - (*d*) The fourth group comprises examples where firms have opened (or have firm plans to open) incremental private healthcare capacity in central London. We considered these to be the relevant examples of entry/ expansion in the market. However, we observed that these

⁸⁷ The Howard de Walden Estate owns and manages a large property portfolio in Marylebone.

incremental facilities were very small relative to the market (a handful of inpatient beds or day-case only facilities) and highly specialised, for example Fortius Clinic, Advanced Oncotherapy, the Harley Street Eye Clinic and Optegra.⁸⁸ While, in theory, a large number of such clinics opening across a full range of specialties could, eventually, be expected to constrain HCA, our view is that the scale of entry/expansion observed is insufficient to have a material impact on competitive dynamics in the near future. In the case of Proton Partners International, we observed that while it proposed to enter on a larger scale (albeit focused on a single specialism) it has not yet identified a suitable site in central London.⁸⁹ The planned new Schön Klinik hospital on Wigmore Street, intended to be a specialised spinal and neurological facility, has yet to secure planning permission. As a result, we consider this potential entry to be uncertain in terms of timing.

(e) The fifth group comprises new NHS PPUs, such as that currently planned at Barts. At around 78,000 sq ft, this facility will be similar in size to HCA's smallest hospital, the Portland. As a result, we consider that this represents 'mid-sized' entry. Barts Health selected Nuffield Health for its PPU. ⁹⁰ The PPU is currently expected to open in 2018. Furthermore, Barts Health indicated that the facility would focus largely, although not exclusively, on cardiovascular treatments. The expected capacity is in the region of three theatres, 26 beds, a full diagnostic suite and outpatient services. We asked King's College Hospital NHS Foundation Trust about its plans to tender for a PPU. [≫]. As a result, it continued to manage its PPU in-house [≫].

In relation to HCA's response to our remittal PFs that the new Barts PPU was expected to be 'significant' in size and a competitor in the fields in which it specialised, we stand by our conclusion in paragraph 5.68(d) of the remittal PFs that the PPU is 'mid-sized'. Nuffield Health is a new entrant to the London PPU market and will be investing, developing, managing and operating the PPU facility located on the St Bartholomew's Hospital site in West Smithfield.

⁸⁸ In the case of Advanced Oncotherapy plc, we noted that the focus of the company was on the development of technology. As the company website states: 'Our sole focus is to develop technologies to maximise the destructive effect of radiation on tumours whilst minimising damage to healthy tissues. Our goal is to help healthcare providers and hospitals expand their repertoire of treatments to ensure clinicians and patients have choices. Advanced Oncotherapy's aim is to cost-effectively deliver the next generation of proton therapy which is clinically superior to the currently available alternative radiation therapies.'

We considered that Proton Partners International should be included in this category given the specialist nature of the facilities.

⁸⁹ Proton Partners International website.

⁹⁰ Preferred provider of private patients unit announced.

(f) Finally, the sixth category of entry is that of a large full-service hospital (ie Cleveland Clinic in Grosvenor Place). We contacted Cleveland Clinic to understand its plans for the central London market. We consider there is a real prospect that Cleveland Clinic will enter. However, entry by Cleveland Clinic is not expected in the near future. Therefore, we conclude that this threat of entry is not sufficient to exert an effective constraint on HCA in the near future (ie next two years).

Our conclusions

- 5.109 In spite of the attractiveness of the growing privately funded healthcare services market in central London, there has been no large-scale entry or substantial change in the structure of the market over the last ten years or more, and only limited incremental expansion/changes in ownership.⁹¹
- 5.110 We conclude that large-scale entry seems likely to take place, however, not in the near future. We found that an entrant would require around a minimum of three years to remodel/refurbish a site for hospital use. Given this lead time in establishing a hospital, we would be aware of any new entry likely to take place in the near future (that is, within two years). Although we know of some planned new entry in this time frame, eg the Schön Klinik and the Nuffield PPU at Barts, we do not believe these new entrants would impose a sufficient constraint on HCA to address the AEC on their own. Therefore, we have concluded that there is unlikely to be entry on a sufficient scale in the near future. However, we consider that over a longer time frame, there is a real prospect of new entry (large-scale, smaller or specialist hospitals) into the central London market which would result in an increased competitive constraint on HCA, and therefore downward pressures on HCA's prices over the medium term (for example the next 12 years),

Other potential barriers to entry considered in the Final Report

5.111 In the Final Report, we also analysed the extent of lack of PMI recognition (whereby a PMI declines to recognise new healthcare facilities) and of clinician incentives (arrangements between private healthcare providers and clinicians, usually consultants, which may deter or prevent them from working with the entrant).

⁹¹ Remittal PFs, paragraph 23.

- 5.112 We concluded that lack of PMI recognition did not constitute a barrier to entry.⁹² Furthermore, taking all factors into account, including the remedies we have introduced with regard to them (see Section 11 of the Final Report and the Final Order), incentive schemes and arrangements which create consultant referral obligations also do not constitute a barrier to entry.⁹³
- 5.113 We have not received any evidence, during this remittal, which would indicate that these would constitute barriers to entry and expansion in the central London market. Therefore, we have not revisited our Final Report conclusions.

Conclusions on barriers to entry and expansion

5.114 We have found that there are substantial barriers to entry and expansion in central London. Our review of the evidence indicates that the principal barriers to entry in central London arise as the result of long lead times, which are exacerbated by the existence of high sunk costs and the limited availability of suitable sites. This latter factor is, in turn, exacerbated by the existence of planning constraints to a greater or lesser extent depending on the area within central London. Our view is that these barriers have contributed to the lack of substantial entry into the market over the last ten years, and the limited examples of expansion, in spite of the attractiveness of the central London market to private hospital providers. Moreover, we conclude that there is unlikely to be entry or expansion of a private hospital operator of sufficient scale to constrain HCA in the near future.⁹⁴

⁹² Final Report, paragraph 6.117–6.122.

⁹³ Final Report, paragraph 6.138–6.141.

⁹⁴ For the purpose of this investigation we have treated 'near future' as the next two years.

6. Bargaining

- 6.1 In the Final Report, we set out the framework and principles underlying our analysis of bargaining and insured price outcomes and then assessed relevant evidence from internal documents and parties' submissions in order better to understand the factors the hospital operators and PMIs take into account when negotiating. Our evidence and analysis in relation to bargaining is set out in paragraphs 6.276 to 6.332 of the Final Report (supported by Appendix 6.11).
- 6.2 In the Final Report, we found that:
 - (a) the competitive position of hospitals at the local level is an important factor that both PMIs and hospital operators take into consideration in their negotiations over insured prices;¹ and
 - (b) both PMIs and hospital operators have some degree of bargaining power, which depends on the strength of their outside options. This will vary from hospital operator to hospital operator and from insurer to insurer.²
- 6.3 This section discusses parties' comments received during this remittal on our framework for analysing bargaining and our assessment of relevant evidence from internal documents and parties' submissions.

Bargaining economic framework

Our conclusions in the Final Report

- 6.4 In the Final Report, we explained that:
 - (a) 'Insured prices', ie the prices charged by hospital operators to PMIs for treatment provided to insured patients, are an outcome of bilateral negotiations between hospital operators and PMIs. During these negotiations, discussions typically focus on the price of the overall bundle of a hospital operator's services (ie the associated revenue), with relatively little focus on the price of individual treatments. The prices of individual treatments are generally not set at the hospital level, but are the same across the hospital operator's portfolio of hospitals contracted

¹ Final Report, paragraph 6.330.

² Final Report, paragraph 6.331.

with the PMI, thus reflecting some average price of each treatment across these hospitals.³

- *(b)* Neither side are 'price-takers' nor in a position to make 'take-it-or-leaveit' offers. The bargaining outcome depends on the 'outside options' of both parties, ie the best alternatives available to each party in the event that no agreement is reached. Typically, an agreement is reached if both parties receive some financial benefit above and beyond the value of their outside options. We refer to this financial benefit as a party's share of the bargaining surplus.⁴
- 6.5 We further explained that the availability of other hospitals to which the PMI can divert its customers in each local area in case of a full delisting is an important determinant of PMIs' outside options. PMIs' outside options will depend on the hospital operator's average local concentration across its portfolio of hospitals. If average local concentration is higher, it will be more difficult for a PMI to find substitutable hospitals in local areas, which will weaken a PMI's outside options. This gives rise to a positive relationship between average local concentration and insured prices, other things being equal.⁵ We also stated that PMIs' outside options will not only reflect local concentration, but are more generally related to their ability to divert policyholders under the terms of the policy away from the delisted hospital.⁶

Parties' comments during the remittal on the bargaining economic framework

- 6.6 HCA raised the following new arguments during this remittal in relation to our application of the bargaining framework in the Final Report:⁷
 - (a) HCA argued that we focused our analysis on the outside options of PMIs, despite acknowledging that the bargaining outcome would depend on both hospital operators' and PMIs' outside options.⁸
 - (b) HCA argued that we did not recognise adequately the important role of how the surplus available was shared between parties, which was determined by the parties' bargaining strength (or the 'sharing rule'). If

³ Final Report, paragraph 6.276.

⁴ Final Report, paragraphs 6.279 & 6.280.

⁵ Final Report, paragraphs 6.283 & 6.285.

⁶ Final Report, footnote 397 to paragraph 6.283.

⁷ HCA response to comment and submit further evidence, paragraphs 5.10–5.19.

⁸ HCA response to comment and submit further evidence, Section 5 summary, third bullet: 'A correct application of economic theory implies that the CMA can only reach a view on any link between the PMI's outside option (e.g. as driven by HCA concentration) and insured prices upon a review of all aspects influencing the bargaining strength of each party.' HCA submission on 1 May 2015, paragraph 5.18: 'It is thus essential to consider a hospital's outside option in order to learn about both parties' overall bargaining positions, as they affect the impact that a change in a PMI's outside option will have on the bargaining outcome.'

PMIs had a high degree of bargaining strength (ie the sharing rule was skewed in their favour), then changes to PMIs' outside options might have a small effect on the bargaining outcome.^{9,10}

- (c) Moreover, empirical estimates in the relevant literature of the shares of bargaining surplus in a variety of industries and markets vary hugely. Therefore, HCA argued that we could not presume a particular sharing rule, and that seemingly extreme sharing rules (that gave hospital operators a very small share of the surplus) were not rare.
- (d) Given the above, HCA argued that we did not know how the bargaining surplus was shared between PMIs and hospitals, and therefore could not predict that an improvement in PMIs' outside options in central London would lead to a sufficiently large reduction in insured prices to justify the divestment remedy.¹¹
- 6.7 In response to the remittal provisional findings, HCA further stated that, in its view:
 - (a) We should weigh the strength of HCA's outside options directly against the strength of the outside options available to PMIs.¹² While the relative balance of both parties' outside options might reveal information about the likely value of the sharing rule, a simple assessment of only PMIs' outside options could not.¹³
 - *(b)* As we had not formed an accurate understanding of the sharing rule, we could not draw any conclusions about the relationships between changes to one party's outside options and bargaining outcomes.¹⁴
 - (c) We were applying an unreasonable standard against which to gauge HCA's bargaining strength when we stated that HCA was still able to

⁹ HCA response to comment and submit further evidence, paragraphs 5.16 & 5.17: '...a change in one party's (e.g. a PMI's) outside option may have a very small, even negligible, effect on the bargaining outcome. This effect depends on... the "sharing rule"... An investigation of the sharing rule was therefore required, to assess how a given surplus is likely to be shared between a hospital and a PMI in a given context.'

¹⁰ To give some economic intuition for this result, consider the extreme case in which PMIs have all the bargaining strength. This is equivalent to a case in which PMIs are able to make 'take-it-or-leave-it' offers to HCA, and HCA is forced to act as a 'price-taker'. In this case, the PMIs would offer HCA just enough so that HCA is indifferent between accepting the PMIs' offer or turning to its outside option. PMIs would capture the entire bargaining surplus. In such a situation, if there are small changes to HCA and PMIs' outside options, the offer that PMIs make to HCA (and hence the bargaining outcome) will vary with changes in HCA's outside options and not at all with changes in PMIs' outside options.

¹¹ HCA response to comment and submit further evidence, paragraph 5.2, first bullet: 'Even if lower local market concentration could be linked to stronger outside options for PMIs ... the CMA was not in a position to predict what impact this would have on the outcome of negotiations between PMIs and hospital operators, which could be negligible.'

¹² HCA response to the Remittal PFs, paragraph 4.6.

¹³ HCA response to the Remittal PFs, paragraph 4.23.

¹⁴ HCA response to the Remittal PFs, paragraph 4.11.

exercise some market power because PMIs did not have countervailing buyer power.¹⁵ HCA argued that we should undertake an assessment of the degree of buyer power.¹⁶

(d) Our assessment of PMIs' outside options did not distinguish between the determinants of outside options that might give HCA bargaining strength because of its higher quality, range of service and reputation on the one hand, and local market concentration on the other.¹⁷

Our response

- 6.8 In the Final Report, we stated that a hospital operator's outside options are determined by:¹⁸
 - (a) the extent to which it is able to avoid the loss of the insurer's policyholders as patients; and
 - *(b)* its ability to seek patients from other sources (such as overseas patients, self-pay patients or NHS work).

That is, to the extent that a delisting results in policyholders switching PMI in order to maintain their access to the delisted hospital, and to the extent that any business lost by the hospital operator can be replaced, this will strengthen the hospital operator's outside options.

- 6.9 We remain of the view that bargaining outcomes will depend on both hospital operators' and PMIs' outside options. In response to HCA's argument that we ignored hospital operators' outside options, we believe that we did give due consideration to hospital operators' outside options as well as PMIs' outside options in our competitive assessment:
 - (a) Insofar as a hospital operator's outside options in negotiations with any particular PMI depend on the hospital operator's ability to avoid the loss of that PMI's policyholders in the event of a delisting, this is simply the counterpart to that PMI's outside options, which is the PMI's ability to steer patients towards alternative hospitals, and which we have discussed in the Final Report.¹⁹
 - (b) To the extent that hospital operators' outside options depend on alternative sources of revenue, we did consider in the Final Report the

¹⁸ Final Report, paragraph 6.284.

¹⁵ HCA response to the Remittal PFs, paragraphs 4.15–4.16.

¹⁶ HCA response to the Remittal PFs, paragraphs 4.9.

¹⁷ HCA response to the Remittal PFs, paragraph 4.53i.

¹⁹ Final Report, Appendix 6.11, paragraphs 10–174.

extent to which hospital operators are able to replace any lost insured business. We originally concluded that they were most unlikely to be able to do so rapidly and would be severely impacted by a major delisting.²⁰

- 6.10 Turning to HCA's points on the sharing rule, in the Final Report, while we found that both parties to the negotiations have some degree of bargaining strength, based on our review of submissions and internal documentary evidence, we did not draw any precise conclusions on the extent of parties' relative bargaining strengths and the way that they share the surplus. Our analysis of the internal documents and parties' submissions relating to the conduct of national negotiations did not enable us to determine how their respective bargaining strength affects the bargaining outcome.²¹
- 6.11 We also thought that the wide range of estimated bargaining strengths that HCA cited from the academic literature could reflect the difficulties and uncertainties around modelling negotiations and estimating bargaining strengths rather than the prevalence of extreme sharing rules.
- 6.12 We do not agree with HCA's argument that we need directly to weigh the strength of HCA's outside options against the strength of PMI's outside options in order to draw broad conclusions about the sharing rule. The parties' outside options determine the value of the bargaining surplus (which is the total value of reaching an agreement after subtracting the value of both parties' outside options) and is unrelated to how the parties then go on to split that bargaining surplus (the sharing rule). This is simply a feature of the standard bargaining model that we are applying.
- 6.13 While we accept that we have not formed a precise estimate of the sharing rule, we reject HCA's argument that we have not formed an accurate understanding. We formed a broad view, in the Final Report, that the PMIs and hospital groups are dependent upon each other, which suggests that both these parties to the negotiations have some degree of bargaining strength. On this basis, we believe that we can draw broad conclusions about the likely impact of changes to parties' outside options on bargaining outcomes, and that improvements in PMIs' outside options would be likely to lead to lower insured prices.

²⁰ Final Report, paragraph 6.316.

²¹ Final Report, paragraphs 6.331 & 6.332. Although we were not able to determine this, we did observe that, as a result of the 2011/12 Bupa-BMI delisting, both parties appear to have suffered substantial damage and we concluded that this suggested that both parties managed to extract a share of the bargaining surplus when an agreement was reached.

- 6.14 We also do not accept HCA's argument that we are applying an unreasonable standard in assessing relative bargaining strengths. Both market power and buyer power are not binary, and HCA will be able to continue to exert some market power even if PMIs also have some (but not countervailing) buyer power.
- 6.15 We examined the possibility that HCA has higher quality and range in paragraphs 6.388 to 6.426 of the Final Report, and in Section 7 of this report. We found that there is no evidence of material quality differences between the main hospitals in central London, although the lack of objectively comparable measures of quality make it difficult to assess quality.
- 6.16 Because this remittal focuses on central London and HCA's position within central London, we have considered more specifically HCA's and PMIs' outside options and bargaining strengths, on the basis of both the relevant evidence submitted during our original investigation (which is summarised in Appendix 6.11 of the Final Report) and additional evidence submitted during this remittal. We consider this evidence in the section below.

Qualitative assessment of bargaining strength and outside options

Parties' comments on our qualitative assessment of bargaining strength and outside options

- 6.17 During the remittal parties made various comments on our qualitative assessment and evidence on bargaining strength and outside options. We briefly discuss parties' general views, and then their detailed comments under the following headings, before we present our overall conclusion:
 - (a) Full delisting and PMIs' outside options (paragraphs 6.22 to 6.41).
 - (b) Restricted networks (paragraphs 6.42 to 6.53).
 - (c) Service-line tenders (paragraphs 6.54 to 6.65).
 - (d) Strategic recognition of new facilities (paragraphs 6.66 to 6.71).
 - (e) Open referrals and incentives to use NHS (paragraphs 6.72 to 6.80).

General views

6.18 In addition to its arguments about our application of our bargaining economic framework, during this remittal HCA reiterated a number of points and arguments that it raised during the original investigation, arguing that PMIs had *(a)* relatively high bargaining strength, and *(b)* better outside options

than HCA.²² HCA argued that we ignored important evidence that it submitted during our original investigation about the overall bargaining position of the PMIs, including their outside options, the strategies which they had successfully used in contract negotiations, and the degree to which they had been able to divert patients to alternative providers.²³ HCA argued that evidence from the private healthcare market, which indicated that at least some PMIs had a strong bargaining position relative to hospital operators (ie that the sharing rule was skewed in PMIs' favour), suggested that any improvement in PMIs' outside options in central London would not be likely to have a significant effect on bargaining outcomes. We respond to each of HCA's detailed points in the subsections below.

6.19 We note that during the hearing with HCA on 13 August 2015, HCA made remarks which in fact suggested that both sides of the negotiation have some bargaining strength:

 $[\gg]$... If we do not give their customers great customer service and give them fantastic healthcare and so on, then we do not have any leverage in that negotiation.... $[\gg]$, the idea that one side has all the power I think completely misses the point. That is not the way it works.

- 6.20 AXA PPP stated that, in its view, there had been no significant changes that had materially affected the dynamic of the central London market since our Final Report. AXA PPP did not believe that its bargaining power had changed in the past two years.²⁴
- 6.21 Bupa argued that its bargaining power over HCA was decreasing, relative to its position since the Final Report, because HCA had substantially increased its strength in central London, was continuing to grow its 'dominance in strategically important specialisms such as oncology', and maintained 'entrenched relationships with key consultants'.²⁵ According to Bupa, large corporate customers continued to demand access to HCA given the location of its facilities. Therefore, in Bupa's view, it would be extremely costly and risky for an insurer to enter a contract dispute with HCA.²⁶ Furthermore, Bupa argued that HCA appeared to be reducing its exposure to private insurer revenues, and Bupa submitted that as a result HCA faced little threat

- ²³ HCA response to comment and submit further evidence, paragraph 5.2, second bullet.
- ²⁴ AXA PPP response to comment and submit further evidence, Q7 p.8.
- ²⁵ Bupa response to comment and submit further evidence, paragraph 2.23.

²² HCA response to comment and submit further evidence, Section 5 summary, 4th bullet: 'first, evidence suggests that the sharing rule is likely to be skewed in their favour in negotiations with HCA; and second, they have more valuable outside options than HCA, and they are successfully using a range of "directional" products to divert business away from HCA hospitals.'

²⁶ Bupa response to comment and submit further evidence, paragraph 2.23.

from insurer buyer power. Finally, Bupa stated that its use of open referrals, NHS Cash Benefits,²⁷ and service line tenders had not increased since the Final Report and these were ineffective in constraining HCA's 'dominance' in central London.

Full delisting and parties' outside options

- Our conclusions in the Final Report
- 6.22 We previously found that:
 - *(a)* the competitive position of hospitals at the local level is an important factor that both PMIs and hospital operators take into consideration in their negotiations over insured prices;²⁸
 - *(b)* in the event of a major delisting, hospital operators appear most unlikely to be able to replace any lost business rapidly and would be severely impacted by a major delisting.²⁹ The potential loss of consultants, who would normally wish to continue to be able to treat a major PMI's policyholders, a phenomenon also known as 'consultant drag', is also a major issue and a real risk;³⁰ and
 - (c) PMIs would also be severely impacted by full delisting. They would incur the costs of sending patients to alternative hospitals, would be likely to have to pay higher prices to the delisted hospital operator due to reduced discounts at the operator's remaining 'must-have' facilities, and could lose future sales of policies to insured patients due to reputational damage.³¹
 - Parties' comments during the remittal
- 6.23 HCA reiterated that, in the event of a full delisting, the scale of the financial damage to the parties was very different. It argued that HCA simply could not survive without recognition from Bupa and AXA PPP.³² Relatedly, HCA objected to our statement in paragraph 11.155 of the Final Report, which suggested that de-recognition of an HCA hospital by one of the major insurers would not necessarily be fatal, due to the significant level of

²⁷ Bupa pays NHS cash benefit to some of its members if they receive inpatient treatment for free from the NHS, and that inpatient treatment is covered by their PMI policy.

²⁸ Final Report, paragraph 6.330.

²⁹ Final Report, paragraph 6.316.

³⁰ Final Report, paragraph 6.313.

³¹ Final Report, paragraph 6.316.

³² HCA response to comment and submit further evidence, paragraph 5.21.

demand from both overseas and self-pay patients for private healthcare treatments in central London. $[\%]^{33}$

- 6.24 HCA pointed out that Bupa successfully used the threat of delisting to get lower prices from BMI and (more recently) Spire, without suffering adverse consequences. HCA stated that Bupa had improved its financial performance since its confrontation with BMI, and any alleged loss of market share had been minimal.³⁴
- 6.25 Finally, HCA reiterated that there was sufficient spare inpatient capacity in central London for any of the largest PMIs to have a viable alternative to HCA's hospital facilities.³⁵ In support of this, HCA's economic advisers, KPMG, submitted new analysis which set out that, [≫]. We discuss HCA's arguments on spare capacity and its new analysis in more detail in Section 4.
- 6.26 In contrast to HCA's views, AXA PPP submitted that it was not an unavoidable contracting partner for HCA.³⁶ Furthermore, in AXA PPP's view, HCA continued to own 'the vast proportion of "must have" hospitals in London to which its customers, in particular large corporate customers, continue to require access'.³⁷
- 6.27 AXA PPP argued that [×].³⁸
- 6.28 Bupa reiterated its previous arguments that the scale and scope of HCA made it a 'must have' hospital group in central London, and that [\gg].³⁹
- 6.29 Bupa also reiterated that, in a contractual dispute with HCA, Bupa would be restricted from directing patients away from HCA by:
 - (a) needing to maintain continuity of care for patients already mid-treatment;
 - *(b)* the threat that customers (particularly corporate customers) would switch if Bupa could not make available what Bupa considered the majority of key private hospitals in central London; and

³⁴ HCA response to comment and submit further evidence, paragraphs 5.22, 5.26 & 5.27.

³⁶ AXA PPP initial response, p.3.

³³ HCA response to comment and submit further evidence, paragraph 5.23. See also HCA observations of CMA summaries of hearings, 13 October 2015, paragraph 3.11.

³⁵ HCA response to comment and submit further evidence, paragraphs 5.60–5.64.

³⁷ AXA PPP response to comment and submit further evidence, Q6 p.7.

³⁸ AXA PPP response hearing summary.

³⁹ Bupa response to comment and submit further evidence, paragraph 2.15.

- *(c)* the regulatory risk that the FCA would be concerned about Bupa materially altering its insurance product to existing customers.
- 6.30 Furthermore, and in contrast to HCA's argument, Bupa argued that HCA appeared to be reducing its exposure to private insurer revenues. It cited new evidence from the latest LaingBuisson report⁴⁰ which estimated that only around 55% of HCA's revenue was from privately insured patients, which meant that even the largest PMI, [≫].⁴¹
- 6.31 HCA responded to AXA PPP and Bupa's comments by stating that the level of supposed harm (from fully delisting HCA) had been overstated by PMIs, and, in any event, was considerably smaller than the harm that would be inflicted on HCA following a delisting:⁴²
 - (a) HCA also noted that, in the event of a full delisting, patient disruption would be minimised. According to HCA, [≫].⁴³
 - (b) HCA further commented that, in the event of a full delisting, PMIs' loss of sales volumes (due to reputational damage from customers that may have their choice of hospital frustrated) would be significantly mitigated because (i) a large part of the PMIs' customer base was captive due to pre-existing medical conditions; (ii) some of the PMIs' corporate clients could do without access to HCA's hospitals; (iii) customer inertia would prevent switching; and (iv) PMIs had good PR and marketing to mitigate the reputational damage.⁴⁴
 - *(c)* HCA pointed to Bupa's financial performance after delisting BMI and in recent years as evidence that PMIs would not be harmed by full delisting and have significant bargaining strength.⁴⁵
- 6.32 Finally, HCA suggested that we should carefully consider the reasons why 'a small core of corporate PMI customers hold a strong preference for HCA's hospitals.'⁴⁶ HCA argued that, if this were due to HCA's higher quality, then this would not support an AEC finding. Alternatively, if this preference were due to the location of a single hospital, the London Bridge Hospital, HCA argued that PMIs could maintain recognition of the London Bridge Hospital and delist HCA's other facilities (a partial delisting).⁴⁷

⁴⁰ LaingBuisson report (February 2015), *Private Acute Medical Care in Central London: Market Report*.

⁴¹ Bupa response to comment and submit further evidence, paragraph 2.24.

⁴² HCA response to the Remittal PFs, paragraph 4.56.

⁴³ HCA response to the Remittal PFs, paragraphs 4.62 & 4.65.

⁴⁴ HCA response to the Remittal PFs, paragraph 4.75.

⁴⁵ HCA response to the Remittal PFs, paragraphs 4.78 & 4.79.

⁴⁶ HCA response to the Remittal PFs, paragraph 4.75.

⁴⁷ HCA response to the Remittal PFs, paragraph 4.77.

- Our response
- Role of local competitive conditions
- 6.33 In our review of internal documents and submissions in the Final Report, we found that the competitive position of hospitals at the local level is an important factor that both PMIs and hospital operators take into consideration in their negotiations over insured prices.⁴⁸ No party has submitted any new evidence or argument indicating otherwise, so we readopt this finding as set out in paragraph 6.330 of the Final Report.
 - Hospital operators' outside options in the event of a major delisting
- 6.34 In the Final Report, we considered evidence that the risk of full delisting may act as a constraint during negotiations. We concluded that, in the event of a major delisting, hospital operators appear most unlikely to be able to replace any lost business rapidly and would be severely impacted.⁴⁹ The potential loss of consultants, who will normally wish to continue to be able to treat a major PMI's policyholders, a phenomenon also known as 'consultant drag', is also a major issue and a real risk.⁵⁰
- 6.35 On central London and HCA in particular, we noted in the Final Report that HCA considers that AXA PPP and Bupa are [≫]⁵¹ and that it would be greatly impacted by any loss of revenue from either large PMI.⁵² We note that this is still HCA's view.
- 6.36 Comparing the estimates that Bupa cites (around [50–60]% of HCA's revenue is from insured patients) with the data we collected and presented in the Final Report (where the share of HCA's revenue from insured patients was [55–65]%),⁵³ while we agree with Bupa that HCA may have reduced its exposure to private insurer revenues since the Final Report, we do not consider that such a reduction is material. Therefore we conclude that there is not sufficient evidence to suggest that HCA would be able to replace lost insured revenues (from the major PMIs) from other sources.
- 6.37 Based on our assessment above, we readopt our findings, in paragraph6.316 of the Final Report, that hospital operators appear most unlikely to beable to replace any lost business rapidly and would be severely impacted by

⁴⁸ Final Report, paragraph 6.330.

⁴⁹ Final Report, paragraph 6.316.

⁵⁰ Final Report, paragraph 6.313.

⁵¹ Final Report, Appendix 6.11, paragraph 72.

⁵² Final Report, Appendix 6.11, paragraphs 68 & 69.

⁵³ Final Report, Table 3.3, and Appendix 6.11, Figure 6.

a major delisting, resulting in an immediate loss of revenue. The potential loss of consultants, who would normally wish to continue to be able to treat the PMI's policyholders, is also a major issue. We therefore conclude that HCA is likely to be severely impacted in the event of a full delisting by either Bupa or AXA PPP.

• PMIs' outside options in the event of a major delisting

- 6.38 In the Final Report, we concluded that PMIs would also be severely impacted by full delisting. They would incur the costs of sending patients to alternative hospitals, would be likely to have to pay higher prices to the delisted hospital operator due to reduced discounts at the operator's remaining 'must-have' facilities (ie a partial rather than full delisting), and could lose future sales of policies to insured patients due to reputational damage.⁵⁴ In reaching this view, we had already considered HCA's arguments and observation that PMIs would attempt to manage and mitigate these costs, and on balance we reached the view that PMIs would be severely impacted by a full delisting of HCA.
- 6.39 On central London and HCA in particular, we noted, in Appendix 6.11 of the Final Report, the widespread views among PMIs and some hospital operators that HCA had a number of 'must-have' hospitals, to which PMIs would have to continue to send patients even in the event of a dispute,^{55,56} and that this was consistent with some PMIs' internal documents and other estimates on the impact of delisting HCA and the proportion of patients which they would not be able to redirect to alternative hospitals.⁵⁷ We also previously noted that HCA's internal documents recognise the risk and difficulty for Bupa and AXA PPP to delist HCA's hospitals.⁵⁸
- 6.40 We also noted in the Final Report AXA PPP's view that 'HCA hospitals are essential for its corporate customers in the South East meaning that its choice was binary either AXA PPP has a credible London offer for its corporate customers, which included HCA, or it does not'.⁵⁹ [≫] Bupa's internal documents during its 2012/13 negotiations with HCA, [≫].⁶⁰ AXA PPP argued that were it to exclude HCA from its network, it would lose a significant volume of customers to other PMIs. A similar view about the

⁵⁴ Final Report, paragraph 6.316.

⁵⁵ Final Report, paragraph 6.297 and Appendix 6.11, paragraph 12.

⁵⁶ Final Report, Appendix 6.11, paragraph 11(b)-(c).

⁵⁷ Final Report, Appendix 6.11, paragraphs 12(d), 32–35.

⁵⁸ Final Report, Appendix 6.11, paragraphs 117 & 118.

⁵⁹ Final Report, Appendix 6.11, paragraph 81.

⁶⁰ Final Report, Appendix 6.11, paragraph 122.

consequence for delisting HCA in London was expressed by most PMIs.⁶¹ We note that AXA PPP and Bupa's views on these points remain unchanged.

6.41 We therefore readopt our finding in paragraph 6.316 of the Final Report that PMIs will also be severely impacted by full delisting, as they would incur costs of sending patients to alternative hospitals. They would be likely to have to pay higher prices to the delisted hospital operator due to reduced discounts. They could also lose future sales due to reputational damage.

Restricted networks

- Our conclusions in the Final Report
- 6.42 In the Final Report, we considered the evidence and views on PMIs' use of restricted networks. We concluded that, even under such restrictive network policies, PMIs still needed to be able to offer an acceptable choice of hospitals to ensure sufficient take-up by policyholders.⁶² Given the limited levels of take-up on restricted network policies at the time of the Final Report,⁶³ and the fact that many corporate customers in particular require policies to provide broad coverage,⁶⁴ we previously concluded that such strategies did not materially improve the PMIs' outside options.⁶⁵
- 6.43 On central London and HCA in particular, we previously noted that both AXA PPP and Bupa argued that HCA was in a position to impose contractual terms that [≫].⁶⁶ AXA PPP stated that it expected its low-cost restricted network products were very much at the margin and HCA still dominated the lion's share of insurer spend in London.⁶⁷ Bupa thought that [≫].⁶⁸
- 6.44 We also note that even if PMIs' restricted networks were to exclude HCA, an important segment of PMIs' customers, such as corporate clients, may insist on access to HCA. For instance, we previously noted that HCA internally

⁶¹ Final Report, Appendix 6.11, paragraph 81.

⁶² Final Report, paragraph 6.325.

⁶³ See Final Report, Appendix 6.11, paragraphs 146 & 169 – AXA PPP's Corporate Pathways product had [\gg] subscribers (representing [\gg]% of its insured population), and AXA PPP argued that its corporate scheme had had very little success in London because it did not include HCA. In 2013, [\gg] corporate accounts had come up for renewal, and only [\gg] had transferred on to Corporate Pathways. Similarly, see also the Final Report, Appendix 6.11, paragraph 208, on Aviva's directional policy. Aviva considered that it had had limited success, and noted that the amounts it could direct might only affect a single-digit percentage of a hospital group's turnover.

⁶⁴ See for example Final Report, Appendix 6.11, paragraphs 11(c), 118, 141 & 158.

⁶⁵ Final Report, paragraph 6.325.

⁶⁶ Final Report, Appendix 6.11, paragraphs 136, 137, 143 & 148.

⁶⁷ Final Report, Appendix 6.11, paragraphs 136.

⁶⁸ Final Report, Appendix 6.11, paragraph 143.

discussed Aviva's 'Extended' and 'Key' hospital lists and noted that it had only ever been included in Aviva's 'Extended' list. HCA noted that [\gg].⁶⁹

- 6.45 Finally, we also previously explained that we do not consider that the presence of restricted networks necessarily strengthens PMIs' bargaining power against HCA, as this depends on the strength of PMIs' outside options in a hypothetical negotiation with HCA for the 'unrestricted network'.⁷⁰ We stated that PMIs' outside options are improved by the presence of restricted networks to the extent that there is enough demand for these networks (ie the PMI knows that it can divert a significant portion of its customer base away from HCA), but further noted that there is a core set of customers (eg corporate customers) in central London that would be unwilling to switch to a network that did not include HCA hospitals.⁷¹
 - Parties' comments during the remittal
- 6.46 HCA reiterated that the very fact that PMIs were able to market and sell credible products with networks that excluded HCA hospitals showed that they were necessarily an alternative that PMIs had already turned to, in favour of including HCA hospitals in the network.⁷² HCA repeated its argument that it had been excluded from at least some network products of almost all PMIs.⁷³ HCA further argued that it was not true that there had been limited take-up of restricted network products,⁷⁴ and that the level of uptake of restricted network policies, when viewed in context, was material.⁷⁵ Similarly, HCA suggested that we should take into account the 'direction of travel', and not just the current subscriber levels for these products.⁷⁶ Finally, HCA argued that the creation of restricted networks was less relevant given the prevalence of open and guided referral practices which, in HCA's view, achieved the same effect but with far less transparency.'⁷⁷
- 6.47 AXA PPP reiterated that it could not sell a credible PMI offer to corporate customers that excluded over 60%⁷⁸ of central London supply of cardiology

⁶⁹ Final Report, Appendix 6.11, paragraph 174.

⁷⁰ Final Report, paragraph 6.426.

⁷¹ Final Report, paragraph 6.426.

⁷² HCA response to comment and submit further evidence, paragraph 5.30; also HCA response to remittal PFs on 4 December 2015, paragraph 4.83.

⁷³ HCA response to comment and submit further evidence, paragraph 5.28.

⁷⁴ HCA response to comment and submit further evidence, paragraphs 5.31–5.36.

⁷⁵ HCA response to the Remittal PFs, paragraph 4.81.

⁷⁶ HCA response to the Remittal PFs, paragraph 4.82.

⁷⁷ HCA response to the Remittal PFs, paragraph 4.84.

⁷⁸ As shown in Table 4.2, HCA's share of admissions in cardiology and oncology in central London in 2011 was $[\aleph]$ % and $[\aleph]$ % respectively.

and oncology (with the latter being the main reason that customers sought PMI cover),⁷⁹ ie one that excluded HCA.

- 6.48 Bupa noted that only a very small proportion of its policyholders were not eligible to access HCA's facilities, and that HCA was relatively unaffected as these restrictive network products were attractive primarily to customers who lived outside of London. Bupa further stated that [[≫]].⁸⁰
- 6.49 Bupa launched a new consumer PMI product (Bupa Fundamental Health Insurance) in July 2015, which gives customers the option of 'substantially lowering the price point they pay... by choosing a (narrower) hospital network that includes some London hospitals but excludes certain London facilities including HCA, The London Clinic and Bupa Cromwell.' [≫] In Bupa's view, this experience provided some evidence that 'it is not credible, as HCA has asserted, for insurers to constrain HCA's market power by launching networks that exclude its facilities.'
 - Our response
- 6.50 To assess the overall significance of restricted network policies on the central London private healthcare market, as part of the remittal we asked AXA PPP and Bupa to submit data on the proportion of their policyholders that are on restricted network policies that do not provide access to HCA as at 2014. Based on this new evidence, we found that:
 - (a) The share of AXA PPP and Bupa's policyholders in Greater London who do not have unrestricted access to HCA is small. Overall, [≫]% of AXA PPP's customers in Greater London do not have access to HCA's hospitals, and an additional [≫]% can access HCA's hospitals only with [≫]% co-insurance. Similarly, only [≫]% of Bupa's customers within Greater London have no access to HCA's facilities.⁸¹
 - (b) Restricted network policies represent a very small share of AXA PPP and Bupa's spend in Greater London. Only [≫]% of AXA PPP's total spend in Greater London is derived from policies which do not include access to HCA or which only provide access with co-insurance.

⁷⁹ AXA PPP initial response letter, p.3 – AXA PPP cites evidence that we presented in paragraph 60 of Appendix 6.2 of our Final Report, which relates to HCA's Cancer Strategy document showing that 91% of people gave cancer as their main reason for taking out PMI.

⁸⁰ Bupa response to comment and submit further evidence, paragraph 3.4(iii).

⁸¹ We note that the two PMIs appear to have very different approaches to their use of restricted network policies, in terms of these policies' uptake among customer segments. Within Greater London, [\gg]% of AXA PPP's corporate customers do not have access to HCA, whereas all of Bupa's SME customers and corporate customers have access to most or all HCA's facilities. In contrast, [\gg]% of AXA PPP's individual customers in Greater London have 'Health on Line' policies which allow access to HCA hospitals with [\gg]% coinsurance, and [\gg]% of Bupa's personal customers in Greater London have no access to HCA hospitals.

Similarly, only around [%]% of Bupa's total spend in Greater London is spent through policies which do not include access to HCA.⁸²

- 6.51 We are aware that any provisional conclusions we draw on the basis of data from Bupa and AXA PPP may not extend to all PMIs. We note, for instance, that HCA told us that [≫]% of Aviva's customers did not have access to HCA hospitals. However, we also note [≫].⁸³
- 6.52 On the basis of the above, and given Bupa and AXA PPP's high combined share of the PMI market,⁸⁴ and the fact that the vast majority of Bupa and AXA PPP's spend in Greater London is derived from policies which do not restrict access to HCA's facilities, we consider that restricted network policies that exclude HCA have had limited uptake among PMI customers, particularly within Greater London. [≫]⁸⁵
- 6.53 On the basis of the available evidence, we readopt our conclusion in paragraph 6.426 of the Final Report that the presence of restricted networks does not necessarily strengthen PMIs' bargaining strength (relative to a situation in which PMIs do not have restricted networks). This depends on whether there is enough demand for these networks. On the basis of the evidence, we provisionally conclude that PMIs' outside options against HCA are not significantly improved by the presence of restricted networks, as there has been limited uptake of such policies.

Service-line tenders

- Our conclusions in the Final Report
- 6.54 In the Final Report, we considered evidence and views on PMIs' specialist networks for particular procedures. Similar to restricted networks, we concluded that, even with specialist network policies, PMIs still need to be able to offer an acceptable choice of hospitals to ensure sufficient take-up by policyholders.⁸⁶ Given the limited number of treatments where specialist networks had been established by the PMIs, we did not consider that such strategies materially improve the PMIs' outside options.⁸⁷

⁸² We also explored whether, within this small share of spend derived from policies that restrict access to HCA, HCA received a sizeable share of revenue from 'out-of-network' claims to its facilities. HCA received [%]% of AXA PPP's spend through these policies, and [%] of Bupa's spend in Greater London through these policies. ⁸³ Final Report, Appendix 6.11, paragraph 171.

⁸⁴ According to LaingBuisson's *Health Cover UK Market Report 2013*, Table 7.2 on page 126, Bupa's share of PMI premium revenue in 2012 was 39.7% and AXA PPP's share of the same was estimated to be 25.7%.
⁸⁵ However, as discussed in paragraph 6.48, [%].

⁸⁶ Final Report, paragraph 6.325.

⁸⁷ Final Report, paragraph 6.325.

- Parties' comments in the remittal
- 6.55 HCA submitted a new argument that we had underestimated the impact of service-line tenders,⁸⁸ and stated that although they covered a relatively small number of procedures, they accounted for a significant volume of business and were growing in importance.⁸⁹
- 6.56 In contrast, Bupa submitted further arguments that it could not use serviceline tenders to constrain HCA's dominance in central London effectively. [%]^{90,91}
- 6.57 Bupa further explained that, [%].⁹²
- 6.58 Finally, Bupa stated that the use of service-line tenders was relatively limited, and [≫] of Bupa's UK claims spend had historically been subject to service line tenders. The treatment needed to be highly standardised across operators and relatively separable from other services (such that it could be provided and contracted separately).⁹³
- 6.59 AXA PPP stated that 'the proportion of claims subject to service line tenders, based on 2014 data, is insignificant and their effect has been overstated by HCA'. AXA argued that 'hospitals negotiate their tariff on a "basket of goods" approach across all services they provide. If insurers attempted to remove a significant service line from a provider, the provider would seek to increase prices for other items or seek compensation for the loss of revenue.
 - Our response
- 6.60 To assess the overall significance of service-line tenders on the central London private healthcare market, as part of the remittal we asked AXA PPP and Bupa to submit data on the proportion of claims and spend that are subject to a service-line tender:
 - (a) AXA PPP reported that its service-line tenders (its Scanning network, Oral Surgery network, and Cataract Surgery network) represented a

⁸⁸ Service-line tenders are where PMIs have identified specific services that could be carved out of the main insurer/hospital contract and procured separately, often via a competitive tender. Policyholders are then required only to use providers that are part of the new service-line network.

⁸⁹ HCA response to comment and submit further evidence, paragraphs 5.46–5.49.

⁹⁰ Bupa response to comment and submit further evidence, paragraph 3.4(ii).

⁹¹ In response to this, [\gg]. (HCA response to the Remittal PFs, paragraphs 4.87–4.89.) We disagree with HCA's claim that [\gg].

⁹² Bupa response to comment and submit further evidence, paragraphs 2.32–2.38.

⁹³ Bupa response to comment and submit further evidence, paragraph 2.33.

combined proportion of $[\gg]$ % of its total spend in Greater London in 2014.

- (b) Bupa reported that its service-line tenders⁹⁴ represented a combined proportion of [≫]% of its total spend in Greater London in 2014, and [≫]% of its total spend in central London in 2014.
- 6.61 AXA PPP further explained that, of its three established service-line networks, only the Oral Surgery network might meaningfully restrict patients' choice of provider, and its spend on oral surgery was relatively small as PMI policies typically only provided limited cover for dental procedures.
 - (a) AXA PPP explained that its Scanning network extended access to scanning services (to include stand-alone outpatient diagnostic centres) and did not remove any hospitals from the network. AXA PPP's members still had access to all scanning facilities in the network, and AXA PPP stated that, in practice, it had not been able to refer members to its preferred (lower-cost) facilities through the pre-authorisation process and 'utilisation of facilities has not changed'. Furthermore, while AXA PPP did achieve savings from the retendering process, AXA PPP calculated that it achieved a total saving of £[≫] in Greater London for MRI scans, comparing 2012 average prices with 2014 average prices, which was under [≫]% of its 2014 spend in Greater London on MRI scans.
 - (b) In AXA PPP's view, its Cataract Surgery network was much less successful than its Oral Surgery network, due to resistance from many surgeons and anaesthetists and some key providers. AXA PPP stated that, in reality, its Cataract Surgery subnetwork was almost fully inclusive of all providers.
- 6.62 On the other hand, Bupa noted that its MRI Network, Ophthalmology Network and outpatient CT network had been successful in reducing costs and achieving savings. For its outpatient CT network, Bupa noted that, within central London, [≫].⁹⁵
- 6.63 On the basis of this evidence, we consider that the extent to which serviceline tenders might improve PMIs' outside options depends on the extent to which they successfully restrict patients to preferred providers. This in turn (along with the level of savings achieved by the service-line tender) is

⁹⁴ Bupa currently has six service-line tender networks: Out-patient MRI Network; Cataract/Ophthalmology Network; Outpatient CT Scan Network; Trans Aortic Valve Implantation (TAVI) Network; Bupa Accredited Physiotherapists; and Mental Health Therapist Network.

⁹⁵ Bupa response to comment and submit further evidence, paragraph 3.4(ii).

affected by the other factors determining bargaining outcomes. The experience of AXA PPP suggests that it is far from certain that service-line tenders can improve PMIs' outside options and achieve savings.

- 6.64 Bupa's experience indicates that service-line tenders can improve PMIs' outside options, although we further note that [≫], as discussed in paragraph 6.56 above,⁹⁶ is consistent with our overall view that both HCA and PMIs share a degree of bargaining strength.
- 6.65 On the basis of these considerations (paragraphs 6.60 to 6.64), we provisionally conclude that service-line tenders can but do not necessarily improve the PMIs' outside options against HCA.

Strategic recognition of new facilities

- Our conclusions in the Final Report
- 6.66 We considered insurer recognition in some detail in paragraphs 6.108 to 6.122 of the Final Report, where we concluded that insurer recognition is not a barrier to entry or expansion. We concluded that the relative bargaining power of the parties in negotiations for recognition will depend on the parties' outside options (particularly on the local competitive conditions of the new facility).⁹⁷
- 6.67 On central London and HCA in particular, we previously identified two instances where Bupa did not recognise HCA's new facilities or did so only in return for substantial discounts.⁹⁸ We also previously noted that the most recent contract between HCA and Bupa (agreed in July 2013) contains a clause that [≫].⁹⁹
 - Parties' comments during the remittal
- 6.68 Parties did not make extensive submissions on this point.
- 6.69 HCA repeated its argument that PMIs' power to withhold recognition of new hospital facilities was 'representative of PMI bargaining power generally', that PMIs used this power to secure significant discounts from list prices,

⁹⁶ Also, in the Final Report, Appendix 6.11, paragraph 223.

⁹⁷ Final Report, paragraphs 6.326–6.328.

⁹⁸ Final Report, Appendix 6.11, paragraph 179(a)–(b).

⁹⁹ Final Report, Appendix 6.11, paragraph 179(g).

and that failure to obtain recognition from a major PMI would make a new hospital unviable.¹⁰⁰

- 6.70 HCA further submitted that the [[≫]].¹⁰¹ HCA also argued that the ability of PMIs to withhold recognition of HCA facilities strongly indicated that HCA did not have unilateral market power.¹⁰²
 - Our response
- 6.71 We consider that, notwithstanding HCA's arguments, our views on this point remain valid and unchanged. Although PMIs are able to withhold recognition for new facilities, this does not alter our conclusions on PMIs' outside options against HCA in central London. In particular, the ability to withhold recognition for HCA's new facilities does not imply that PMIs can do without HCA's existing facilities.

Open referrals, guided referrals, and incentives to use NHS

- Parties' views during the remittal
- 6.72 HCA submitted a new argument that we had underestimated the rapid growth of open referral policies, and that open referral policies had gained ground since the Final Report.¹⁰³ HCA referred to a Bupa article on 15 January 2014 stating that 'more than 8 out of 10 of [Bupa's] corporate clients have chosen Open referral'. HCA reiterated the point that PMIs' ability to influence patients' choice of healthcare provider was not limited to their policies which mandated open referrals. For example, PMIs could encourage policyholders to contact them before seeking treatment in order to recommend consultants and hospitals. (We refer to this broader range of PMI influence as 'guided' referrals.) HCA argued that the growth of these policies in and of itself improved PMIs' outside options, regardless of whether there was evidence that they were being used to divert patients away from HCA.
- 6.73 HCA also argued that Bupa offered cash incentives to its policyholders to use the NHS rather than claim under its policy for certain procedures, in particular cardiac and cancer treatments.¹⁰⁴

¹⁰⁰ HCA response to comment and submit further evidence, paragraphs 5.50–5.55.

¹⁰¹ HCA response to the Remittal PFs, paragraphs 4.100 & 4.101.

¹⁰² HCA response to the Remittal PFs, paragraph 4.102.

¹⁰³ HCA response to comment and submit further evidence, paragraphs 5.37–5.45.

¹⁰⁴ HCA response to comment and submit further evidence, paragraph 5.56.

- 6.74 AXA PPP submitted new evidence that while the number of open referrals had increased in recent years, the importance of HCA's facilities had not been materially impacted by the growth of open referrals, as:
 - *(a)* the majority of specialists continued to be named by GPs when a referral was made, a process in which insurers had little to no influence;¹⁰⁵ and
 - *(b)* open referrals had not resulted in a significant change to overall referral patterns, given that the majority of patients retained a choice of specialist/facility,¹⁰⁶ and HCA remained the largest provider even among open referral patients.^{107,108}
- 6.75 Bupa stated that the number of customers on open referral policies had not grown materially since the publication of the Final Report (uptake of open referral policies peaked in July 2013).¹⁰⁹ It further submitted that [≫].^{110,111} Both Bupa and [≫]. Bupa told us that it presented quarterly data on open referrals to HCA.
- 6.76 On NHS Cash Benefits, Bupa submitted that the effect on private provider revenues was very small. It accounted for [≫] of Bupa's total claims spend in each year and related to claims where the patient had agreed to be treated as an NHS rather than private patient in return for a cash payment. In Bupa's view, therefore, its NHS Cash Benefits could not be said to lead to the NHS constraining HCA to any material degree.¹¹²
 - Our response
- 6.77 To assess the overall significance of open referral policies and guided referrals on the central London private healthcare market, as part of the remittal we asked AXA PPP and Bupa to submit data on the proportion of their policyholders that are on open referral policies, as well as the

¹⁰⁹ Bupa response to comment and submit further evidence, Q1, p.2, and Q.6, p. and Q.6,

¹¹¹ [※]

¹⁰⁵ Our survey of GPs during the original investigation found that, across the UK, an estimated 68.9% of referrals were to a named consultant, 21.5% of referrals were to a named hospital or PPU, and only 9.4% of referrals were open (Tables D1.01–D1.03).

¹⁰⁶ AXA PPP had only one product that 'requires' open referral, Healthcare Pathway, which was only available to corporate customers. According to AXA PPP, take up of Healthcare Pathway [%] UK PMI members as at 31 Dec 2014. The Healthcare Pathway product had [%] in the London market, where corporate customers required an insurer's list to include HCA.

¹⁰⁷ AXA PPP response to comment and submit further evidence, p2. According to AXA PPP, HCA received [&] out of [&] open referrals in 2014, a larger proportion than any other provider. The [&] open referrals represented [&] & of AXA PPP's [&] recorded referrals that resulted in hospital treatment in central London in 2014. ¹⁰⁸ AXA PPP response to comment and submit further evidence, Q1, p.2, and Q.6, p.7.

¹¹⁰ Bupa response to comment and submit further evidence, paragraph 3.2(i).

¹¹² Bupa response to comment and submit further evidence, paragraphs 2.29–2.31.

proportion of their claims and spend in central London that either derives from open referral policies or where the patient was guided.

- 6.78 We found that, as at December 2014, [≫]% of Bupa's policyholders and [≫]% of AXA PPP's policyholders across the UK are on open referral policies. For both insurers, less than [≫]% ([≫]% for Bupa, [≫]% for AXA PPP) of their 2014 spend in Greater London was derived from open referral policies or from customers who had accepted their guidance. Furthermore, Bupa told us that [≫]. It stated that this was consistent with the overall trend for the number of Bupa policyholders on open referral policies, which had not grown since [≫].
- 6.79 To examine whether open and guided referrals are having a particular impact on HCA, we also examined the proportion of Bupa and AXA PPP's spend at HCA that is derived from open referral policies, and whether HCA's share of PMIs' open referral spend is significantly different from its share of PMIs' total spend. In 2014, open referral policies accounted for [≫]% of Bupa's spend with HCA and [≫]% of AXA PPP's spend with HCA. For Bupa's spend in 2014, HCA received a similar share of Bupa's open referral/guided spend and total spend in Greater London ([≫] respectively). This is consistent with Bupa's argument that [≫], HCA received [≫]% of AXA PPP's open referral/guided spend, compared with [≫]% of AXA PPP's total spend in London. This suggests that AXA PPP is able, to some degree, to use open referral to move patients away from HCA.
- 6.80 On the basis of the new available evidence discussed in paragraphs 6.72 to 6.79 above, we conclude that PMIs are, in principle, able to use open referrals to direct patients away from HCA and this has potentially improved PMIs' outside options to some extent (relative to a situation in which PMIs are not able to use open referral policies). However, taking into account the overall limited uptake of open referral policies, and the fact that HCA still receives a sizeable proportion of open referrals, we consider that the impact of open referrals on PMIs' outside options is nevertheless relatively limited. Similarly, we do not consider that the use of cash incentives by Bupa materially improves its outside options against HCA.

Ongoing developments

6.81 We were informed by Aviva and VitalityHealth (formerly known as PruHealth), the third and fourth largest PMIs with shares of revenue of [≫]% and [≫]% respectively, that they were creating a new joint purchasing arrangement that would establish a joint venture (known as HPA) to negotiate with private hospital providers for the procurement of hospital services on their joint behalf.

- 6.82 HCA submitted that [≫] and that '…HPA will use its stronger bargaining power to negotiate even more aggressive managed care strategies with hospital operators [≫].'
- 6.83 [※]
- 6.84 [≫] this development is likely to change the relative balance of negotiations in favour of Aviva and VitalityHealth, by weakening HCA's outside options (relative to a situation in which HCA could negotiate independently with Aviva and VitalityHealth). However, we believe that HCA still retains some degree of bargaining strength, as HCA would still benefit from all the features that make its hospitals 'must have' in the views of both Bupa and AXA PPP. We think that HCA would still be 'must-have' for HPA. Therefore, we consider that HCA is likely still to be able to extract a share of the bargaining surplus in negotiations with HPA.
- 6.85 We agree with HCA that the new joint entity may negotiate more managed care strategies (such as restricted networks, service-line tenders, open and guided referral policies). However, we believe that our conclusions on each of these aspects of PMI behaviour remains valid and unaffected by this development.

Conclusions on qualitative assessment of bargaining strength and outside options

- 6.86 In the Final Report, we found that PMIs and hospital groups are dependent on each other, which suggested that both of these parties have some degree of bargaining power. However, we could not determine how parties' bargaining strength affects the bargaining outcome.¹¹³
- 6.87 In the Final Report, we considered parties' views specifically in relation to the relative bargaining power of the parties, and the extent of any countervailing buyer power of PMIs.¹¹⁴ We took the view that both parties to the negotiations are extracting a share of the surplus and therefore the provider retains some market power in the negotiations.¹¹⁵ Therefore, while PMIs have some bargaining or buyer power, PMIs do not have countervailing buyer power¹¹⁶ which completely prevents the exercise of market power by hospital providers.

¹¹³ Final Report, paragraph 6.331.

¹¹⁴ Final Report, paragraphs 6.303–6.309.

¹¹⁵ Final Report, paragraph 6.319.

¹¹⁶ In the Final Report, paragraph 6.281 and footnote 395 we defined (in accordance with CC3) 'countervailing buyer power' as buyer power which prevents the exercise of market power. We used the term 'buyer power' for bargaining power that falls short of countervailing buyer power.

- On the basis of the evidence and analysis in the Final Report, and the 6.88 additional evidence and analysis in this remittal, taking all of the aspects above into account (paragraphs 6.41, 6.53, 6.65, 6.71 and 6.80) and assessing their aggregate impact, we do not agree with HCA that an extreme 'sharing rule', in which hospital operators receive a very small share of the bargaining surplus, is a plausible description of negotiations in the central London private healthcare market. In particular, we believe that the relatively low uptake of restricted network policies which exclude HCA and limited uptake of open referral policies, along with a sizeable proportion of open referrals still going to HCA's hospitals, does not suggest that PMIs are able (or anywhere close to being able) to negotiate on a 'take-it-or-leave-it' basis with HCA. We also note that the fact that HCA is able to negotiate clauses that [%] does not seem consistent with a situation in which HCA has little or no bargaining strength. Finally, we note HCA's stated view that both sides had some bargaining strength, and that 'the idea that one side has all the power ... completely misses the point.'
- 6.89 We readopt our conclusion from the Final Report that both parties have some degree of bargaining power and PMIs do not have countervailing buyer power which completely prevents the exercise of market power by hospital providers.

7. Quality and range

- 7.1 Competition in private healthcare provision is characterised by hospital operators positioning themselves in terms of quality, range and price.¹ In the Final Report we analysed quality and range separately in relation to central London, setting out HCA's views on competition in quality and range in London, differentiation of HCA compared with other London hospitals, differentiation of HCA compared with TLC, economic theory and empirical studies on the effect of competition on quality, and PMIs' incentives in relation to quality. This evidence and analysis was set out in paragraphs 6.388 to 6.426 of the Final Report and we set out our conclusions on quality and range in paragraph 6.440. We also gave additional consideration to HCA's evidence and submissions on quality and range, as part of its argument related to loss of relevant customer benefits if our proposed remedies were adopted, in Appendix 11.1 of the Final Report.
- 7.2 We consider it appropriate (as we did in the Final Report) to maintain a clear distinction between quality and range:²
 - *(a)* Quality indicates how well a given treatment and the overall service are provided (also referred to as vertical product differentiation). Quality may refer to different aspects, including clinical expertise and outcomes, nursing care, waiting time, comfort and quality of accommodation.³
 - (b) Range indicates which and how many treatments are provided (also referred to as horizontal product differentiation) and it encompasses the extent to which hospital operators provide more complex, and possibly more costly, treatments (ie high-acuity care).⁴
- 7.3 On quality and range, we concluded in the Final Report that:⁵
 - *(a)* Both within and outside central London, there was no evidence of material quality differences between hospital operators, although we

¹ HCA often referred in its submissions to 'innovation' as another dimension of non-price competition in the provision of healthcare. As we discussed in the Final Report, in this market 'innovation' mainly refers to the adoption of existing products, technologies, equipment, rather than the development of new ones. For this reason, we consider that non-price competition is adequately described in terms of quality and range.
² We note HCA's view, as set out in paragraph [7.22] below, that this distinction between quality and range was 'erroneous'. HCA made the point that providing a wider range of service also allowed clinicians more options in treating patients. HCA response to the Remittal PFs, paragraphs 5.22–5.26.

³ Final Report, paragraph 6.384.

⁴ Treatment complexity, which is determined by a hospital operator's range of treatments, should not be conflated with patient complexity. Patient complexity refers to those features of patients that, for any given treatment, make them more difficult or costly to treat than an otherwise similar patient receiving the same treatment. For example, patients who are older, more obese, or have co-morbidities may be more difficult to treat. This is independent of whether they need a relatively simple or complex treatment. We do not discuss parties' submissions and evidence on patient complexity, which will be discussed in the section on the IPA. ⁵ Final Report, paragraph 6.440.

also noted that the lack of objectively comparable measures made quality difficult to assess.⁶ In particular, in relation to central London, the evidence available did not lead us to conclude that HCA's quality was materially higher than that of close competitors in central London, including TLC.⁷

- *(b)* Notwithstanding the weak competitive constraints and barriers to entry and expansion, there was a degree of competition over both quality and range in many local areas, including central London.⁸
- *(c)* The evidence indicated that, overall, quality and range would not worsen with greater rivalry and we had reason to believe that they would improve in more competitive markets.⁹
- 7.4 We did not receive any additional evidence or submissions in this remittal that would cause us to change our findings (in paragraphs 7.3(b) and 7.3(c), above) that there is a degree of competition in both quality and range in central London, and that quality and range will not worsen with greater rivalry. Therefore, we readopt both findings.
- 7.5 In the remainder of this section, we discuss parties' submissions and evidence on quality and range received in the course of this remittal. In particular, we set out:
 - (a) Parties' views, submissions and any other evidence provided during this remittal on whether there are any material quality differences between hospital operators and in particular between HCA and TLC. This question is relevant for our assessment of competitive constraints (particularly in our assessment of the extent to which hospitals outside central London impose a competitive constraint on hospitals in central London), and for our IPA (insofar as differences in quality between HCA and TLC might explain any observed price difference).
 - (b) HCA's argument that its broader range of complex treatments means that it has a higher cost base which might then be reflected in higher prices across its range of treatments.

⁶ Final Report, paragraph 6.440.

⁷ Final Report, paragraphs 6.412 & 6.418.

⁸ Final Report, paragraph 6.440.

⁹ Final Report, paragraph 6.440.

(c) HCA's argument that our finding that there is competition over quality and range is inconsistent with our finding that there is weak competition on price.

Differences in quality between hospital operators

HCA's views

- 7.6 HCA made a number of points on differences in quality between hospitals in this remittal. These related to four areas:
 - (a) First, HCA suggested that the results of the corrected IPA were, in its view, inconsistent with concentration being a key driver and that other alternative drivers, such as quality differences might explain any price differences between HCA and TLC. HCA took the view that it provided higher quality services than TLC.¹⁰ Noting that in the Remittal PFs, we had stated that the evidence did not suggest that HCA's quality was 'materially higher' than TLC's,¹¹ HCA pointed out that we had not measured this and that, in HCA's view, the CMA had not addressed whether observable quality differences were capable of having an impact on HCA's prices. HCA noted that the small size of the alleged price difference meant that even non-substantial quality differentials were capable of explaining or contributing to differences in price between HCA and TLC.¹²
 - *(b)* Second, in relation to market definition and competitive constraints, HCA argued that any alleged 'quality gap' between Outer London and central London providers was becoming increasingly less significant, and that we had not carried out an assessment of quality in any case.¹³ HCA argued that we were wrong to conclude that central London hospitals were higher quality than those in outer London, as we had not conducted any analysis to establish this, and it listed several high-quality hospitals in outer London.¹⁴
 - (c) Third, HCA criticised the Final Report for not taking account of various pieces of evidence on quality differences between HCA and TLC that it had submitted in the course of the original investigation.

¹⁰ HCA response to the Remittal PFs, paragraphs 5.4–5.18.

¹¹ Remittal PFs, paragraphs 7.13 & 7.14.

¹² HCA response to the Remittal PFs, paragraphs 5.19–5.21.

¹³ HCA response to comment and submit further evidence, paragraph 2.3.

¹⁴ HCA response to comment and submit further evidence, paragraph 4.84.

- *(d)* Finally, HCA also made an overarching point that, in the course of the original market investigation and in this remittal, the CMA had failed to collect quality data and had not sought the views of consultants or clinical advisers which would have allowed us to compare the quality of private hospitals in central London, such as consulting with independent clinical advisers, speaking to the medical Royal Colleges, or surveying GPs and consultants for their views on the issue.¹⁵
- 7.7 For completeness, we briefly set out the pieces of evidence to which HCA referred us (referred to in paragraph 7.6(c), above), while also noting any areas where new evidence on quality has been submitted.
- 7.8 HCA pointed out that it had the widest breadth of accreditations of any private provider, which, in its view, indicated that it provided higher quality services than other central London private hospitals.¹⁶ During this remittal, it pointed in particular to the fact that it had achieved JAG accreditation for its endoscopy units at the Wellington and the London Bridge Hospitals, whereas TLC was not JAG accredited.^{17,18} HCA also stated that it collected, monitored and reported more quality data and participated in more audits, registries and databases than any other private provider.¹⁹
- 7.9 In addition to these general points on its quality, HCA pointed to a number of specific pieces of evidence that it argued were not properly assessed in the course of the original market investigation and which, in its view, indicated that HCA had a higher quality offering than TLC. HCA took the view that the CMA should have come to a different conclusion on the interpretation or weight to be put on this evidence. These included:
 - (a) HCA's higher number of resident medical officers (RMOs) and clinical nurse specialists (CNSs) compared to TLC, which, in HCA's view, the CMA was wrong to consider as being a function of HCA's greater number of Intensive Treatment Units (ITUs), as these staff are used across various specialties, not just in critical care;²⁰

¹⁵ HCA response to the Remittal PFs, paragraphs 5.1–5.3 & 5.18.

¹⁶ HCA response to the Remittal PFs, paragraph 5.9.

¹⁷ According to HCA, 'JAG is the Joint Advisory Group on gastrointestinal endoscopy ... The JAG accreditation scheme measures and audits clinical standards in endoscopy ... It is widely regarded as the "gold standard" in endoscopy. HCA understands that the NHS tariff is *higher* for NHS JAG-accredited endoscopy facilities, acknowledging the higher quality outcomes for patients.'

¹⁸ According to the list of JAG accredited units, London Bridge Hospital was assessed in November 2014 and the Wellington was assessed in March 2014. We note that this is after the period covered by the data in our IPA. TLC has not been assessed. The list of JAG-accredited units is available on its website (accessed on 30 March 2016), and, at the time of writing, the table was last updated on 1 March 2016.

¹⁹ HCA response to the Remittal PFs, paragraphs 5.11–5.18.

²⁰ HCA response to the Remittal PFs, paragraph 5.5.

- *(b)* HCA's higher nurse-to-patient ratio compared to TLC, which, in HCA's view, the CMA dismissed, whereas it should have verified the claim;²¹
- *(c)* HCA's evidence in relation to six case studies it had prepared which related to the quality of HCA's services²² that, in its view, demonstrated the quality of its services, with which, in its view, the CMA had not properly engaged in the original investigation;²³
- *(d)* letters from HCA consultants that, in HCA's view, 'attested to the higher quality environment within HCA facilities', which the CMA 'dismissed';²⁴ and
- *(e)* a number of previous HCA submissions on the differences in services between it and TLC, which, in its view, the CMA had 'not engaged with'. These included:
 - (i) IT systems and software, which the CMA had not sought to compare with those of other providers;
 - (ii) use of multi-disciplinary teams (MDTs), which HCA used proactively, compared to TLC's retrospective use of MDTs; and
 - (iii) HCA's integrated hospitals network which HCA argued benefited patients and individual hospitals.²⁵
- 7.10 Finally, HCA pointed to evidence that AXA PPP had submitted, which was included in the Final Report, which pointed to HCA being considered a 'must have' by AXA PPP in part due to AXA PPP's patients viewing HCA as the 'best' with the 'strongest professional reputation'. HCA also referred to a point that AXA PPP had made in a hearing, which HCA interpreted as saying that the only constraint on AXA PPP's ability to redirect patients away from HCA was the reputation of its hospitals for quality and complexity.²⁶

²³ HCA response to the Remittal PFs, paragraph 5.7.

²¹ HCA response to the Remittal PFs, paragraph 5.6.

²² These case studies were set out in the Final Report, Appendix 11.1, paragraphs 7–23. These six studies focused on the treatment of breast, prostate and blood cancers, orthopaedic and cardiac care, and neurosurgery. They compared various measures of HCA's quality against those of the NHS and national averages for the UK and some other OECD countries, as well as pointing to differences in the facilities available at HCA hospitals compared to some other private providers for some of these services.

²⁴ HCA response to the Remittal PFs, paragraph 5.8.

²⁵ HCA response to the Remittal PFs, paragraph 5.9.

²⁶ HCA response to the Remittal PFs, paragraph 5.10, which refers to Appendix 6.10, Annex A, paragraph 42, of the Final Report.

AXA PPP's views

- 7.11 AXA PPP stated that it was not aware of any changes to guality or range since the Final Report.²⁷ In AXA PPP's view, there was no evidence to support the proposition that HCA's quality of care was any different from that of other providers in central London. AXA PPP agreed that there was a perception that HCA was a high-quality hospital, but it stressed that TLC was also perceived 'as being absolutely the equal' of HCA's hospitals in perceptions of quality. In addition, AXA PPP did not agree that HCA had better or more renowned consultants than TLC.²⁸
- 7.12 AXA PPP cited evidence from the National Joint Registry on revision rates and 90-day mortality rates for hip and knee surgery, which showed that HCA's hospitals were within the expected range around the national average. AXA PPP submitted that there was no evidence to suggest that HCA's performance on clinical quality was substantially better than the national average.

Bupa's views

- 7.13 Bupa stated that there were currently no satisfactory public sources of clinical quality information with which to compare hospital operators across a broad range of treatments. According to Bupa's patient satisfaction surveys,²⁹ [%].³⁰
- 7.14 Bupa also provided comparisons of a number of quality metrics that it asks hospital operators to report, which give an indication of safety and performance at their facilities, such as infection rates and readmission rates. On the limited set of metrics that may be compared,³¹ HCA does not deliver systematically better outcomes when compared to TLC.

²⁷ AXA PPP response to comment and submit further evidence, Q8 p9.

²⁸ Summary of hearing with AXA PPP, 12 August 2015, paragraph 14.

²⁹ According to Bupa, the survey was conducted by an independent survey company (MSB). It was a selfreported survey, sent to a random sample of around 6,200 patients each month within three months of a processed claim, covering around 300 hospitals across the UK. ³⁰ Bupa submission on 6 May 2015, paragraph 2.57.

³¹ These metrics were: MRSA bacteraemia per 1,000 bed days; number of cases of C. difficile per 1,000 bed days; total number of orthopaedic surgical site infections; % cases DVT/PE inpatient in all inpatient admissions; % of deaths within 48 hours of inpatient anaesthetic episode; % unplanned returns to theatre as a proportion of visits to theatre; % unplanned transfers as a proportion of total discharges; % unplanned readmissions within 29 days as a proportion of total discharges; and number of adverse clinical incidents which result in moderate risk, high risk or death, per 1,000 bed days.

TLC's views

- 7.15 TLC believed that the quality of care it provided 'is as good [as] or better' than HCA's, although it acknowledged that the statistical evidence was limited. In response to HCA's response to our Remittal PFs, TLC submitted a detailed rebuttal to a number of points that HCA had made, as set out above. These included:
 - (a) on IT systems and software, TLC pointed out that it had not had any complaints or adverse comments on this and that its core IT system was the same as the one used by HCA;
 - (b) on MDTs, TLC stated that HCA's allegation was 'false and misleading' and pointed out that it operated a prospective and retrospective MDT programme; and
 - (c) in response to HCA's point on the wide breadth of accreditations that it held, TLC pointed out that it also had a wide breadth of accreditations.

Our response

- 7.16 In the Final Report, we considered HCA's claim that its quality was higher than that of its competitors³² and TLC in particular.³³ Overall, we found that the evidence available to us did not lead us to conclude that HCA's quality was materially higher than that of its close competitors in central London, including TLC,³⁴ although we noted that there was a lack of objectively comparable quantitative data on quality indicators.
- 7.17 In response to HCA's assertion that we have not done enough to collect data on quality or to consult with clinical experts, we note that we have looked at data from a number of sources (the National Joint Registry and Bupa's internal data on patient satisfaction, and on safety and clinical quality) and have taken account of additional evidence and the views of HCA, TLC and the PMIs, as set out above, in coming to an overall conclusion on quality differences.
- 7.18 There is still a lack of objectively comparable measures of clinical quality across a broad range of treatments. HCA has supplied only limited additional evidence or comparable data on clinical quality to support its claim that it provides a higher quality of care. We have considered the limited evidence available from sources of publicly available comparable data, such as

³² Final Report, paragraphs 6.395 & 6.412, and Appendix 11.1, paragraphs 27–38.

³³ Final Report, paragraph 6.417.

³⁴ Final Report, paragraphs 6.412 & 6.418.

outcome data from the Society for Cardiothoracic Surgery³⁵ (noting that TLC does not perform cardiac surgery, so this data does not address whether HCA is better quality than TLC) and the National Joint Registry.³⁶ Neither of these sources suggest that clinical quality at HCA's hospitals (at least, for cardiothoracic surgery, hip replacements and knee replacements) is substantially better than expected based on the patient profile and activity levels at these hospitals.³⁷ We note that this is consistent with Bupa's limited set of comparable clinical quality metrics. Similarly, [≫] also does not suggest that HCA's quality of care is materially higher than other private hospital operators, including TLC.

- 7.19 We note HCA's view that, given (what it sees as) the small size of the alleged price difference identified by the IPA, even 'non-substantial quality differentials are capable of explaining or contributing to differences in price' between HCA and TLC.³⁸ As set out in Section 8 of this report, we found that HCA charges higher prices than its main competitor, TLC, although we could not conclude on the precise size of the price difference, as we could not be sufficiently confident that we were comparing prices on a like-for-like basis. As set out in Section 11, below, there are a number of possible reasons for any price difference between HCA and TLC, with the evidence indicating that weak competitive constraints on HCA and possible differences in patient complexity are the most likely drivers. As set out in some detail in this section, our view remains that there is no evidence of a material difference between quality at HCA and at its close competitors in central London, including TLC.
- 7.20 With regard to HCA's more detailed points:
 - (a) In relation to the evidence on HCA's numbers of RMOs and CNSs, its nurse-to-patient ratio, and the six case studies, these are pieces of evidence that were already assessed in the course of the original investigation, alongside many other pieces of evidence. In particular, the Final Report assessed the usefulness of the case study evidence on cancer care waiting times and survival rates and concluded that the

³⁵ Society of Cardiothoracic Surgery in Great Britain and Northern Ireland, data for The Harley Street Clinic, London Bridge Hospital and The Wellington Hospital.

³⁶ National Joint Registry Surgeon and Hospital Profile, data for The Wellington Hospital, London Bridge Hospital, Princess Grace Hospital and TLC.

³⁷ For cardiothoracic surgery, we considered risk-adjusted in-hospital survival rate for HCA's hospitals. The survival rates for The Harley Street Clinic, London Bridge Hospital, and The Wellington Hospital were all within the control limits, meaning that they are 'expected' survival rates, with any variation above or below the risk-adjusted national average due to chance. For hip and knee surgery, we considered risk-adjusted 90-day mortality ratios and risk-adjusted revision rates for HCA's hospitals and TLC. The 90-day mortality and revision ratios for The Wellington Hospital, London Bridge Hospital, Princess Grace Hospital and TLC were all within the expected range around the national average.

³⁸ HCA response to the Remittal PFs, paragraphs 5.19–5.21.

comparison to the NHS was not particularly informative.³⁹ The Final Report also noted that the wide confidence intervals around the breast cancer survival rates indicated that HCA was not performing statistically significantly better than the NHS in England on this measure.⁴⁰

- (b) As set out above, TLC responded to a number of HCA's points and we note that TLC put forward the view that its IT system, its use of MDTs and its wide range of accreditations were comparable to those of HCA, and stated that HCA's assertions on these issues were 'irrelevant, immaterial and/or misleading'. In addition, we noted that HCA's JAG accreditation was awarded after the period of our IPA data set, so may not be relevant to our comparison of quality at HCA and TLC, in the context of the analysis of insured prices.⁴¹ We also noted that over 100 NHS hospitals and almost 40 independent-sector hospitals in England had been awarded JAG accreditation, so it was not clear to what extent it was a useful differentiator of the quality of different hospitals in this context.⁴² TLC told us that it was working towards receiving JAG accreditation, but that it related to the layout of the endoscopy suite rather having, in its view, any impact on the clinical quality of the service.
- (c) On letters from consultants, HCA referred to Appendix 11.1 of the Final Report which stated that consultants who wrote to us told us that the quality of HCA's hospital facilities and its level of innovation were persistently higher than other private hospital operators in the UK, including TLC and Bupa Cromwell.⁴³ HCA contends that these letters were 'dismissed' but in fact the Appendix went on to set out a number of other pieces of evidence on this topic, in particular the results of a HCA survey of consultants (conducted in 2010 and unrelated to the market investigation), which indicated that other private providers, including King Edward VII, TLC and Bupa Cromwell, received comparable ratings to those of HCA's facilities, performing better on some measures and worse on others.⁴⁴
- (d) Finally, on HCA's point that AXA PPP had previously stated that its policyholders viewed HCA as the 'best' in terms of quality, we note, as set out above, that AXA PPP stated that TLC was of the same quality as

³⁹ Final Report, Appendix 11.1, paragraphs 27 & 28.

⁴⁰ Final Report, Appendix 11.1, paragraphs 28.

⁴¹ According to the list of JAG accredited units, London Bridge Hospital was assessed in November 2014 and the Wellington was assessed in March 2014. We note that this is after the period covered by the data in our IPA. TLC has not been assessed. The list of JAG accredited units is available on its website (accessed on 30 March 2016), and, at the time of writing, the table was last updated on 1 March 2016.

⁴² As at 1 March 2016, according to the JAG website.

⁴³ Final Report, Appendix 11.1, paragraph 30,

⁴⁴ Final Report, Appendix 11.1, paragraphs 32–37.

HCA, that its consultants were of the same quality, and it had provided data on revision and 90-day mortality rates from the National Joint Registry to support these views.⁴⁵

7.21 Overall, the available evidence does not indicate that the relative quality of HCA and TLC has changed since the Final Report. Therefore, we readopt our finding that there is no evidence of material quality differences between HCA and TLC, noting that the lack of objectively comparable measures makes quality difficult to assess.

Parties' views on differences in range between hospital providers

- 7.22 HCA put forward the view that the distinction between quality and range that we made in the analysis in this section was 'erroneous' and gave the example of cancer services, where having a wider range of treatment options would allow a clinician to choose the 'optimum treatment modality' for a patient.⁴⁶
- 7.23 HCA's economic advisers presented evidence, relying on definitions of treatment complexity commonly used in the healthcare sector, that its range of treatments was more complex than TLC's, which would also imply that it had a higher cost base. HCA's economic advisers further argued that higher costs were 'likely' to be apportioned across all of HCA's treatment prices. HCA argued that with long-term contracts and flat annual price increases, changes in the relative costs for treatments would mean that even if there were no cross-subsidisation at the time of negotiation, it was likely that some would be introduced over time. In response to the Remittal PFs, where we stated that any cross-subsidisation was likely to be limited,⁴⁷ HCA pointed out that the CMA had not defined what a 'significant' level of crosssubsidisation would be and given (what HCA sees as) the relatively small alleged price difference between HCA and TLC, HCA argued that even relatively low levels of cross-subsidisation would have a bearing on any pricing differentials.48
- 7.24 HCA also argued that it was likely to have received more difficult patients due to the breadth of services that it offered (which included more complex treatments). These patients were more costly to treat, which might explain any price differences between HCA and TLC. In other words, HCA

⁴⁵ See paragraphs [7.11 & 7.12], above.

⁴⁶ HCA response to the Remittal PFs, paragraphs 5.22–5.26.

⁴⁷ Remittal PFs, paragraph 7.20.

⁴⁸ HCA response to the Remittal PFs, paragraph 5.33.

suggested that there was a link between its range (and complexity) of treatments and the complexity of its patients.

7.25 AXA PPP accepted that HCA had a greater range of treatments and did more complex treatments than most other private hospitals. However, with the exception of cardiac surgery (which TLC does not provide), AXA PPP did not believe there were material differences between HCA and TLC with respect to range and therefore treatment complexity.

Our response

- 7.26 On the distinction between range and quality, we do not accept that these are necessarily related, as HCA claimed, although this may be the case in some circumstances. As such, we still believe that there is a sensible distinction to be made between the range of services that a hospital provides and the quality of those services. While there may be some interrelationships between the two, it is not clear how the presence of gynaecology or dermatology services is likely to affect the quality of hip replacement surgery, for example, as measured by readmission or mortality rates. Similarly, it is not clear that having a narrow range of services is associated with poorer quality, as many specialist NHS hospitals, such as Great Ormond Street Hospital and Moorfields Eye Hospital to name but two, are considered to be high quality while having a relatively narrow focus.
- 7.27 We acknowledged in the Final Report that HCA had a relatively strong focus on high-acuity care and that it had been the leader in introducing a range of treatments/diagnostic techniques.⁴⁹ However, we also noted that although there may be a degree of horizontal differentiation (ie differences in the range of treatments provided by hospital operators), this did not appear to be perceived by HCA as a significant differentiator between its hospitals and those of some of its competitors, in particular competitors in central London.⁵⁰ Overall, we acknowledged that HCA offered a wider range of treatments than TLC, but we took the view that TLC's offer is regarded by HCA as being broad. We also concluded that the difference in product range between HCA and TLC was likely to be explained to some extent by the difference in the sizes of their hospital portfolios and that both HCA and TLC had expanded their range in recent years.⁵¹ Our views on these points are unchanged.

⁴⁹ Final Report, paragraph 6.411.

⁵⁰ Final Report, paragraphs 6.411 and 6.414–6.416.

⁵¹ Final Report, paragraph 6.416.

- We do not accept HCA's argument that its broader range of high-complexity 7.28 treatments meant that it had a higher cost base which must then be reflected in higher prices across its range of treatments – both complex and less complex - regardless of the differing levels of competition that it may face across different treatments. If anything we would expect any services where its cost base was higher (due to its providing more complex treatments) to be reflected in the prices of those high-complexity treatments that only HCA provided rather than in those treatments where it competed directly with TLC. HCA's incentives are to offer higher prices for treatments where it faces less competition. We also believe that any cross-subsidisation is likely to be limited, and if there were significant cross-subsidisation across treatments, then we would expect HCA and PMIs to be aware of it and, if desired, to adjust treatment prices and bring them back in line with relative costs. We have received no evidence, either in submissions or parties' internal documents, that there is a significant degree of cross-subsidisation. We further note that HCA's substantial and persistent profitability in excess of the cost of capital indicates that HCA's pricing is higher than a level which merely covers its cost base.
- We note HCA's view that, given its broader range of services and (what it 7.29 sees as) the relatively small alleged price difference between HCA and TLC in the IPA, that 'even relatively low levels of cross-subsidisation would have a bearing on any pricing differentials'.⁵² HCA made a similar point (above) in relation to the materiality of any quality differences between its hospitals and TLC.⁵³ Again our response points to our conclusion in Section 8 of this report, where we found that HCA charges higher prices than its main competitor, TLC, although we could not conclude on the precise size of the price difference, as we could not be sufficiently certain that we were comparing prices on a like-for-like basis. As set out in Section 11, below, there are a number of possible reasons for any price difference between HCA and TLC, with the evidence indicating that weak competitive constraints on HCA and possible differences in patient complexity are the most likely drivers. As set out above, in paragraph 7.28, our view remains that differences in range are not likely to be driving any price differences between HCA and TLC to any material extent.

Parties' views on competition on quality and range

7.30 HCA criticised what it considered to be our inconsistent findings in the Final Report that there was a degree of competition over both quality and range in

⁵² HCA response to the Remittal PFs, paragraph 5.33.

⁵³ See paragraph 7.6, above.

central London, but a lack of effective competition with respect to price, given that some competitive constraints applied to quality and range.⁵⁴ It argued that investments were uncertain, and that successful investments would allow a hospital operator to differentiate itself and be first to market with a new service. This may enable that provider to charge higher prices to cover the cost (and risk) of investment and to reflect the higher quality of the new service, and/or to increase volumes by capturing market share from other competitors. Rivals may also invest to improve the competitiveness of their offer, which would reduce this effect.⁵⁵ HCA argued that 'we should normally expect to see a lower level of quality and innovation in a monopolised market than would be the case in a competitive market.'⁵⁶ It argued that competition on quality and innovation, and the fact that providers responded to each other's investments, was evidence that hospital operators were actively competing.⁵⁷

- 7.31 HCA also questioned our conclusion that PMIs faced a narrower range of competing providers than individual patients and consultants, pointing out that the same set of providers competed on quality and on price in central London. In its view, there were not separate sets of competitors for quality and for price.⁵⁸
- 7.32 HCA further argued that our conclusion that insured patients may be relatively more sensitive to quality and range and less sensitive to price, and that this led to a degree of competition on quality and range, but a lack of price competition, 'lacked coherence'.⁵⁹ It went on to argue that, as self-pay patients are sensitive to both price and quality, it was difficult to understand how the CMA could sustain its self-pay AEC.⁶⁰ In addition, HCA submitted that the CMA had previously acknowledged that rival hospitals in London were investing in quality and new services which provided HCA with a competitive constraint. In HCA's view, the CMA provided no logical explanation why the same rivalry, which drove investments in quality and range, would not also constrain HCA's prices with PMIs.⁶¹

⁵⁴ HCA response to comment and submit further evidence, paragraph 4.8; HCA response to Remittal PDR dated 13 April 2016, paragraph 3.4 (v).

⁵⁵ HCA response to comment and submit further evidence, paragraph 4.9.

⁵⁶ HCA response to comment and submit further evidence, paragraph 4.10.

⁵⁷ HCA response to comment and submit further evidence, paragraph 4.11.

⁵⁸ HCA response to the Remittal PFs, paragraph 5.41.

 ⁵⁹ HCA response to the Remittal PFs, paragraph 5.38.
 ⁶⁰ HCA response to the Remittal PFs, paragraph 5.39.

⁶¹ HCA response to the Remittal PFs, paragraph 5.59.

TICA response to the Remittal FFS, paragraph 5.40

Our response

- 7.33 We deal with each of HCA's three points in turn.
- 7.34 First, as we noted in the Final Report, the existence of investments in quality and range is not inconsistent with a market being highly concentrated as, in general, firms with market power may also find it worthwhile to improve quality and expand range.⁶² We also responded in the Final Report to HCA's view that higher prices may result from successful investments and noted that HCA does not appear to have invested more over recent years than its closest competitor, TLC, and HCA's profitability is significantly higher.⁶³
- 7.35 We do not accept HCA's argument that our findings on competition on price and non-price factors in central London are inconsistent. We remain of the view that competition over quality and range is not inconsistent with a lack of competition over price in the private healthcare market, particularly within the insured segment. This is because, for insured patients, decisions about (a) where to go for treatment and which treatments to receive, and (b) how much to pay for treatments at each hospital are divorced, and competitive conditions at each of these levels may diverge.
- 7.36 At the point of seeking treatment, insured patients (with advice from GPs and consultants) decide where to seek treatment and which treatments to receive. They are likely to be more sensitive to non-price factors like quality, range and location, and relatively less sensitive to the price of treatments. Individual patients and consultants may have a range of alternatives in central London, and so hospital operators in central London may have stronger incentives to improve their quality and range.
- 7.37 In contrast, insured prices are the result of negotiations between PMIs and hospital operators. In the case of patients who are insured via their employer, these individuals are even further removed from considerations on price, as it is their employer that pays for their private medical insurance. The range of alternatives available to PMIs in central London, when negotiating prices and which hospitals to include in their network, is much narrower than those facing individual patients and consultants. For instance, HCA's hospitals are considered by Bupa and AXA PPP to be 'must have',⁶⁴ for reasons that we discuss in detail in Section 4 on competitive constraints

⁶² Final Report, paragraph 6.405.

⁶³ Final Report, paragraph 6.409.

⁶⁴ These views are not limited to Bupa and AXA PPP. In the Final Report, we noted the widespread views among PMIs and some hospital operators that HCA has a number of 'must-have' hospitals, to which PMIs would have to continue to send patients even in the event of a dispute. (Final Report, paragraph 6.297 and Appendix 6.11, paragraph 12.)

and Section 6 on bargaining, while any individual patient might have a range of alternatives to HCA's hospitals, depending on their individual circumstances, and choose on the basis of hospital quality and price (if they are self-pay). Therefore, while there is a degree of competition over both quality and range in central London, hospital operators may not face strong incentives to compete on price, particularly insured prices.

- 7.38 Even accepting that there is a degree of competition over quality and range, this does not mean that we can ignore a lack of price competition. Given our previous finding that HCA had, during the period 2007 to 2012, been earning returns persistently in excess of the cost of capital,⁶⁵ we are of the view that there are some limitations in the competitive process overall.
- 7.39 Second, in response to HCA's specific point on whether there are different sets of competitors in relation to quality and in relation to price,⁶⁶ we are not saying that there are separate and distinct sets of competitors with respect to price and quality, as HCA asserts. We are simply pointing to the fact that the competitive dynamics are not identical for PMIs and for self-pay patients, as set out in paragraphs 7.35 to 7.37, above.
- 7.40 Finally, we respond to HCA's specific point that self-pay patients' relatively higher level of price sensitivity means that the AEC in relation to self-pay patients is difficult to sustain. We would expect self-pay patients to be relatively more price sensitive than insured patients, but this does not imply that providers compete effectively on price for self-pay patients. As set out in Section 10, the evidence on entry barriers, weak competitive constraints on HCA, and on the role played by local competitive constraints in determining prices for self-pay patients all suggested that a concentrated market like central London would be expected to display higher prices for self-pay patients than would prevail in a more competitive than insured patients is not sufficient to conclude that there is, therefore, effective price competition for these self-pay patients.

Conclusions on quality and range

7.41 We have not received any new evidence or new arguments that would lead us to change our views on quality and range. Therefore, we readopt all of

⁶⁵ Final Report, paragraph 6.474. In addition, in paragraph 6.409 of the Final Report, we noted that 'HCA does not appear to have invested over recent years more than its closest competitor, TLC' and that 'TLC has invested proportionately more than HCA over the period' between 2007 and 2011.
⁶⁶ Set out in paragraph 7.31, above.

our findings on quality and range in paragraph 6.440 of the Final Report, in relation to central London:

- (a) In central London, there is no evidence of material quality differences between hospital operators (including between HCA and TLC), although we also note that the continuing lack of objectively comparable measures makes quality difficult to assess.
- *(b)* Notwithstanding the weak competitive constraints and barriers to entry and expansion, there is a degree of competition over both quality and range in central London.
- *(c)* The evidence indicates that overall, quality and range will not worsen with greater rivalry and we have reason to believe that they will improve in more competitive markets.⁶⁷

⁶⁷ Final Report, paragraph 6.440.

8. Empirical analysis on insured prices (insured pricing analysis)

- 8.1 As set out in detail in Section 1, the focus for the remittal was to review and re-consult on the IPA analysis, where we conceded that there had been errors in the code used.¹ The IPA is an empirical analysis of price differences between HCA and TLC for insured patients. We also held disclosure rooms where interested parties had access to the underlying raw data, cleaned data set and full details of the methodologies, analyses and codes used in the computer modelling of the IPA, as well as sensitivity and robustness checks related to the IPA. Written submissions on the Remittal IPA Working Paper and Remittal PFs were received from AXA PPP, Bupa and HCA, and non-confidential versions of these submissions were published. These parties also attended hearings, as did TLC, and subsequent submissions and responses to information requests have also been received from these four parties, as set out in the relevant paragraphs of this section.
- 8.2 The reason for the remittal is that two errors in the computer code were made. We have corrected those errors and re-consulted with the parties on our findings based on the corrected calculations of the IPA. In this section we focus on the evidence presented to us in the course of the remittal and we do not expand in detail on the coding errors.
- 8.3 This section is structured as follows:
 - (a) The IPA methodology and high-level results from previous analyses (paragraphs 8.5 to 8.20).
 - (b) Parties' views on the issue of potential differences in patient complexity between HCA and TLC, additional issues raised by the parties and our assessment (paragraphs 8.21 to 8.137).
 - (c) Updated IPA results (paragraphs 8.138 to 8.147).
 - *(d)* Robustness checks and alternative empirical analysis (paragraphs 8.148 to 8.160).
 - *(e)* Our conclusions on the empirical analysis of insured prices in central London (paragraphs 8.161 to 8.166).
- 8.4 In each of the subsections we deal with substantive issues in relation to the IPA methodology and results (that is, those covered by paragraph 8.3(b)

¹ As set out in more detail below, these two errors related to the statistical robustness of the results (the R-squared statistics of the underlying regressions and the statistical significance testing of the price differences) rather than to our estimates of the sizes of the relevant price differences.

above). We first outline the evidence and analysis set out in the Remittal IPA Working Paper and Remittal PFs. We then describe the relevant comments we received from parties in response to the working paper and Remittal PFs and we conclude with our views on each issue.

Our IPA methodology and high-level results from previous analyses

Our approach to the IPA analysis during the remittal

- 8.5 Our approach to calculating any difference in the prices that HCA and TLC charge to PMIs is based on the same overall methodology we employed in the Final Report, in the Remittal IPA Working Paper and in the Remittal PFs.² The IPA was presented in paragraphs 6.333 to 6.383 and Appendix 6.12 of the Final Report.
- 8.6 While in the Final Report the IPA was carried out for Great Britain as a whole, the focus of the remittal is on central London. We have therefore reexamined the IPA in relation to central London providers HCA and TLC only.
- 8.7 We first describe the basis for, and the steps involved in, the IPA.

Constructing price indices on a like-for-like basis

- 8.8 The aim of the IPA in relation to central London is to compare the prices charged by HCA and TLC to individual PMIs in each of the years 2007 to 2011, as well as to compare the prices paid to these hospital operators across all of the PMIs across all years.^{3,4} This is a complex task due to the differences between hospital operators in the treatments that they offer and the mix of patients that they treat (factors for which we sought to control).
- 8.9 Our methodology aimed to construct a measure of insured prices that would be comparable between hospital operators. To do this, we constructed a 'price index' based on a common basket of treatments offered by both hospital operators to each PMI.
- 8.10 The index summarised prices in a single aggregated number, to reflect the process of bargaining between PMIs and hospital operators, which does not

² The Remittal IPA Working Paper, paragraphs 30–40.

³ Note that we do not have the data for all years for some PMIs.

⁴ HCA commented that the data set was five to nine years old, which, in its view, raised doubts with respect to the reliability on the IPA, 'particularly given the number of changes in the competitive conditions in the supply of private healthcare' (HCA response to the Remittal PFs, paragraph 6.3). We note that we do not believe that market conditions have developed in such a way that we would expect a downwards shift in price for HCA and that, in our view, the data provide a reliable picture for 2007–2011.

take place at the level of the individual treatment but at an overall level covering all treatments.

- 8.11 We based our calculations on underlying invoice data which captured what we referred to as the 'episode price'. An episode is defined as a single patient visit to a given hospital for a given treatment and the corresponding episode price is defined as the total amount paid for hospital services excluding consultant fees. The prices are based on data obtained from Healthcode, an intermediary between hospital operators and PMIs, which we further prepared for the purposes of our analysis (a process referred to as 'data cleaning'). The relevant data, ie after the data cleaning, related to inpatient and day-case episodes, which accounted for 75% of revenue in 2011 covered in the data set. Because data relating to outpatients was not classified in a way which allowed them to be compared across operators, outpatient episodes were not included in the analysis.⁵
- 8.12 In the Final Report, we set out different versions of the price index, two of which are relevant for the remittal. These are:⁶
 - (a) an 'average price index' (the average insured price charged by each hospital operator on average across PMIs). This allows for comparisons between the prices charged by different hospital operators across PMIs; and
 - (b) an 'insurer-specific price index' (the average insured price charged by a given hospital operator to a given PMI in a given year), the results of which are given in paragraph 8.143. This allows for comparisons between the prices charged by different hospital operators for a given PMI in a particular year.
- 8.13 In central London, we focused on comparing HCA and TLC, because we considered them to be the two closest competitors to each other based on their shares of admissions and capacity, overlap in terms of the range of services provided, and the views of relevant parties.⁷ Because HCA and TLC are almost exclusively based in central London, we noted that as far as they were concerned, insured prices and local prices were essentially the same thing.
- 8.14 When comparing prices between HCA and TLC, conducting a robust like-forlike comparison is a complex task because we need to take into account differences between the treatment mix (or treatment complexity) and patient

⁵ Final Report, Appendix 6.12, paragraph 11.

⁶ The self-pay analysis is dealt with in Section 10.

⁷ Final Report, paragraphs 6.204–6.218 and Appendix 6.10.

mix (or patient complexity) between the two hospital operators. The different mix of treatments and services that different hospitals provide is likely also to include differences in the complexity of those treatments (which we deal with in Section 7 on quality and range) and could, for example, relate to the level of specialised staff and equipment, which could be associated with higher costs of provision. The complexity of patients, in the context of the IPA, refers to factors that may result in a patient being more expensive to treat than other patients being admitted for the same treatment (or CCSD),⁸ for example, due to co-morbidities⁹ or the severity of the patient's illness which may mean the patient requires, for example, more theatre time, more (and/or more high-value) drugs, more pathology tests, more nursing time or monitoring.

8.15 In the remittal, as well as in the Final Report, we have included specific patient characteristics - age, gender and length of stay - in the construction of the price index as we consider that these are likely to capture the effects of possible differences in patient complexity on the price difference between HCA and TLC.¹⁰ The aim of including patient-specific demographic characteristics in the price index approach is to take into account the severity or complexity of the condition of a particular patient. For example, for a given treatment, a patient with a more severe or complex condition might have to stay in hospital longer. This affects the price of the treatment received regardless of at which hospital the patient was treated. If one provider treats more complex patients, who may stay longer, the observed episode price for a given treatment should be higher. However, we have already accounted for these higher costs required to treat more complex patients by including the length of stay explicitly in our analysis. A similar argument can be made in relation to age (as, for some treatments, older patients tend to have more co-morbidities and hence are more complex to treat)¹¹ and gender (for those treatments where gender affects costs).¹²

⁸ We use the terms 'treatment' and 'CCSD' interchangeably. CCSD stands for 'Clinical Coding and Scheduling Development' and is a system of classifying treatments and diagnostic procedures in the private healthcare sector. See the CCSD website. We use this terminology in discussing more detailed points in relation to the IPA and HCA's advisers' analysis thereof, as this is the system of classifying treatments that is used in the Healthcode data set, on which our analysis is based.

⁹ Co-morbidities are other conditions that a patient has alongside the main diagnosis that they are being treated for, for example, high blood pressure, a heart condition, asthma or diabetes.

¹⁰ In doing so we follow the recent academic literature. For example, Gowrisankaran, Nevo and Town (2015), 'Estimating the price impact of hospital mergers: an analysis of Inova's proposed acquisition of Prince William Hospital', *American Economic Review*, January, Vol 105, No 1.

¹¹ There are likely to be exceptions to this where we might expect a negative correlation between age and the cost of treating a patient. For example, for some paediatric procedures we might expect a younger patient to be more expensive to treat. Also, for some treatments age may not have a material impact on the costs involved in treating the patient.

¹² We also take into account the fact that the above-mentioned patient demographics may have a different effect for different treatments.

- 8.16 To calculate the insurer-specific price index for a hospital operator (eg HCA) for a given PMI in a given year (eg Bupa in 2010) we took the following steps:
 - (a) We identified the 'common basket' of treatments for the hospital operators included in the comparison (in this case, HCA and TLC). The common basket includes treatments provided by both operators included in the price comparison for the given PMI in a given year. This step of the methodology controls for any differences in treatment mix between HCA and TLC.
 - (b) For each treatment in the common basket, we regressed episode prices on patient characteristics (age, gender and length of stay) and a constant term using all episodes associated with the hospital operators for the given PMI in a given year.¹³
 - (c) For each treatment in the common basket, we used the regression estimates from step (b) to estimate the price charged by the hospital operator for the given PMI in a given year for treating a 'representative patient'. The representative patient is defined separately for each treatment as a patient with median characteristics (age, gender¹⁴ and length of stay) across all hospital operators included in the price comparison. In combination with step (b), this step of the methodology controls for any differences in patient mix or patient complexity.
 - (d) We then calculated the insurer-specific price index as a weighted average of the estimated prices for each treatment obtained in step (c). Each treatment receives a weight equal to the number of admissions for that treatment across all operators included in the price comparison (for example, HCA and TLC in central London).
- 8.17 Repeating the above steps for each hospital operator in the price comparison produces insurer-specific price index results for a PMI and year pair (for example, comparing the prices charged by HCA and TLC to Bupa in 2011). We then repeat this process for all PMIs and all years to produce the full set of results.
- 8.18 To calculate the average price index, we use the weighted average of the insurer-specific price index results described above. We weight each

¹³ This regression technique allows us to control for price differences that can be systematically explained by differences in observable patient characteristics.

¹⁴ In relation to gender, the 'median' is defined by whichever gender is more common in the relevant sample of patients.

insurer-specific price index by the size of the common basket of treatments according to the number of admissions.

High-level results from the Final Report and the Remittal IPA Working Paper

8.19 Based on the above described methodology, Table 8.1 presents the overall price differences that were reported in the Final Report and in the Remittal IPA Working Paper, as these provide the relevant context for the parties' views that follow.

Table 8.1: Overall price differences between HCA and TLC

| | | % |
|--|---------------------|----------------------------------|
| Minimum patient episode threshold* | Final Report | Remittal IPA Working Paper |
| 5 episode 30 episodes | [≋] Not reported | [》] [》] |

Source: Final Report, CMA analysis.

*The minimum patient episode threshold is explained in detail in Appendix C.

8.20 These results indicate that, based on the analysis presented in the Final Report, HCA was [≫]% more expensive than TLC (based on a 5-episode threshold).¹⁵ The Remittal IPA Working Paper showed an overall price difference of between [≫]% and [≫]%, based on 5- and 30-episode thresholds, respectively,¹⁶ both of which were statistically significant at the 99% confidence level. In the Remittal IPA Working Paper, for the insurer-year price differences, 34 out of 36 price differences indicated that HCA was more expensive than TLC (based on the 5-episode threshold) and 22 out of 36 of these differences were statistically significant (at the 95% level or above).¹⁷

Parties' views on patient complexity and other issues

- 8.21 In the following section we address the comments made by the parties on patient complexity and other issues in response to the Remittal IPA Working Paper, Remittal PFs, hearings and information requests.
- 8.22 Parties raised various views on the Remittal IPA Working Paper and in relation to our Remittal PFs, with a particular focus on four main areas:
 - (a) First, patient complexity, where two related points were raised:

¹⁵ Final Report, paragraph 6.346 and Appendix 6.12, Annex B, Table 2.

¹⁶ The Remittal IPA Working Paper, Table 4, p27.

¹⁷ The Remittal IPA Working Paper, Table 8.5.

- HCA put forward the view that its patients tended to be more complex than TLC's for a number of reasons. Bupa, AXA PPP and TLC also put forward views and evidence on this issue, which contradicted HCA's view; and
- HCA submitted an analysis conducted in the IPA Working Paper Disclosure Room (IPA WP DRR) that included extra variables in an attempt more adequately to control for these differences in patient complexity. Bupa, AXA PPP and TLC submitted views on whether HCA's approach was, in principle, a valid one. In response to our Remittal PFs, HCA submitted further analysis, based on its own data on its patients' co-morbidities, to support its view on patient complexity. Bupa and AXA PPP submitted analysis and TLC expressed its views, reaffirming their respective understanding on the topic.
- (b) Second, HCA submitted that a small number of individual treatments accounted for a large proportion of the overall price difference, which, in HCA's view, called into question the robustness of the results, as well as the extrapolation of these results to HCA's pricing more generally.
- (c) Third, we deal with two other issues that HCA has put to us:
 - (i) treatment mix and the representativeness of the 'common basket';
 - (ii) competition within and outside the common basket; and
 - (iii) causal relationship between high concentration and HCA's higher prices.
- (*d*) Fourth, in relation to the R-squared statistics, HCA put forward points about the levels of these statistics and the implications of this for the robustness of our results.
- 8.23 In relation to each of these issues, we first outline the evidence and analysis set out in the Remittal IPA Working Paper and Remittal PFs. We then describe the relevant comments we received from parties in response to the working paper and Remittal PFs and we conclude with our views on each issue.

Patient complexity

8.24 In this section we discuss the views and evidence that have been put to us in relation to differences in patient complexity across hospitals and, in particular, the potential impact of any differences in patient complexity

between HCA and TLC on the estimated price differences between these two providers.

8.25 In our approach to the IPA, we accounted for patient complexity by including age, gender and length of stay in the regressions that we estimated for each treatment. In the Final Report, we stated that:

... for the majority of treatments included in our analysis, the regression analysis controls for the majority of the variation in episode prices, and we did not have evidence to suggest that any remaining differences between patients (eg due to clinical reasons) were materially different between HCA and TLC ...¹⁸

8.26 In its response to the Remittal IPA Working Paper, HCA's economic advisers (KPMG and a number of academic experts) stated that the price comparisons in the IPA were 'not conducted on a like-for-like basis'. HCA's economic advisers had also made a similar point in a previous submission, referring to the analysis of insured prices in the Final Report:

Differences in treatment mix were not properly taken into account. Furthermore, systematic differences in patient complexity were not appropriately controlled for, which are likely to influence the reliability of price indices. This means that observed differences in price are – at least partly – explained by higher costs of providing higher quality procedures, a greater scope of services overall, and lastly of treating patients with more complex medical needs, and thus are more expensive to treat. Observed differences in prices would then be due to legitimate differences in the nature and/or quality of services provided, and not necessarily to discretionary price setting behaviour.

8.27 HCA pointed to the level of the R-squared statistics, which, in its opinion, were relatively low, given that we were attempting to predict prices. It argued further that this would suggest that not all (major) factors were included in the explanation of the price difference.¹⁹ It then suggested using the number of pathology charges in an invoice as a way to 'more adequately control for' differences in patient complexity. It showed that including the count of pathology charges as an additional variable in the treatment-level regressions in the IPA reduced the price difference between HCA and TLC.

¹⁸ Final Report, paragraph 6.366.

¹⁹ We discuss the issue of R-squared statistics further below.

Similarly, this analysis also considered the number of pathology charges alongside [\gg], which gave similar results.

- 8.28 Given the comments put to us by HCA, we considered two questions related to patient complexity:
 - (a) Are there plausible mechanisms through which more complex patients are disproportionately directed towards HCA rather than TLC?
 - (b) Is the number of pathology charges in the invoice data a good basis for comparing and controlling for differences in patient complexity between HCA and TLC?
- 8.29 We address each question in turn, providing details of HCA's arguments, other parties' responses and our view.
 - (a) Mechanism for allocating complex patients
- 8.30 In the IPA WP DRR, and in their response to our Remittal PFs, HCA's economic advisers argued that, for the treatments included in the common basket, even once differences in age, gender and length of stay were taken into account, [≫]. In HCA's view, better accounting for these differences meant that the estimated price difference between the two providers reduced substantially and was no longer statistically significant based on the 5-episode threshold.
- 8.31 In order to assess the strength of this argument in relation to patient complexity differences, we began by considering whether there were likely to exist any mechanisms that would systematically allocate more complex patients to HCA rather than to TLC and then assessing whether any such mechanisms that were identified would be sufficient to lead to a material difference in patient complexity between the two providers. We asked HCA and the other parties for evidence on the existence of such mechanisms.
- 8.32 The following paragraphs provide a summary of the views and evidence submitted by HCA, AXA PPP, Bupa and TLC on whether, and if so why, there may be differences in the complexity of patients treated by HCA and TLC. We then set out our assessment and provide our view on this issue.
 - HCA
- 8.33 HCA put forward a number of reasons why it considered that it attracted more complex patients than TLC. In essence, these were as follows:

- (a) HCA's profile as a provider of complex, tertiary services meant that it attracted leading consultants who tended to provide complex treatments and attract complex patients.
- *(b)* HCA's wider range, in particular its focus on high-acuity and highcomplexity services, meant that it could treat more complex patients.
- (c) HCA marketed itself to GPs, which meant that they were more likely to refer their more complex patients to HCA.
- (*d*) Patients were increasingly likely to choose their own facility and patients with more complex diagnoses were more likely to do their own research and then choose HCA due to its wide range of complex services and its reputation for providing complex services.
- 8.34 First, HCA pointed to its strategy of targeting the 'more acute end of the acuity spectrum' in its investment decisions and noted a number of examples of 'new complex clinical services and state-of-the-art equipment' that it had invested in, as well as pointing to its staffing levels. HCA argued that it provided more complex treatments than TLC and that, even within the common basket, its activity was more concentrated on higher-complexity treatments and offered a broader range of specialised procedures than TLC. HCA also made the point that it had a higher proportion of episodes involving multiple CCSDs than TLC. HCA referred to its previously submitted case study evidence which, in its view showed 'how HCA's treatment pathways facilitate the rapid diagnosis [and] treatment of more complex conditions' and pointed to 'HCA's integrated care pathways, cutting-edge technology, multi-disciplinary teams, and higher levels of clinical staffing, which are specifically geared towards higher-complexity treatments'.
- 8.35 HCA gave the example of a patient being referred for a vascular problem by a GP. It argued that the GP or the cardiologist might prefer to investigate the patient at the Wellington Hospital rather than at TLC in case something went wrong, for example a cardiac catheterisation, as cardiac surgery could be performed at the Wellington (and not at TLC as it did not provide cardiac surgery). Another example related to haematological transplants which may be conducted on more complex patients (such as those with leukaemia, myeloma or a lymphoma) at HCA's PPU at UCH due to the infrastructural support available at the NHS trust compared with the types of patients that TLC may treat. [≫]
- 8.36 In addition, in the Remittal PFs Data Room Report, KPMG provided evidence addressing whether HCA's patient mix was influenced by HCA offering cardiac facilities. First, using data on patients' co-morbidities for

HCA patients only, it showed that out of all HCA patient episodes in the common basket, [\gg].²⁰ Second, KPMG's analysis suggested that [\gg].²¹ Specifically, KPMG showed that [\gg].²² In HCA's view, this difference showed that there was a patient pathway that disproportionately allocated patients with cardiac comorbidities to HCA hospitals with cardiac facilities, even for non-cardiac procedures. KPMG stated that this was evidence that a referral pathway existed, ie HCA patients with cardiac comorbidities were more likely to be referred to HCA hospitals with cardiac facilities compared to patients without cardiac comorbidities.²³ One possible wider extrapolation to non-HCA hospitals is that a similar referral pathway would result in patients with cardiac comorbidities being disproportionately referred to HCA hospitals with cardiac hospitals with cardiac facilities, such facilities.²⁴

- 8.37 Second, HCA stated that its 'profile as a high-acuity, high-complexity provider with a wide range of tertiary treatments inevitably attracts leading consultants in more complex, specialised fields and, hence, patients with more complex conditions. Referral decisions by GPs and/or consultants are based and guided on [this] fact ...' Where consultants 'split' their patient lists, they may treat a more complex patient or carry out a more complex procedure at HCA rather than at another hospital due to factors such as the availability of specialist diagnostic equipment, more extensive ITUs, 24-hour laboratory services and so on. HCA gave a number of examples of where a more complex patient might be treated at HCA rather than TLC, such as a patient with a history of cardiac illness attending HCA for orthopaedic surgery due to the availability of ITU facilities that were 'suitably equipped to provide potentially life-saving cardiac intervention'.
- 8.38 Third, and related to the second point above, [≫].²⁵ This, KPMG argued, was suggestive of HCA attracting a larger share of patients with cardiac comorbidities than TLC and therefore was further evidence for the existence of a patient pathway of more complex patients being referred to HCA rather than to TLC.

^{20 [%]}

²¹ KPMG use ICD-10 coded data for inpatient episodes between 2013 and June 2015 across its six central London hospitals. Comparable data is not available for TLC.

 ²² KPMG found that this difference was statistically significant – using a one-tailed Fisher Exact Test.
 ²³ In addition, KPMG showed that patients with cardiac comorbidities are more likely to have longer intensive care support and incur higher episode charges compared to patients without cardiac comorbidities.
 ²⁴ This wider interpretation has not been stated directly by HCA.

²⁵ In the data, they use patients who receive multiple CCSD treatment of which at least one is outside the common basket, ie is not offered by TLC.

- 8.39 [[≫]].²⁶ Furthermore, HCA argued that the above evidence further illustrated the importance of appropriately controlling for patient and episode complexity to ensure a like-for-like comparison of insured prices.
- 8.40 Fourth, in relation to GPs, HCA stated that while GPs 'primarily [focus] on the choice of consultant ... the choice of hospital may also play a role in some cases'. HCA pointed to its work building and maintaining relationships with GPs to 'ensure that they have the requisite knowledge and information about HCA's consultants ...', which included GP seminars, workshops and 'master classes', regular visits to GP practices, a one-stop service for GPs, and regular newsletters. According to HCA, '[t]his helps to ensure that patients with more complex, underlying conditions are referred to the appropriate specialist as soon as possible', with 'the GP's knowledge and familiarity of consultants ... likely to be the key driver for making a referral and, in turn, the most likely reason why a greater proportion of complex patients are being referred to HCA'.
- 8.41 Fifth, HCA pointed out that patients were 'increasingly asserting their own choice of consultant and facility' and a patient who was aware that they needed complex care 'may be more likely to choose a consultant based at HCA' due to its broad and in-depth range of services (for example, cancer and cardiac care) and its 'reputation in the market for offering complex care'.
- 8.42 Finally, HCA also pointed out that PMIs' open referral policies 'have tended to affect less complex procedures'. We consider one relevant implication of this point in our assessment in paragraph 8.60 below.
 - AXA PPP
- 8.43 AXA PPP stated that there was no evidence to suggest that the quality of HCA's services or the acuity of its patients were any different from that of other providers.²⁷ AXA PPP accepted that HCA carried out some complex treatments that TLC did not, but, with the exception of cardiac surgery, it did not believe there were material differences in complexity between HCA and TLC. AXA PPP also agreed that there was a perception that HCA hospitals were high-quality, but it stressed that TLC was definitely perceived as being absolutely the equal of HCA's hospitals.
- 8.44 AXA PPP provided evidence from the National Joint Registry on revision rates and 90-day mortality rates for hip and knee replacements, which

²⁶ HCA response to the Remittal PFs, paragraph 6.22 (iv).

²⁷ AXA PPP hearing summary, paragraph 1.

showed that HCA's hospitals were within the expected range around the national average in terms of these outcome measures.²⁸ AXA PPP interpreted this as demonstrating that there was no evidence to suggest that HCA's performance on clinical quality was substantially better than the national average and that, based on this data source, HCA's hospitals treated patients who were likely to be less complex than average, based on age, obesity, risk of medical problems before or after surgery, and diagnoses other than osteoarthritis.²⁹ AXA PPP stated that it was not aware of any other publicly-available data on case-mix adjustments in different specialties and treatments, and that the available data did not support the hypothesis that HCA was providing services of superior (clinical) quality or that HCA's patients were more complex or difficult to treat.

8.45 On HCA's ability to treat more complex patients due to its ability to offer cardiology services, AXA PPP stated that providing cardiac services was unrelated to a hospital's ability to offer surgical procedures, such as orthopaedic surgery, for patients with co-existing cardiac co-morbidities. It further stated that if a patient had a serious and life-threatening cardiac condition, it was unlikely that an elective surgery, such as hip or knee arthroscopy, would be performed on the patient. Furthermore, AXA PPP said that, on the basis of the limited evidence available to it, it appeared that TLC would have slightly more complicated cases (notwithstanding the fact that TLC did not have the same cardiology capability as HCA). AXA PPP noted that the evidence available in the public domain, for example, National Joint Registry information relating to hip and knee replacements, included markers of patient complexity and this information showed that HCA did not treat more complex patients compared with TLC for hip and knee surgery.³⁰ On the American Society of Anaesthesiologists (ASA) scores that HCA had pointed to (see paragraph 8.53, below), AXA PPP contended that these did not show that HCA was treating more complex patients, but actually indicated that TLC's knee and hip replacement patients displayed higher scores compared with HCA.³¹ Further, AXA PPP considered it extremely unlikely that TLC would be turning away such patients because it did not have the related depth of cardiac services needed to treat them.³²

²⁸ The revision rate is the frequency with which a knee or hip implant breaks or wears out before the specified replacement date and therefore needs replacement.

²⁹ AXA PPP hearing summary, paragraphs 5 and 6.

³⁰ Also, the data showed that HCA did not have significantly better revision rates for hip and knee surgery compared to TLC.

³¹ AXA PPP response to the Remittal PFs, paragraph 4.2, Tables 1 and 2.

³² AXA PPP response hearing summary, paragraph 12.

- Bupa
- 8.46 In Bupa's view, there was no evidence that there were material differences in patient complexity between HCA and TLC. According to Bupa, [≫]. Furthermore, Bupa was not aware of any differences that would result in more complex patients being treated at HCA rather than at TLC.
- 8.47 Bupa considered that the ICD-10 data available currently in the private healthcare market was incomplete and a very poor indicator of complexity and more costly treatment of patients.³³ Therefore, in Bupa's view, the HCA argument that proportionately more patients with co-morbidities went to HCA rather than to TLC and that this was a driver of higher costs at HCA could not be substantiated and did not stand. Bupa did not have any evidence which showed that patients with cardiac co-morbidities being treated for non-cardiac conditions were being sent to HCA for treatment rather than to TLC.³⁴
 - TLC
- 8.48 In TLC's view, HCA did not treat more complex patients for those CCSDs that HCA and TLC both provided. TLC stated that its consultants did not inform TLC that they had to take their most complex patients to HCA. TLC's view was that, if there was any tendency for more complex cases to go to one provider or the other, it would be driven by consultants, but TLC's view was that, if there was any difference, it saw consultants bringing their more complex cases to it rather than the other way around.
- 8.49 TLC also contended that the number of pathology tests and the length of the invoice '...cannot be a consideration in terms of how complex is a case'.³⁵
- 8.50 TLC noted that only in exceptional circumstances would patients be directed or treated elsewhere if they had a cardiac condition. While TLC did not provide cardiology services, it did have cardiologists and was fully able to support patients through their post-operative phase.

³³ The ICD-10 data is the 10th revision of the International Classification of Diseases and Related Health Problems, which classifies different medical conditions. For example, J11.8 is the ICD-10 code for 'Influenza with other Manifestations, Virus not identified'.

³⁴ Bupa response hearing summary, paragraph 4.

³⁵ TLC response hearing summary, paragraph 8.

- HCA's further views in response to the PMIs' submissions
- 8.51 For completeness, we also set out a number of additional points that HCA put to us in response to the points that AXA PPP and Bupa have made.
- 8.52 HCA clarified that it was 'not challenging the "calibre" or quality of TLC's consultants', but 'simply making the point that there is a broader range of treatments and sub-specialisations, and a more extensive clinical infrastructure within HCA hospitals, and that HCA is more effectively geared to treating patients with more complex needs and comorbidities'.
- 8.53 Responding to AXA PPP's evidence in relation to the National Joint Registry, HCA pointed out that one measure of the severity of the patient's illness (the ASA score)³⁶ pointed to HCA having more complex patients than TLC for the treatments covered in the National Joint Registry (knee and hip replacements), with HCA hospitals having average scores between 1.7 and 2, compared with an average score of 1.6 at TLC. Additionally, the National Joint Registry data also indicates that HCA's patients on average are older than TLC's, and, in HCA's view, in the 'specific context of joint operations this is likely to indicate more complex patients'.
- 8.54 Furthermore, in its response to Remittal PFs HCA questioned the relevance of the evidence provided on patient complexity and its materiality for the IPA by 'AXA PPP and others'.³⁷ HCA stated that the cited evidence was 'extremely high level and therefore is unable to determine, at a granular level, if differences in patient complexity more than offset any difference in price estimated by the IPA'. HCA also stated that neither TLC nor AXA PPP had accessed the data room and were therefore, in its view, not in a position to have any insights into the level of complexity differentials that could be considered material to the IPA.³⁸
- 8.55 In relation to Bupa's evidence on the differences in average patient age at HCA and TLC, HCA stated that this was 'meaningless for a number of reasons', including the following:
 - (a) Age had already been controlled for in the IPA.

³⁶ HCA explained that the ASA was an assessment of the severity of the patient's illness done by the 'anaesthesiologist' prior to the start of the operation. See also paragraph 8.45.

³⁷ HCA response to the Remittal PFs, paragraph 6.18.

³⁸ HCA response to the Remittal PFs, paragraph 6.18.

- (b) Age 'is not itself an indication of complexity'. For example, for [≫] older patients might well be routine while a younger patient 'is more likely to indicate symptomatic underlying condition, like [≫].'
- (c) HCA's paediatric services meant that its average patient age was brought down relative to TLC's.
- 8.56 On whether Bupa guided its more complex patients towards HCA, HCA stated that its case was that 'Bupa is guiding patients **away** from HCA and its consultants through its open referrals policies ... [HCA's emphasis]'.
- 8.57 HCA also responded to TLC's argument that it rarely had to transfer patients to other hospitals or turn away patients with cardiac co-morbidities because TLC was not able to offer cardiac support to these patients. KPMG provided evidence that, in its view, showed HCA treated more complex patients, as evidenced by multiple-CCSD episodes that included a CCSD code which was not offered by TLC. Based on this, KPMG pointed out that TLC's claim that it rarely transferred or turned away complex patients was most likely to be a result of TLC treating a lower proportion of patients with cardiac comorbidities compared with HCA. KPMG also stated that the results of this analysis supported HCA's submission that it treated more complex patients than TLC, even within the common basket, and that these patients required services that HCA was better able to provide.
 - Our assessment
- 8.58 We have considered the potential mechanisms that HCA has put forward and assessed the evidence that HCA has pointed to which may support its view in each case. We have also taken into account the views and evidence provided by AXA PPP, Bupa and TLC. We set out below our assessment of the likely extent to which there is any material difference in the complexity of patients treated by HCA and TLC which has not already been controlled for by the patient characteristics included in the IPA.
- 8.59 First, in relation to its greater range, it is clear that HCA provides some services that TLC does not, in particular cardiology, which may lead it to attract patients with more co-morbidities for non-cardiology-related treatments. We recognise that there exists evidence that patients with cardiac co-morbidities treated within HCA's hospital network, are more likely to be treated in an HCA facility which is equipped with cardiac facilities.
- 8.60 However, we cannot quantify the potential impact that the greater range could have on our comparison of HCA and TLC prices across the range of treatments in the common basket for the following reasons:

- (a) We note HCA's evidence that it treats a non-negligible share of patients with cardiac co-morbidities ([≫]).³⁹ However, from this analysis of HCA's patients, we cannot conclude on the existence of a referral mechanism of more complex patients to HCA as compared with TLC.⁴⁰ Because comparable data on patient co-morbidities does not exist for TLC,⁴¹ we are not in a position to test whether the share of patients with cardiac co-morbidities at TLC is higher or lower (as suggested by HCA) compared with HCA. Furthermore, because the presented evidence is limited to HCA's patients, we are not able to assess the impact of patients with cardiac comorbidities on the IPA and therefore on the price difference between HCA and TLC.⁴²
- (b) The evidence on patients with cardiac co-morbidities being slightly more likely to attend an HCA hospital with cardiac facilities than one without these facilities could be the result of a mechanism that applies within HCA. As such, it may not apply to the allocation of patients between HCA and TLC. While the evidence presented on multiple-CCSD episodes outside the common basket is an indicator of HCA's wider range, the degree to which this implies that HCA is treating more complex patients within the common basket, and therefore how it affects the IPA is not clear.⁴³
- (c) The evidence only relates to patients with cardiac co-morbidities. However, cardiac co-morbidities are only one source of potential complexity of a patient. In any case, the evidence does not suffice to assess accurately the effect of patient complexity on the price differences in the IPA. Again, we would need further information on patient complexity, such as ICD-10 co-morbidities, for both HCA and TLC.
- (d) Using the additional information on cardiac co-morbidities in the IPA to estimate the price difference between HCA's cardiac hospitals and noncardiac hospitals reduces the estimated price difference. In particular, KPMG showed that there was an estimated price difference of [≫]% between HCA's cardiac hospitals and non-cardiac hospitals using the

³⁹ [%]

 ⁴⁰ [∞]. This evidence has the same drawback as outlined in the above paragraph: that it is of limited value for understanding differences between HCA and TLC. [∞]. Particularly, if a referral pathway exists and notwithstanding the first point, the second point would call into question the strength of the effect on the IPA.
 ⁴¹ TLC confirmed that it currently did not hold the information on patients with co-morbidities within a particular CCSD Group code that would enable it to make a comparison with other private healthcare providers.
 ⁴² This argument is similar to the above point on the evidence of a referral pathway, however, here points to difficulties in establishing the exact price difference in the IPA.

 $^{^{43}}$ We provide more detail on this point in paragraph 8.59(c).

IPA methodology, not accounting for ICD-10 cardiac co-morbidities. They further showed that the price difference between the two types of hospitals reduced to [≫]% when accounting for cardiac co-morbidities.⁴⁴ However, neither price difference is statistically significant, which suggests that accounting for patient complexity (with and without explicitly accounting for cardiac co-morbidities) makes no difference to the estimated price difference.⁴⁵ We therefore conclude that this particular analysis is not informative in quantifying the extent to which the IPA is affected by patient complexity differences.

- 8.61 Second, much of HCA's evidence on consultants choosing HCA appears to relate to these consultants' ability to perform more complex procedures rather than providing strong evidence of a tendency to treat more complex patients within the same treatments that TLC also provides.⁴⁶ The same applies to HCA's view on availability of types of equipment at its hospitals. As such, the extent to which this mechanism is likely to lead to greater patient complexity within 'common basket' treatments is not clear.
- 8.62 Third, in relation to HCA's marketing and engagement work with GPs, we do not consider that this is a strong argument that it attracts more complex patients within the same treatments that TLC provides. HCA is not unique among private hospital providers in marketing itself to GPs,⁴⁷ with TLC also doing so,⁴⁸ and we consider that such marketing could result in HCA gaining more GP referrals, and potentially more GP referrals for complex treatments, rather than necessarily leading to more complex referrals within the same treatments that TLC also provides. While the latter is plausible the evidence that HCA has provided on this mechanism is very limited.
- 8.63 Fourth, in relation to patients with more complex conditions actively researching and choosing HCA due to its reputation and range of tertiary services, HCA quotes the findings of the CC's patient survey which showed that most insured patients using London-based private providers conducted some online research before being treated (63% 'looked up relevant information online') and that many patients placed importance on the consultant's reputation (46%) and clinical expertise (43%). While this is relevant to the way in which patients choose where to be treated, it does not

^{44 [%].}

 ⁴⁵ Note that the analogy made here between the differences of HCA's cardiac and non-cardiac hospitals is merely suggestive of a price difference between HCA and TLC and therefore has to be interpreted with care.
 ⁴⁶ We note that a number of these quotes from consultants do indicate that HCA attracts more complex patients than many other private providers, although we also note that, in two instances, the fact that HCA provides cardiology services is the relevant point.

⁴⁷ Final Report, paragraph 8.2.

⁴⁸ TLC response hearing summary, p14.

point towards substantial numbers of more complex patients choosing to be treated at HCA rather than TLC.

- 8.64 Fifth, in relation to PMIs, HCA pointed out that the PMIs' open referral policies often related to less complex treatments. This, in our view, is an argument about treatment complexity: HCA's range of treatments may become more skewed towards more complex treatments if PMIs are directing patients to other providers for less complex treatments. As such, this is not relevant to the complexity of patients within those treatments that it (and TLC) do provide to insured patients.
- 8.65 Finally, we previously recognised HCA's wider range of treatments.⁴⁹ However, we do not think that the evidence presented by KPMG on multiple-CCSD episodes and cardiac co-morbidities suggests a referral pathway that directs more complex patients towards HCA rather than TLC. In particular, if patients with a particular need can only receive the specific treatment (or combination of treatments) at HCA, but not at TLC, then the share of this type of patients is necessarily higher at HCA. However, as such treatments are outside the common basket because they are only offered by HCA, this evidence is not relevant for the estimated price difference between HCA and TLC within the common basket.
- 8.66 To illustrate the above point, consider the following example. Suppose that a treatment in the common basket is, to a large extent, offered to patients with multiple CCSDs, of which most are outside the common basket. Then a higher price for the CCSD in the common basket may reflect higher costs due to higher patient complexity. This reasoning follows only if there is a sufficient number of complex patients receiving a CCSD outside the common basket. In this case the price estimate based on the common basket would be biased. For patients with a cardiac co-morbidity the potentially affected episodes that could bias the results in the data presented by KPMG are at most [≫]% of the total episodes.⁵⁰
- 8.67 Furthermore, the evidence presented does not allow us to understand whether a patient (or their GP or consultant) has chosen HCA over TLC for a treatment offered by both hospital providers because of HCA's ability to offer back-up care, in particular for cardiac complications or for other reasons. We agree that it is plausible that if, for a given treatment inside the common

⁴⁹ See paragraph 7.27 above.

⁵⁰ There are [\gg] patients in their dataset of which [\gg] patient have a cardiac comorbidity and have multiple CCSDs with at least one of the CCSDs outside the common basket. The numbers are taken from Tables 3 and 4 on pages 10 and 11, respectively.

basket, a patient needs medical back-up care that is not offered by TLC, for example, for any likely cardiac complication, then the patient would be referred to a hospital that is equipped to treat the patient. However, in order to understand the relevance of the referral pathway, it is important to distinguish between patients that TLC is unable to treat because it does not offer the treatment needed and who are, hence, irrelevant to the IPA, and patients that TLC in principle is able to treat, but a medical risk assessment directs the patient to another hospital provider, which is better equipped to treat the patient.⁵¹

- 8.68 Our view is that the evidence presented on multiple-CCSD episodes inside and outside the common basket is a result of HCA's greater range, rather than being supportive of the argument that HCA is treating more complex patients compared to TLC within the common basket. Therefore, the evidence on multiple-CCSD episodes does not allow us to draw conclusions on the relative complexity of patients between HCA and TLC that would be relevant for the IPA.
- 8.69 In addition to our own analysis of patient complexity (within those treatments included in the common basket), we have also been provided with opposing views by parties: on the one hand, HCA has put forward a number of reasons, and some evidence, on why it considers that it attracts more complex patients than TLC; on the other hand, AXA PPP, Bupa and TLC have all told us that HCA does not treat more complex patients within the same CCSDs.⁵² Overall, while we consider that some of the potential mechanisms put forward by HCA are plausible, and some of the evidence it has submitted is relevant, and therefore could have an effect on the estimated price difference between HCA and TLC,⁵³ we cannot quantify the size of this effect.
 - (b) Controlling for patient complexity in the IPA
- 8.70 KPMG's analysis in the data room in the course of this remittal used additional information in the IPA data set in order more appropriately to attempt to control for any differences in the complexity of patients between

⁵¹ In the data we only observe CCSDs once the patient has been treated. If a patient attended a hospital for a specific treatment and needed back-up care, ie received an additional treatment, we would not be able to distinguish this from the data, ie we would know that patients had more than one treatment but not the reasons for the treatments. As a result, we cannot distinguish between patients who were given more than one treatment but where the additional treatment was scheduled or where it was due to back-up care.

⁵² As cited above, AXA PPP provided evidence on the ASA scores of its patients for hip and knee replacements.
⁵³ For example, HCA's provision of cardiology services may well attract referrals of patients with cardiac conditions, who may be less likely to be referred to TLC even where the procedure in question is unrelated to cardiology.

HCA and TLC.⁵⁴ Specifically, based on the line-item data in the Healthcode invoice data, KPMG showed that [\gg], which, according to KPMG, confirmed HCA's contention that it treated more complex patients.⁵⁵

- 8.71 KPMG then used this information on the number of line-item charges in patients' invoices to construct additional variables. When including one of these the number of pathology charges in an invoice in the treatment-level regressions in the IPA, this led to much smaller price differences than those estimated by us using the IPA. In particular, when using the 5-episode threshold, KPMG estimated an overall price difference of [≫]%. When using the 30-episode threshold, the estimated overall price difference was [≫]%. KPMG interpreted this as evidence that, when patient complexity differences between HCA and TLC were adequately controlled for, there was no statistically significant price difference between HCA and TLC, based on the 5-episode threshold.⁵⁶
- 8.72 In the remainder of this section we discuss the arguments provided by HCA and the other parties in relation to the question of whether the number of pathology charges in an invoice is a reliable indicator of patient complexity. We then provide our own analysis of the data and our view on the issue.
 - Parties' views
 - HCA
- 8.73 On the question of whether the number of pathology tests is a good proxy⁵⁷ for patient complexity, HCA made a number of points:
 - (a) [%]
 - (b) HCA noted that the provision of pathology tests were either 'clinician driven or are based on standard clinical protocols' and that the number was not determined by the hospital operator.

⁵⁴ For the IPA WP DRR, KPMG modified the data set used by the CMA in order to use the count of a number of different categories charge units within the Healthcode invoice data. We discuss this data cleaning in more detail in Appendix E.

⁵⁵ In addition, [%].

⁵⁶ We discuss statistical significance testing in more detail in the relevant section below and in Appendix F. ⁵⁷ We use the term 'proxy' as a shorthand way of expressing the potential relationship between the number of line-item charges in invoices (especially the count of pathology charges) and underlying patient complexity. HCA's submissions have used various forms of words, with the KPMG IPA WP DRR referring to the line-item data being used to 'more adequately control' for patient complexity (paragraph 1.5), 'measures of complexity identifiable in the line-item data' (paragraph 4.6) and stating that 'pathology tests can be a key indicator of complexity' (paragraph 4.30).

- (c) HCA also stated that other line items within the invoices 'could be good proxies for patient complexity', such as [≫], [≫] and [≫], but that these might be more likely to occur in treatments that were less important in driving the overall price difference. For procedures other than the [≫] dealt with in detail in the HCA submissions (as these were the [≫] treatments which accounted for a large proportion of the estimated price difference between HCA and TLC), HCA conceded that 'the count of pathology charges may not be as good an indicator' of patient complexity. HCA pointed out that '[i]n order to determine whether pathology charges are a good indicator of patient complexity, an assessment made with clinical input would need to be carried out on a procedure by procedure basis'.
- (d) In addition, KPMG provided evidence that 'for all single CCSD episodes with common basket CCSDs, [≫]. In addition, '[a]mong patients with a Top-5 CCSD, those with a Charlson Comorbidity have [≫].'
 - AXA PPP
- 8.74 In response to KPMG's approach summarised in paragraphs 8.70 and 8.71, above, AXA PPP submitted that the number of pathology line items in any given episode of care was not a straightforward indicator of patient complexity. AXA PPP pointed out that:
 - (a) during the period covered by the IPA, consultants at different hospital groups might have been paid incentives to perform more 'unnecessary' tests;
 - (b) although in theory consultants determined the quantity of pathology tests, hospitals might have different practices with respect to ordering tests (for instance, ward protocols that automatically ordered pathology tests as routine or on an 'opt-out' basis), so that particular hospital groups ordered more tests for reasons that were unrelated to patient complexity; and
 - (c) billing practices across hospital groups might differ, so that the same profile or group of tests might be billed as one line item with one hospital operator and as several line items with another. AXA PPP reported that [≫].

- 。 Bupa
- 8.75 Bupa explained that different billing practices between HCA and TLC for day-case treatments⁵⁸ meant that a count of line items on the invoice would not be informative of patient complexity in relation to the [%] procedures that HCA had identified, all of which were day-case treatments. Bupa noted the differences in billing practices between HCA and TLC for day-case treatments:
 - (a) [%]
 - (b) [%]
 - (C) [%]
- 8.76 Bupa also argued that the number of pathology tests was not a good proxy for patient complexity because the billing practices were affected by the bargaining strength of HCA. In conclusion, Bupa contended that [[≫]].
 - TLC
- 8.77 TLC 'refuted' that the count of line items, such as pathology charges, was a good measure of patient complexity and suggested that this could be driven by billing practice rather than reflecting the care that was delivered.
 - HCA's further views in response to the PMIs' submissions
- 8.78 For completeness, we also set out a number of additional points that HCA has put to us in response to the points that AXA PPP and Bupa have made on this issue.
- 8.79 In relation to what HCA called 'the allegations made by both Bupa and AXA PPP concerning "over-treatment" in HCA hospitals', HCA made a number of points:
 - (a) First, it pointed out that Bupa and AXA PPP's views that HCA performed more pathology tests than TLC were consistent with KPMG's analysis of the IPA.
 - (b) Second, it reiterated that it was the consultant not the hospital that determined the number of [≫] and that HCA did not 'induce' consultants to commission unnecessary [≫].

- (c) Third, HCA pointed to three examples where Bupa or AXA PPP had questioned the amount of treatment that HCA was providing, pointing out in each case that these queries had been considered, for example, after independent expert determination, and resolved.
- (*d*) Finally, HCA pointed to a number of relevant parts of the CMA's findings in the Final Report:
 - (i) 'We would expect the ethical and regulatory constraints of consultant behaviour and, to the extent that it applies, peer or multi-disciplinary team review, to offset to a substantial extent any economic incentive for a consultant to offer advice on treatment that was otherwise than in the patient's best interests'.⁵⁹
 - (ii) '... the PMIs did have the means to (at least partly) counteract variation [in treatment levels] which was unwarranted.'⁶⁰
- Our assessment
- 8.80 In this section we assess whether the invoice-level line items in the Healthcode data set are suitable for inclusion in the IPA regressions in order to account for differences in patient complexity between HCA and TLC. We first outline the reasons why we do not consider that it is appropriate to do so. Notwithstanding our views on the appropriateness of using the line-item data in our analysis, we then investigate KPMG's claim that the count of pathology charges is a good proxy for patient complexity and present the results of this analysis.
- 8.81 In relation to using additional line items, our pricing analysis in the original investigation and in this remittal has used episode prices, rather than line item data, as, in our view, these were unreliable for a number of reasons:
 - (a) Due to differences in billing practices, the line-item data does not necessarily provide a like-for-like comparison. For example, some treatments are invoiced according to a 'package price' rather than based on the sum of individual items – services, tests, scans, etc – provided during the episode and listed in the invoice. As such, these packageprice invoices would not provide any useful information on the services, tests, etc which a patient received during an episode of care.

⁵⁹ Final Report, paragraph 8.162.

⁶⁰ Final Report, paragraph 9.55.

- (b) We considered that patient age, gender and length of stay were much less likely to be subject to 'measurement error' than individual line items within invoices, for example it is far less likely that patient age would be recorded or reported differently at HCA compared with TLC, whereas specific items within an invoice may well be. The overall invoice totals (which we used in our analysis as the price for each episode) are validated by Healthcode, but the individual items within the invoices are not.
- (c) Due to the duplication of lines on an invoice, the total invoice sum (which is validated) is not equal to the sum of line items on the invoice. We clarified the existence of those duplicates with Healthcode, which stated that sometimes patients had more than one diagnosis recorded for the same treatment and so an extra line was added in the Healthcode data set to record this. As a result, for example, for a particular invoice, the theatre charges might be duplicated, thus overstating the amount that was actually charged for theatre time. In the overall data set, we found that about 50% of the episodes have a duplicated line item. Given the billing and measurement issues outlined in (a) and (b), above, we therefore judged that removing the duplicated line items would still not have produced a set of comparable and usable line-item variables to use in the IPA.
- 8.82 In addition to these reasons, further examination of the line-item data showed that the categorisation of individual line items involved a high level of aggregation. For example roughly half of all pathology charges were simply labelled as 'pathology', which is likely to include a variety of different tests, with different implications for patient complexity and providers' costs. Healthcode explained that it had taken the 'mapping of service item codes to Industry Standard Codes (ISC) in-house in 2012, as the ISC codes to which hospital providers mapped these were notoriously unreliable'. Healthcode's view was that hospital providers often mapped individual services and tests into very broad "bucket" codes, for example 50 different types of pathology tests were simply being recorded as "pathology".
- 8.83 In order to test KPMG's assertions on charge categories, we developed a methodology to clean the data set of these duplicated line items. We provide further details on our approach in Appendix E. For the remainder of this section we base our discussion of our results on this cleaned data set.⁶¹

⁶¹ KPMG developed its own approach to removing the duplicated line items. These approaches are very similar and lead to very similar price difference estimates.

- We also conducted an analysis of the charges that HCA and TLC include in 8.84 their invoices for specific line items, where we examined the differences between HCA and TLC with respect to:
 - (a) the composition of revenues across different categories of these line items; and
 - (b) the extent to which episodes were charged by using package prices that PMIs had agreed with HCA or TLC, rather than being based on an invoice of individually listed and priced line items.
- 8.85 We looked at the revenue composition of the different categories of line items in the invoice data based on the prices that HCA and TLC charged for these.⁶² As shown in Table 8.2 below, for treatments in the common basket (columns 1 to 3), we found that a large proportion of line item charges are recorded against 'theatre', 'accommodation', 'pathology', and 'drugs and consumables'.
- In addition, as also set out in Table 8.2, we found that a large share of the 8 86 relevant revenue is charged through all-inclusive packages.⁶³ When focusing on the IPA common basket only (columns 1 to 3), packages correspond to $[\gg]$ % of revenues, with the corresponding numbers for HCA and TLC being $[\gg]$ % and $[\gg]$ %, respectively. Based on our review of PMI contracts, these all-inclusive packages involve hospital operators charging a single price for all of the individual charge categories (for example, charges for theatre use, bandages, drugs and diagnostic tests) that are used to treat a patient in the course of an episode.⁶⁴ When charging for an all-inclusive package, a hospital operator is, generally, not expected to bill separately for items in the listed charge categories.65
- 8.87 HCA suggested that the number of pathology tests 'may be a good proxy for certain procedures, particularly [%]. This is in the important context of the IPA where three [%] contribute a disproportionate amount of the estimated price difference' between HCA and TLC. We therefore provide the revenue shares for $[\gg]$ of the largest $[\gg]$ in the common basket in columns 4 to 6 of Table 8.2. We note the following points:

⁶² We analysed the share of revenues rather than the count of items, because we can readily compare revenues, based on fees invoiced to PMIs.

⁶³ These are mostly charged to day-patients and include several or all aspects of the treatment (such as accommodation, theatre and pathology).

⁶⁴ For example, the all-inclusive package may contain the charges for pathology tests regardless of how many pathology tests had been ordered by the consultant. ⁶⁵ There are, however, contractually-specified exceptions, for example, in the case of high-value drugs.

- (a) For both HCA and TLC, a large share of their revenues are from packages (for both, over [≫]%). Within the charge item of 'packages' we are not able to observe the different medical tests or services charged for, for example, pathology tests or theatre time, and thus we are not able to observe the number of times that these services or tests have been performed. Therefore, even if these line items were good proxies for patient complexity, it is not possible to account for differences in patient complexity using the count of any of these line items.
- (b) One question related to the high number of packages is whether patients, for whom no package is charged, are more complex compared with patients on a 'package deal'. It seems plausible to argue that patients on a non-package deal could be more complex because they require a non-standard treatment for a given CCSD. However, even within a package, patients may have different degrees of complexity and therefore may need, for example, more or fewer pathology tests. The main difference to the non-package patients is that the financial risk lies with the hospital operator instead of the insurer. Because we are not able to observe details of packages, using pathology count as a proxy for complexity might not be a reliable approach.
- (c) While HCA uses more pathology charges compared with TLC, this might be explained by differences in billing practices, as noted by Bupa, AXA PPP and TLC. These billing differences may lead to HCA invoicing for more pathology tests even though it may not carry out more than TLC for a comparable patient. As such, the KPMG analysis may overstate the patient complexity differences between HCA and TLC, and so underestimate the estimated price difference.
- 8.88 We also provide the revenue share for all episodes in the data set in columns 7 to 9 of Table 8.2. The table shows that there are not very pronounced differences between the revenue shares for the two hospital providers, in particular with respect to pathology charges where these account for [≫]% of HCA's revenue, while for TLC the equivalent figure is [≫]%. Also, the table shows that the revenue share from packages is generally lower (on average [≫]%) across all treatments than it is for the IPA common basket, while also being somewhat higher at TLC ([≫]%) relative to HCA ([≫]%). The figures in Table 8.2 suggest that, when taking into account all episodes in the data set, this line item data does not clearly point to HCA treating a substantially higher share of complex patients relative to TLC.

Table 8.2: Share of revenue in each charge category within invoice data of HCA and TLC

| | IPA basket | | | Episodes with CCSDs H2002, H2003, G6500 | | | All episodes | | |
|----------------------------|--------------|------------|------------|--|------------|------------|--------------|------------|------------|
| Revenue shares | Total (1) | HCA (2) | TLC (3) | Total (4) | HCA (5) | TLC (6) | Total (7) | HCA (8) | TLC (9) |
| Theatre | [≫] | [≫] | [※] | [※] | [≫] | [≫] | [≫] | [≫] | [≫] |
| Accommodation | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] |
| Pathology | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] |
| Drugs and consumables | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] |
| Prosthesis | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] |
| Diagnostics (ex pathology) | [≫] | [≫] | [≫] | [%] | [≫] | [※] | [%] | [≫] | [≫] |
| Packages | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] | [≫] |
| Other | [≫] | [≫] | Ī≫] | [≫] | [%] | [≫] | [※] | [≫] | [≫] |
| Total | [≫] | [≫] | [≫] | [※] | [≫] | [≫] | [≫] | [≫] | [≫] |

Source: CMA analysis.

- 8.89 This evidence suggests that, on the one hand, the individual charge categories are of limited value for the IPA, because of the prevalence of packages for which information on the incidence of individual line items is not available.
- 8.90 On the other hand, based on the same analysis, we acknowledge that it is plausible that the charge categories, and in particular the number of pathology charges, could explain some of the price differences between HCA and TLC. It is, however, a separate question as to whether these charges, and in particular the number of pathology charges, are a good proxy for patient complexity. In particular ,we note:
 - (a) As pointed out by Bupa, a hospital provider's contract with an insurer generally specifies prices for some treatments. There exist differences between what HCA can bill for compared with TLC. This introduces uncertainty as to the accurate measurement of the charge categories and therefore their reliability in explaining the differences in prices between HCA and TLC.
 - (b) We had concerns around the comparability of line items, in particular in relation to any differences in the way in which line items had been aggregated into different broader categories by different providers, such that the number of charges for particular categories of line items may not be comparable across providers. As set out above, Healthcode identified a particular issue, as our analysis of the data did too, in relation to how different types of pathology charges had been classified as simply 'pathology' which raises clear issues around the comparability of this variable across providers and treatments.

%

- Additional response by HCA to the Remittal PFs
- 8.91 In response to the Remittal PFs, [%]
 - *(a)* [≫].⁶⁶ [≫]
 - (b) [%].⁶⁷
 - Our assessment
- 8.92 We acknowledge that the estimated price difference falls in response to the inclusion of the number of pathology charges when excluding episodes with package prices. However, because packages account for a large proportion and coverage of the overall sample used, as we outline in paragraph 8.86, and because we do not have information on the services, tests, etc administered to patients receiving package-price treatments, it would not possible to account fully for patient complexity in the IPA using pathology counts, or any other charge category.⁶⁸ This reaffirms our view that individual charge categories are of limited value for the IPA.⁶⁹
- 8.93 Using the IPA methodology to compare prices for Bupa's insured inpatients only, does not address our wider concern in relation to the lack of comparability of billing practices for all other insurers considered in the IPA and for Bupa's day-case patients. The evidence provided on Bupa's inpatients cannot be generalised to the IPA, because of the existence of packages. Therefore using the number of pathology tests is not meaningful in informing our view on controlling for patient complexity and on its exact impact on the estimated price difference. Taking into account all the above points, we conclude that, on the one hand, we do not consider that charge items are likely to be a reliable proxy for the complexity of a patient. On the other hand, we conclude that we are not able to rule out that charge items contain information on the complexity of a patient.
- 8.94 Notwithstanding this conclusion and with a view to assessing KPMG's analysis of using line items in the IPA, we have assessed the effect of the pathology charge count on the estimated price differences. We present the results in more detail below (see Table 8.7). Based on our analysis, which follows the methodology set out in HCA's IPA WP DRR, including the

⁶⁶ For both price differences, none of the annual price differences were statistically significant.

⁶⁷ None of the annual price differences were statistically significant.

⁶⁸ This requires that there is a link between charge categories and patient complexity.

⁶⁹ In the IPA basket, HCA derives [%]% of its revenue from packages. The respective share for TLC is [%]%. Furthermore, for this exercise only 15 insurer-year pairs could be used, while the total number of insurer-year pairs is 36. Hence, even if one accepts KPMG's argument, the evidence presented is not generalizable to the IPA as a whole.

pathology count in the IPA reduces the overall price difference between HCA and TLC to [\gg]%, but, based on the above discussion, we do not think that this reduction in the price difference is fully explained by HCA treating more complex patients.

Small number of treatments account for much of the price difference

8.95 In this section we address the point, raised by KPMG in the IPA WP DRR and in the Remittal PFs DRR, that a small number of individual treatments within the common basket account for a large proportion of the overall price difference. In assessing this point, we have requested additional views and evidence from the PMIs and also requested views on the related question of whether, as set out more generally in the preceding subsection, HCA is likely to treat more complex patients within these specific treatments compared with TLC. We first provide HCA's arguments, then set out the views of the PMIs in relation to this issue, and, finally, we present our view on this issue.

Parties' views

- HCA
- 8.96 [※].
- 8.97 The [≫]CCSDs which KPMG identified as making the largest contributions to the overall price difference between HCA and TLC were:
 - (a) [%]
 - (b) [%]
 - (C) [%]
 - (d) [%]
 - (e) [%]
- 8.98 KPMG also pointed out that the [≫] CCSDs that made the largest contribution to the overall weighted price difference, all of which were [≫], accounted for [≫]% of the overall weighted average price difference, but collectively accounted for only [≫]% of HCA's total revenues. KPMG showed that excluding these treatments reduced the price difference to [≫]% (for the 5-episode threshold) a price difference which was not statistically significant. The report stated that this was evidence that 'the price difference identified in the IPA WP is not systematic across all CCSDs'.

- 8.99 HCA's submission on the reasons why these [≫] specific CCSDs accounted for the majority of the price difference estimated by the IPA included an explanation of the factors that may be associated with patient complexity and the costs of treatment for these particular CCSDs. For some of these CCSDs, it also gave reasons why HCA was likely to treat more complex patients than TLC, as set out below.
- 8.100 [≫], HCA listed various factors that could drive price differences (that are not necessarily correlated with patient age, gender or length of stay), such as medication and consumables, pathology, the patient's test pathway, whether the procedure was conducted on an elective or emergency basis, and the severity of the patient's condition, and pointed out that the type of surgeon performing the procedure was likely to indicate whether the patient was more complex. [≫]
- 8.101 The IPA WP DRR also put forward a number of reasons why, in HCA's view, 'there appeared to be significant differences in patient mix between HCA and TLC' for the $[\aleph]$,⁷⁰ $[\aleph]$,⁷¹ $[\aleph]$;⁷²
 - (a) Episodes at HCA were likely to have more pathology charges on an invoice than TLC.
 - *(b)* Episodes at HCA were more likely to have theatre charges on an invoice than TLC.
 - (c) HCA performed 'far more' of these procedures as part of a multiple-CCSD episode.

All of which, in HCA's views, were indicative of HCA having a different patient mix for these [8] CCSDs.

- (d) HCA gave two clinical reasons why it saw more complex patients for these [≫] CCSDs:
 - (i) [**※**]
 - (ii) Referrals from GPs were likely to be routine cases whereas referrals from consultants were more likely to be symptomatic patients requiring more tests. [[≫]]

- 8.102 On the question of why HCA considered pathology charges to be a good proxy for patient complexity for these [%], it made a number of points:
 - (a) The IPA WP DRR focused on pathology charges, as [≫] accounted for a large proportion of the estimated price difference between HCA and TLC, and there was 'a clear clinical link between the number of pathology charge items and patient complexity for these treatments'.
 - (b) 'Further discussions have corroborated that for these [≫] procedures the number of pathology tests performed could be a proxy for more complex patients.' HCA also stated that the provision of pathology tests was either 'clinician driven or ... based on standard clinical protocols' and that the number was not determined by the hospital operator.
 - (c) Other line items 'could be good proxies for patient complexity', such as X-rays, CTs, MRIs, but that in the context of the common basket these charge items tended to occur in CCSDs that were less important in driving the overall weighted average price difference. For a number of procedures other than the [≫] dealt with in detail in the HCA submissions, 'it is likely that the count of pathology charges may be an important indicator of patient complexity' whereas for others, 'the count of pathology charges may not be as a good an indicator' of patient complexity. HCA pointed out that '[i]n order to determine whether pathology charges are a good indicator of patient complexity, an assessment made with clinical input, would need to be carried out on a procedure by procedure basis'.

Bupa

- 8.103 Bupa explained that different billing practices between HCA and TLC for day-case treatments⁷³ meant that a count of line items on the invoice would not be informative of patient complexity. Bupa noted the differences in billing practices between HCA and TLC for day-case treatments. In particular, it noted that these differences could be significant, as many of the episodes and procedures in the IPA were day-case treatments. For example, Bupa reported that over [≫]% of the treatments for [≫] for Bupa's patients were in a day-case setting.
- 8.104 In Bupa's view 'it seems unlikely that differing patient complexity would materially change the costs of treatment for some of these [≫] specific CCSD] codes', as [≫] tended to be delivered in 'day-case settings under

mild sedatives (rather than general anaesthetic), and typically in under an hour. They both tend to have very low rates of complication or mortality'. If a patient was particularly complex, they might be given another treatment (and different CCSD code), for example if a patient was too frail or too complex for a [\gg]. 'Therefore, some of the most complex patients will already have been filtered out of the analysis' in Bupa's view.

TLC

8.105 TLC stated that it had a very strong endoscopy department and that this offered the full range of treatments, carrying out complex as well as routine treatments. By way of illustration, TLC confirmed that it carried out Laparoscopic Cholecystectomy procedures and that this was a growing specialty of TLC.⁷⁴ TLC also said that it was currently building a new intensive care unit. In addition, TLC stated that, in its view, it had a good reputation with consultants because it did offer many sub-specialties that supported complex surgery.

Our assessment

- 8.106 Our assessment is that there are a number of reasons why the fact that these [≫] CCSDs account for a high share of the overall price difference does not undermine the robustness of our findings on the price difference between HCA and TLC:
 - (a) The identified treatments are high-volume and display large price differences; it is not surprising that these sorts of treatments play an important role in determining our overall results.
 - (b) To the extent that PMIs contract across a range of treatments, rather than tendering for each treatment or service line separately, we would not necessarily expect to find that HCA is more expensive than TLC for each and every treatment; this is why we construct a series of price indices to compare HCA and TLC at the aggregate level in the first place.
 - (c) Our hypothesis is that HCA has more market power than TLC and uses this to charge higher prices across a range of treatments. The question of in which particular treatments these higher prices are most pronounced does not change the overall outcome of higher prices being charged by HCA.

⁷⁴ Laparoscopic Cholecystectomy is a Top-5 CCSD (J1830).

- (d) Notwithstanding the fact that [≫] treatments account for a large share of the overall weighted price difference, it is also the case that HCA charges higher prices than TLC for most individual treatments in the common basket. As set out in Appendix G, HCA is more expensive than TLC for [≫] of CCSDs in the common basket ([≫] out of [≫]), so the overall positive price difference is not, in any sense, unrepresentative of the overall common basket.⁷⁵
- Additional responses by HCA to the Remittal PFs
- 8.107 In response to point 8.106(c) above, KPMG stated that the CMA's approach to assessing whether the overall price difference was 'unrepresentative' of the common basket was 'incorrect', as it did not account for the weight of each CCSD for each insurer in each year nor did it test the statistical significance of the price difference for each treatment. In response to these issues, KPMG tested the statistical significance of the contribution of each CCSD to the overall weighted average price difference. The analysis showed that:
 - (a) [×]
 - (b) [×]
 - (C) [%]
 - Our assessment
- 8.108 While we acknowledge KPMG's point on statistical significance in the Remittal PFs IPA DRR, even if we focus on all of the treatments with a statistically significant positive or negative impact on the overall price index, [≫]% of these treatments contributed positively to the price index.⁷⁶ Furthermore, while some CCSDs' contribution to the overall price index was statistically not significant, we have tested, and confirmed, the overall statistical significance of the price index. This suggests that we should include all CCSDs in our assessment of the price difference.
- 8.109 We compared the price differences based on these [≫]CCSDs with those based on the remaining CCSDs for each insurer in each year. As summarised in Table 8.3 below, the overall results indicate that the price difference for these [≫] CCSDs is much higher ([≫]%) than for the

⁷⁵ Appendix G, Figure 1.

⁷⁶ [※]

remainder of the common basket ([\gg]%).⁷⁷ Our analysis indicates that for almost all insurers and all years, these [\gg] CCSDs show substantially higher price differences than the remaining CCSDs, with these remaining CCSDs in many cases indicating that TLC is more expensive (for about [\gg] of all CCSDs in the common basket).⁷⁸ For example, for [\gg] the [\gg]-CCSD analysis shows HCA as being between [\gg] and [\gg]% more expensive than TLC (across different years), while looking at the remaining CCSDs we estimate negative price differences (between [\gg] and [\gg]%) indicating that TLC is more expensive. However, we also note that for a number of insurers ([\gg]) the price differences even when these [\gg] CCSDs are excluded are still positive and in some cases substantial.⁷⁹ For example, looking at [\gg] in 2009, HCA is [\gg]% more expensive than TLC for these [\gg] CCSDs and [\gg]% more expensive for the remaining CCSDs.

Table 8.3: Price differences for the top [\aleph] CCSDs and the remaining CCSDs

| | | % |
|---|--------------|--------------------|
| | [≫] CCSDs | Remaining CCSDs |
| IPA methodology | [%] | [%] |
| KPMG addition of count of pathology charge | [%] | [%] |

Source: CMA analysis.

8.110 These results indicate that, as KPMG's analysis suggested, these [≫] CCSDs account for a large proportion of the overall price difference between HCA and TLC, and for many individual PMIs in specific years these [≫] CCSDs are major determinants of the price difference between HCA and TLC. However, as set out in paragraph 8.106, above, we do not believe that this undermines the robustness of our IPA results.

Other issues raised by parties

- 8.111 In this section we summarise other issues raised by the parties in response to our Remittal IPA Working Paper. Those issues were:
 - *(a)* treatment complexity and the representativeness of the 'common basket';
 - (b) competition within and outside the common basket; and

⁷⁷ See Appendix G, where we set out in detail a number of robustness tests that we have conducted on KPMG's analysis.

⁷⁸ Appendix G, Figure 1.

⁷⁹ We note again that, for some smaller insurers the size of the sample used to calculate these price differences is very small, which may mean that these price differences (taken in isolation) are less robust.

(c) the causal relationship between HCA's market share and its prices.

Treatment complexity and the representativeness of the 'common basket'

- 8.112 As set out above, the IPA methodology controls for differences in treatment mix between HCA and TLC, as it focuses on a 'common basket' of treatments that both HCA and TLC provide.⁸⁰ Due to this focus, the IPA does not include all of the episodes for these providers only the 'overlap' and so does not include all of the episodes covered by the Healthcode data set.
 - HCA's view
- 8.113 HCA's economic advisers argued that the approach to controlling for treatment mix in the IPA was inadequate, because the common basket approach was not representative of either HCA's or TLC's businesses. In particular they noted that:

[A]nalysis conducted in the Data Room showed that the common basket, from a revenue perspective, is not representative of HCA's or TLC's businesses. For [≫]% of HCA's PMI-year pairs, the proportion of in-patient and day-case patient revenue associated with the common basket was less than [≫]%. Similarly, for [≫]% of TLC's PMI-year pairs, the proportion of in-patient and day-case patient revenue associated with the common basket was less than [≫]%.

- 8.114 Further, KPMG stated that the extrapolation of estimated price differences based on a common basket approach was flawed as the common basket approach is not representative of either HCA's or TLC's businesses, and did not appropriately control for the differences in treatments that the hospital operators perform, which could lead to differences in costs and could be linked to differences in patient complexity.
- 8.115 Its analysis set out the proportion of statistically insignificant price differences by complexity of treatment (as defined in the Healthcode data) and showed that for more 'complex' treatments, where HCA tended to concentrate its activity, the IPA was less likely to find a statistically significant price difference than for less 'complex' treatments. It concluded that:

... to the extent that the CMA considers it possible to extrapolate from the common basket to treatments outside it, it should take into account the possibility that treatments outside the common

⁸⁰ See paragraph 8.16.

basket, being mostly high complexity treatments, might also be not significantly different from what the CMA considers a competitive price benchmark.

- Our assessment
- 8.116 In relation to treatment mix, we noted in the Final Report that sensitivity checks of our results suggest that 'the conclusions of our price comparisons are robust to changes in the common basket of treatments'.⁸¹ However, we acknowledged that for smaller insurers, the common basket typically contains relatively few treatments and thus the results may be less robust.⁸²
- 8.117 As set out in Appendix C,⁸³ our IPA analysis is based on a relatively small subset of the Healthcode data set for a number of reasons:
 - (a) we are only comparing prices for day-case and inpatient treatments;84
 - (b) we are comparing the prices of HCA and TLC and so can only conduct our analysis on treatments that both HCA and TLC provide – the 'common basket'; and
 - *(c)* the IPA analysis only covers those treatments where at least five episodes are observed per treatment per insurer per year per hospital operator, which reduces the coverage of the sample further.⁸⁵
- 8.118 The IPA based on the 5-episode threshold covers episodes accounting for [≫]% of HCA's revenue in the final data set, while for TLC it accounts for [≫]%. Looking at the IPA conducted using the 30-episode threshold, the data set is further reduced, as treatments with lower patient volumes are no longer included. The data set used in the 30-episode analysis accounts for [≫]% of HCA's revenue in the final cleaned data set and [≫]% of TLC's.
- 8.119 Based on the data for AXA PPP and Bupa, the IPA covers less than [≫]% of the revenue accounted for by the Healthcode data for these insurers at both TLC and HCA, as set out in Appendix C, Table 2.
- 8.120 We do not consider that these small shares of revenue invalidate our analysis, for a number of reasons.

⁸¹ Final Report, paragraph 6.360.

⁸² ibid.

⁸³ Appendix C, paragraphs 9–18.

⁸⁴ Final Report, paragraph 6.339.

⁸⁵ Our regression approach (see paragraphs 8.159–8.160 and Appendix G) covers a larger proportion of the Healthcode data, as it includes all treatments with at least two episodes.

- 8.121 First, in order to make a meaningful comparison between HCA and TLC prices we only compare those treatments that are provided by both operators. Given that the range of services that HCA and TLC provide is not identical, there are treatments which HCA provides that TLC does not and vice versa. Therefore, there are many treatments that HCA and TLC provide, and which generate insured revenue for them, which are not relevant to our analysis.
- 8.122 Second, looking again at the revenue coverage of our IPA, we consider that the most relevant measure of its coverage is to focus on the 'overlap' treatments that both HCA and TLC provide to insured patients. For HCA, the IPA (5-episode version) accounts for [≫]% of the revenue generated by overlapping treatments in the final cleaned data set, while for TLC the equivalent figure is [≫]%. As such, our analysis does cover a substantial proportion of those treatments for which a price comparison between HCA and TLC is meaningful.
- 8.123 We are comparing prices in those treatments where HCA and TLC overlap and, hence, actually or potentially compete for insured patient business. Comparing price differences for those treatments where HCA and TLC do not overlap would be meaningless. Furthermore, given that we consider TLC to be HCA's closest competitor, we would expect a comparison of prices for those treatments where they overlap to be, at least, representative of HCA's pricing more generally and to be a reasonable proxy for HCA's relative market power. If anything, such a comparison may underestimate HCA's market power, as HCA is likely to have the ability to exercise its market power to a greater extent when pricing those treatments where it does not face direct competition from TLC.
- 8.124 On treatment complexity and whether prices for treatments outside the common basket may be closer to the 'competitive level', we would expect that HCA would have an incentive to charge higher prices for those treatments where it faces less competition, so we would not expect the common basket to lead us to overestimate the extent of HCA's market power when setting prices.

Competition within and outside the 'common basket'

8.125 In response to our argument that HCA faces low competitive constraints on treatments not in the common basket between HCA and TLC, [≫].⁸⁶ [≫].⁸⁷ [≫].⁸⁸

Our assessment

8.126 We note that in the Final Report we stated that '[flor central London, our analysis focuses on the comparison between HCA and TLC on the basis that they are the largest two operators in terms of size and we considered them to be the closest competitors to each other.⁸⁹ This view is unchanged. In fact, our view that TLC is the closest competitor to HCA is corroborated by TLC's overlap with HCA on single-CCSD episodes - [%]. While the evidence suggests that HCA faces some competition for CCSDs outside the common basket with TLC, it is the overall range of services offered at a hospital group that is a key factor in the price negotiations with PMIs. We therefore conclude that, while HCA may face competitive pressure on treatments outside the common basket, some of this competitive pressure is from hospitals that are not considered to have a comparable range of service offering and are therefore likely to exert a less effective competitive constraint than TLC. As such, this data confirms that TLC is HCA's closest competitor.

Causal relationship between HCA's market share and its prices

- 8.127 HCA submitted that the IPA findings in the Final Report did not demonstrate a causal relationship between local concentration, in particular HCA's high market share in central London, and local prices, in particular our finding that HCA charged higher prices than TLC. This subsection sets out, very briefly, what was said in the Final Report, HCA's arguments on this issue and our assessment.
- 8.128 In the Final Report, we stated that:

We found consistent results in relation to HCA and TLC in central London that supported the conclusions that HCA faces weak competitive constraints from its rivals in central London,

⁸⁶ HCA also states that the '[CMA's] position is not founded on any analysis of competition for treatments outside the common basket. HCA has already explained that the whole approach to measuring competitive constraints by considering competitors at a given point in time is inappropriate in a market where competition translates in a continuous stream of new treatments being introduced.' (HCA response to the Remittal PFs, paragraph 6.43.) ⁸⁷ [\approx]

⁸⁸ HCA response to the Remittal PFs, paragraph 6.45.

⁸⁹ Final Report, paragraph 6.338.

even from its closest competitor TLC (as reflected, for example, in their respective shares of supply). In particular, we found that HCA charges significantly higher prices to PMIs than TLC ...

... Notwithstanding the limitations of our empirical analysis ... we considered that, overall, for central London, the results of our empirical analysis all support our hypothesis that local substitutability plays a role in determining insured price outcomes ... ⁹⁰

- HCA's views
- 8.129 HCA's view was that the IPA: 'failed to establish any causal (as opposed to a merely correlative) relationship between allegedly higher prices and market concentration or adequately to consider alternative explanations for HCA's allegedly higher prices.'⁹¹ HCA's expert witness, Professor Michael Waterson, argued that there were other 'plausible [explanations for one provider being more expensive than another, including the possibility that] one operator tackles more difficult patients' and HCA argued that:

the CMA has failed to conduct any robust analysis to rule out the possibility that factors such as quality were joint determinants of both prices and market share, or that price differences may be caused by factors other than market concentration such as costs and, clinical factors, or the individual priorities and negotiating strategies of individual insurers.⁹²

8.130 HCA drew attention to one figure from the Final Report, stating that:

... the CMA's empirical analysis provided it with a very limited number of data points from which to infer the relationship between market concentration and insured prices. The CMA relied on the average price indices for two operators (HCA and TLC) in 2011, thus using only two data points in total. With so few observations, the only methodology available for charting the relationship was a simple graphical analysis, by which the two observations are plotted on a chart in order to discern whether there is a visual correlation between the two variables of interest (average price index and a proxy for local share of supply). Such an analysis is extremely crude. It does not provide

⁹⁰ Final Report, paragraphs 6.380 & 6.381.

⁹¹ HCA's Re-amended Notice of Application, 17 October 2014, paragraph 5 (a) (vii).

⁹² HCA's Re-amended Notice of Application, 17 October 2014, paragraph 126.

a reasonable basis for inferring a causal relationship at all; and in any event is a wholly inadequate basis for justifying an intrusive remedy such as divestiture. The crudity of the analysis is evident from Figure 7 of Appendix 6.12, which charts TLC's and HCA's respective average price indices against their shares of admissions (and, separately, capacity) in central London in 2011. No weight at all may reasonably be placed on the 'positive association' between market share and price observed by the CMA for only two operators in a single year.⁹³

- 8.131 HCA's expert witness, Professor Michael Waterson, pointed out that the fact that the price differences calculated by the IPA for many insurer-years were not statistically significant is 'substantially at variance with the theory ...' that 'greater market share ... leads to ... higher prices'.
- 8.132 In response to our Remittal PFs, HCA reiterated that 'the IPA cannot be seen to provide any evidence of a price differential between HCA and TLC on a like-for-like basis.'⁹⁴ Furthermore, HCA stated that 'even if one were to conclude that there was a price difference, the evidence overwhelmingly shows that this cannot be due to HCA's local market share.' HCA argued that variation in the estimated price difference across years and insurers while HCA's market share was stable demonstrated that there could be no causal link between price and market share.⁹⁵ It also stated that the KPMG analysis of spare capacity in central London further undermined any causal relationship between market share and insured price.⁹⁶
 - Our assessment
- 8.133 As explained in paragraphs 11.33 to 11.39, HCA mischaracterises our approach to linking high concentration, in particular HCA's high market share, and its pricing in central London. We have considered alternative explanations for HCA's higher prices (both differences in quality of care and in the complexity of HCA and TLC patients) and have based our view on a range of evidence about the competitive constraints facing HCA and its bargaining strength with PMIs, as well as HCA's profitability, rather than being based purely on market shares for HCA and TLC for one year, as HCA has suggested. Furthermore, we address the evidence on spare capacity in Section 4, above.

⁹³ HCA's Re-amended Notice of Application, 17 October 2014, paragraph 122.

⁹⁴ HCA response to the Remittal PFs, paragraph 6.49.

⁹⁵ HCA response to the Remittal PFs, paragraph 6.50.

⁹⁶ HCA response to the Remittal PFs, paragraphs 6.51–6.54.

Revised R-squared figures

- 8.134 As noted in paragraph 8.16, we estimated a number of regressions that sought to explain the prices that PMIs paid to hospital operators for each treatment in terms of patient characteristics. The R-squared figure of a regression is a measure of how much of the variation in prices is explained by the explanatory variables in the regression model. In this section we present the revised R-squared figures. We provide a more detailed discussion of the R-squared error in Appendix D.
- 8.135 We present our corrected R-squared statistics, alongside the R-squared figures as reported in the Final Report (column 1), in Table 8.4.⁹⁷ The R-squared statistics are presented in terms of the proportion of regressions for which the R-squared is above the threshold specified in the first column. Our corrected R-squared statistics in column 2 show that the large majority (69%) of treatment-level regressions have an adjusted R-squared statistic of over 50% and that 46% of regressions have an adjusted R-squared that is 80% or higher.

Table 8.4: Distribution of R-squared statistics for treatment-level regressions for the HCA and TLC price comparison

| | | % |
|--------------|--|--|
| R-squared | CMA adjusted R ² referred to in the Final Report | Adjusted R- squared based on revised data set* |
| | (1) | (2) |
| 90% or above | 89 | 27 |
| 80% or above | 99 | 46 |
| 70% or above | 100 | 54 |
| 60% or above | 100 | 62 |
| 50% or above | 100 | 69 |
| 40% or above | 100 | 75 |
| 30% or above | 100 | 81 |
| 20% or above | 100 | 87 |
| 10% or above | 100 | 92 |

Source: CMA analysis, KPMG CAT DRR (Table 9).

*R-squared results presented in this column incorporate the correction of the error in the calculation of adjusted R-squared, and corrections in data cleaning. Because of differences in data error corrections between KPMG and the CMA, as well as due to differences in adjusted and unadjusted R-squared statistics, our corrected results differ from KPMG's corrected results. Note: Each row in the table shows the proportion of regressions for which the R-squared was at or above the threshold specified in the first column.

8.136 In response to the IPA WP DRR, KPMG argued that 'there is a substantial amount of variation in episode prices that is not explained by [age, gender and length of stay]'. And that, in order to have confidence in the predictive power of our statistical model, the R-squared statistics should be higher.

⁹⁷ Note that we report the adjusted R-squared figures. The adjusted R-squared takes a similar approach to the unadjusted R-squared but takes account of the number of explanatory variables in the model, so that adding extra explanatory variables does not automatically increase the adjusted R-squared. The adjusted R-squared is generally lower (or, at least, equal to) the unadjusted R-squared.

KPMG showed that using line-item information in the regression somewhat increases the proportion of regressions with an R-squared above 50% from 69% to 84%.

8.137 As set out in more detail in Appendix D and taking into account our view of the R-squared statistics above, our analysis does nevertheless explain a large share of the variation in the episode price data.

Updated results of the IPA

8.138 In this section we present the results from the IPA, including the statistical significance testing. Further details on our approach to the statistical significance testing are presented in Appendix F. When presenting the price differences, we provide an interpretation of the results as well as the results of the statistical significance testing. The results are based on a modified approach to cleaning the data set, which we set out in Appendix E.

Statistical significance testing

8.139 We conducted statistical significance testing for the price differences in the price indices to understand whether the price differences between HCA and TLC reflected genuine difference or whether these were the result of random variation or statistical 'noise' in the data.⁹⁸ The code that we used in our original analysis contained an error, which KPMG identified in the CAT DRR.⁹⁹ This error resulted in an overstatement of the statistical significance of the calculated price differences in the Final Report. Subsequently we have corrected this error and in this section we present the results for the corrected statistical significance testing, while Appendix F also sets out a number of other improvements we have made to the testing procedure.

Results

8.140 In Table 8.5 below, we present the insurer-year price difference between HCA and TLC for the 5- and 30-minimum-episode threshold. As explained below, and set out in more detail in Appendix D, there are advantages and disadvantages of both thresholds. We therefore place equal weight on both

⁹⁸ To calculate the standard error we used a bootstrap approach, which we programmed in our statistical software, Stata.

⁹⁹ The error in the bootstrap is technical in nature and we include a detailed discussion of this in Appendix F. In summary, the coding error resulted in our using the variation generated for one treatment for the calculation of the standard error of other treatments as well. We have corrected this error and present the corrected results below. In addition we made additional changes to the bootstrap, for example the calculation of the weights in the bootstrap. We discuss these changes in Appendix F.

the 5- and 30-minimum-episode thresholds in our interpretation of the price difference.

- 8.141 The 5-episode threshold includes treatments with very low patient volumes, which has the disadvantage of not allowing us to be as confident as we could be that the treatment-level regressions in the IPA precisely identify the relationship between the patients' characteristics and the episode prices.¹⁰⁰ Increasing the minimum number of episodes per treatment increases our confidence that we are getting more precise estimates of the relationship between patient characteristics and prices.
- 8.142 Increasing the minimum number of episodes per treatment to 30 increases the precision and reliability of our statistical significance testing of any estimated price differences. The more observations that are available for a given treatment, the more information there is about the underlying true distribution of the episode prices for that treatment.
- 8.143 For the 5-episode threshold we are able to estimate 36 insurer-year price differences for HCA and TLC. For some of the insurer-year price indices, the relevant data were not available. The results suggest that [≫] of the 36 insurer-year price indices are positive, ie that HCA is charging a higher price than TLC.¹⁰¹ In particular, for the two largest insurers, AXA PPP and Bupa, the price difference is positive. [≫]. The overall price difference across all insurers and years, using a 5-episode minimum threshold, is [≫]%.
- 8.144 When using a 30-episode threshold, however, [≫] out of the 36 insurer-year price differences cannot be calculated. This is because, for these smaller insurers, the patient volumes are too low and the relevant treatments do not meet the 30-episode threshold in any year. The results show that all [≫] insurer-year price indices are positive. The individual insurer-year price differences are somewhat higher under a 30-episode threshold for some insurers, while for others the 30-episode results show lower price differences. The overall price difference across all years and insurers is [≫]% for the 30-episode threshold, compared with [≫]% for the 5-episode threshold.

 ¹⁰⁰ Having larger sample sizes – in our case, analysing treatments with higher numbers of patients being treated – leads to better estimates. In technical terms, larger sample sizes improve the consistency of our estimates meaning that the larger the sample, the less risk that the estimates that are produced will be biased.
 ¹⁰¹ Note that a more detailed discussion of our statistical significance testing is presented in Appendix F.

Table 8.5: Insurer-year price differences between HCA and TLC

%

| | | Price difference for a 5-episode threshold | Price difference for a 30-episode threshold |
|--------------|------------------------------|--|---|
| 2007 | AXA PPP | [≫] | [≫] |
| 2008 | AXA PPP | [≫] | [≫] |
| 2009 | AXA PPP | [※] | [≫] |
| 2010 | AXA PPP | [≫] | [≫] |
| 2011 | | [%] | [%] |
| 2011 2007 | Aviva | [%] | [%] |
| 2007 | Bupa Bupa | [≫] [≫] | [≫] [≫] |
| 2000 | Bupa | [%] | [%] |
| 2000 | Bupa | [%] | [%] |
| 2011 | Bupa | [≫] | [≫] |
| 2007 | Bupa Int'l | [≫] | [- ·] |
| 2008 | Bupa Int'l | [≫] | [≫] |
| 2009 | Bupa Int'l | [≫] | [≫] |
| 2010 | Bupa Int'l | [≫] | [≫] |
| 2011 | Bupa Int'l | [※] | [※] |
| 2007 | Cigna | [≫] | |
| 2008 | Cigna | [%] | |
| 2009 2010 | Cigna | [≫] | |
| 2010 | Cigna Cigna | [≫] [≫] | [%] |
| 2011 | Exeter | [%] | [%] |
| 2008 | PruHealth | [%] | |
| 2009 | PruHealth | [≫] | [%] |
| 2010 | PruHealth | [≫] | [≫] |
| 2011 | PruHealth | [≫] | [≫] |
| 2007 | SLH | [≫] | |
| 2008 | SLH | [≫] | [≫] |
| 2009 | SLH | [※] | [≫] |
| 2010 | SLH | [≫] | |
| 2011 | SLH | [%] | |
| 2009 2010 | Simplyhealth | [%] | [%/] |
| 2010 | Simplyhealth Simplyhealth | [≫] [≫] | [≫] [≫] |
| 2011 | WPA | [%] | [@≫] |
| 2010 | WPA | [%] | |
| Overall | | [※] | [≫] |

Source: CMA analysis from the Remittal IPA Working Paper. Notes:

1. This table presents statistical significance tests for the percentage price differences between HCA and TLC. Statistical significance is presented at the 99% level by ***, the 95% level by ** and the 90% level by *.

2. A positive number means that HCA is more expensive compared to TLC.

3. Price differences based on a 30-episode threshold cannot be calculated for some insurers in some years due to low patient volumes per treatment for some smaller insurers.

- 8.145 In terms of statistical significance, these price differences are statistically significant for [≫] of the 36 insurer-year pairs (based on the 5-episode threshold) and for [≫] of the 23 insurer-year pairs (based on the 30-episode threshold).
- 8.146 Looking at Table 8.6 below, where we averaged across insurers in each year, we see that, on average, increasing the threshold leads to increases in the price difference for some years but makes little or no difference in 2007, 2008 and 2011.
- 8.147 Overall, we find that both the price differences calculated using the 5- and 30-episode thresholds indicate that HCA charges higher prices than TLC in the region of [≫]% to [≫]% averaged across all five years of our data set.

These overall price differences are statistically significant at the 99% confidence level.

| | | | % |
|--|---------------------------------|---------------------------------|-------------------------------------|
| | Updated | d results | Original results in Final Report |
| | Median patient 30-episodes | Median patient 5-episodes | Median patient 5-episodes |
| | (A) | <i>(B)</i> | (C) |
| 2007 2008 2009 2010 2011 Overall | [%] [%] [%] [%] [%] | [%] [%] [%] [%] [%] | [%] [%] [%] [%] [%] |

Source: CMA analysis.

Notes:

1. This table presents the percentage price differences between HCA and TLC, averaged over all insurers in a given year. 2. A positive number means that HCA is more expensive than TLC.

Robustness checks and alternative empirical analysis

- 8.148 In this subsection we present a brief summary of three sets of robustness checks to our analysis:
 - (a) robustness of our price-index approach, in particular with respect to the different assumptions that we make (alternative representative patients and multiple CCSDs);
 - (b) robustness checks that we have conducted on KPMG's analysis of the line-item data; and
 - (c) an alternative empirical approach to estimating the price difference between HCA and TLC (the regression approach) and HCA's views on it.
- 8.149 We provide a more detailed description of these robustness checks and the detailed results in Appendix G.

Alternative representative patients

8.150 As we have discussed in paragraph 8.16 above, we used the 'representative patient' for each treatment to calculate the price difference between the hospital operators. In particular we defined the representative patient to have the median characteristics of the relevant patients. We tested the robustness of this definition by using alternative definitions. We tested whether defining the representative patient as the 25th and 75th percentile, rather than the

median, affected our results. Below we discuss the results, which we report in detail in Appendix G.

- 8.151 For the 25th percentile representative patient, the overall price difference reduces to [≫]% from [≫]% in our baseline, ie the 5-episode IPA, based on the median representative patient. Looking at the insurer-year results, we see some differences between these price differences and those set out in Table 8.5, though we note that the changes in the price differences for [≫] and [≫] are small, with the exception of [≫] in 2009.¹⁰² Similarly, for the 75th percentile representative patient, the overall price difference is slightly different, but quite close to our baseline results, at [≫]%. Again, the insurer-year results show some differences compared with those in Table 8.5, but the results for [≫] and [≫] are similar to the baseline results.
- 8.152 In addition we defined the representative patient as the median patient at HCA and the median patient at TLC respectively rather than taking the median across patients at both providers as we do in the baseline IPA approach. This robustness check responds to a submission by HCA's academic experts, Professors Gaynor and Pakes, suggesting that [≫]. The results suggest that this alternative definition of the representative patient has a negligible impact on the price difference between HCA and TLC. Specifically, using an HCA and TLC median patients the annual price difference is [≫]% and [≫]%, respectively, for the 5-episode threshold. The results suggest that the allocation of patients in the sense suggested by HCA's advisers does not have a material impact on our estimated price differences.
- 8.153 Having checked the robustness of our baseline results to different types of representative patients, overall our checks suggest that the results are robust with respect to alternative representative patients. While there is some variation in the price difference when using alternative representative patients (as expected), the variation is not substantial.¹⁰³

Multiple CCSDs

8.154 In our analysis we focused on episodes that have single CCSD codes only. The reason was that episodes with multiple CCSD codes might not be comparable between hospital providers and we therefore excluded episodes

¹⁰² Here the price difference increases from [\gg]% to [\gg]%.

¹⁰³ We would expect some variation in the price difference as a result of the change in the representative patients. We observe changes between [%] percentage points in the annual price differences.

with multiple CCSD codes from our analysis.¹⁰⁴ Nevertheless, we have checked the sensitivity of our results to the inclusion of those episodes with multiple CCSD codes (see Appendix E for details).

8.155 The estimated overall price differences that we calculate when we include multiple-CCSD episodes are [≫]% and [≫]%, for the 5- and 30-episode thresholds respectively. For the insurer-year price differences, the estimated price differences are mostly in line with the results for single-CCSD episodes only. We observe some differences in the insurer-year price indices, for example, for AXA PPP in 2008 the price difference turns from [≫]% to [≫]%. We conclude that our overall estimated price differences between HCA and TLC are reasonably robust to the inclusion of multiple-CCSD episodes.

Alternative charge items

8.156 As well as considering the impact of including the number of pathology charges as an additional variable in our analysis, we have also analysed whether any other charge categories, such as theatre or X-ray charges, have an impact on the overall price difference. The results in Table 8.7 below suggest that the estimated price differences when different line-item charge categories are included in the IPA range from $[\gg]\%$ (for pathology charges) to $[\gg]\%$ (for prostheses), compared with the baseline, 5-episode price difference of $[\approx]$ % that we estimated from the IPA (see Table 8.5, above). A similar picture emerges when using a 30-episode threshold (see Appendix G, Table 7). This suggests that the pathology count is the variable that has the biggest impact on the reduced price differences that HCA's economic advisers have calculated. However, as noted in paragraphs 8.80 to 8.93 above, we do not consider that the pathology count is a reliable measure of patient complexity and therefore we do not place any weight on the results of this analysis.

Table 8.7: IPA and alternative charge items ([\aleph] episodes)

| | Pathology | СТ | X-ray | MRI | ECG | Theatre | Nursing | Prosthesis |
|--|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 2007 2008 2009 2010 2011 Average | [%] [%] [%] [%] [%] |

Source: CMA analysis.

¹⁰⁴ In response to the Remittal PFs, KPMG submitted evidence in its KPMG IPA WP DRR that hospital providers and insurers used multiple-CCSD episodes on a widespread basis and that the inclusion of these episodes in the IPA reduced the average price difference between HCA and TLC. We provide more detail and our assessment in Appendix E.

Outliers in terms of pathology charges

- 8.157 We also analysed whether a small number of episodes with unusually high numbers of pathology charges (or 'outliers') could be driving the KPMG results. We excluded those outliers from the data and recalculated the price difference between HCA and TLC.¹⁰⁵ For example, for a specific CCSD code for [≫] patients in 2011, we drop all pathology charge counts that are above 40. This resulted in one observation out of [≫] being classified as an outlier which had a pathology charge count of [≫].
- 8.158 The exclusion of outliers increased the price difference by up to [≫] percentage point for the 5-episode threshold, which is a slightly higher price difference than in the KPMG analysis: [≫]% overall compared with [≫]%. For the 30-episode threshold, the price difference increased by up to [≫] percentage points: [≫]% compared with [≫]%. Based on this analysis, while excluding outliers (in terms of pathology charges) increases the price differences between HCA and TLC and reduces the average R-squared statistics, it does not appear that the results are being unduly driven by these outliers.

The regression approach

- 8.159 As an additional robustness check on our analysis, we used a regression approach to test the robustness of the representative patient assumption and the statistical significance testing in the IPA methodology. We outline the approach and HCA's responses to it in Appendix G.¹⁰⁶ This approach enabled us to obtain a simpler estimate of the price difference between HCA and TLC without making assumptions around, for example, the representative patient. One benefit of this approach was that we could then include more treatments (those with smaller patient volumes) and so increase the coverage of our analysis to about 91,000 episodes compared with around 68,000 episodes for the 5-episode threshold version of the IPA. This addressed one of the criticisms of our IPA analysis, which was that it covered relatively few treatments and small episode numbers.
- 8.160 The results of the regression approach, as set out in Appendix G, Table 10, suggest that the estimated overall price difference between HCA and TLC

¹⁰⁵ The rule we used to exclude an episode from the analysis was to do so if the pathology count was, respectively, above one, two or three times the standard deviation of the mean pathology count for a particular treatment. Our preferred specifications drop two and three times the standard deviation, while we report dropping one standard deviation for completeness.

¹⁰⁶ HCA made a number of criticisms of the suitability of our econometric model and the extent to which our regression approach represented an effective robustness check of our IPA results. HCA's views on this are set out in Appendix G.

was [\gg]%. This estimated price difference was in line with the price difference of [\gg]% to [\gg]% in the IPA. In addition, we are interested in whether the inclusion of pathology charges reduces the price difference between HCA and TLC. The results suggested that controlling for pathology charges in addition to the original variables, the price difference reduces, as set out in Appendix G, Table 11. Overall we conclude that the regression approach was consistent with the IPA results.

Conclusions on insured prices

8.161 In the Final Report, our conclusion in relation to our empirical analysis of insured prices in central London was that:¹⁰⁷

We found consistent results in relation to HCA and TLC in central London that supported the conclusions that HCA faces weak competitive constraints from its rivals in central London, even from its closest competitor TLC (as reflected, for example, in their respective shares of supply). In particular, we found that HCA charges significantly higher prices to PMIs than TLC. We found this to be the case on average across PMIs, and for the large majority of individual PMIs [%], for each year between 2007 and 2011 inclusive. Over this period, HCA charged prices to PMIs that were on average [%] per cent higher than TLC. In addition, in relation to the prices paid by PMIs relative to self-pay patients for HCA, we found that [%] paid prices that were similar to, and in a small number of cases up to [%] than, the prices paid by self-pay patients, [%] paid prices to HCA that are higher than the prices paid by self-pay patients on average in 2007 to 2011.

- 8.162 As set out in this section, our analysis of insured prices in central London focused on comparing prices that HCA and TLC charge to PMIs. In order to ensure that we have compared prices on a like-for-like basis, our analysis controlled for:
 - (a) differences in the range of treatments that each provider offers by only comparing those that both HCA and TLC provide to PMIs' patients, that is, the 'common basket' of treatments; and

¹⁰⁷ Final Report, paragraphs 6.380.

- (b) differences in the complexity of patients at HCA and TLC for the same set of treatments by controlling for length of stay, patient age and gender in our treatment-level regressions.
- 8.163 As set out above, our IPA methodology produced estimates of price differences between HCA and TLC for 36 insurer-year pairs (as presented in Tables 8.5 and 8.6) which showed that, for many insurers in many years, HCA charged higher prices than TLC. Looking at the overall average price difference across all insurers and all years also indicated that HCA's prices were higher than TLC's, by between [≫] and [≫]%, and that this difference was statistically significant.
- 8.164 During the remittal, HCA has put new submissions and evidence to us that our IPA does not fully account for differences in patient complexity between HCA and TLC. HCA has suggested that the number of pathology tests is an indicator of patient complexity for certain procedures, particularly [≫], and that introducing the number of pathology tests as an additional variable in our analysis reduces the overall estimated price difference. However, we do not consider that the number of pathology tests is a reliable proxy for patient complexity in this data set, such that it would allow us to control for differences in patient complexity and so give a sufficiently robust estimate of the price difference on a like-for-like basis.
- 8.165 While the evidence submitted on patient co-morbidities is consistent with HCA's argument that it treats more complex patients, we do not consider the evidence presented to be direct evidence of a difference in patient complexity between HCA and TLC which allows us to control sufficiently for any such differences in our quantitative analysis. The evidence was based on HCA data only and we are therefore not able to assess the differences between HCA and TLC, which would be necessary to establish the effect of patient complexity on the price difference between HCA and TLC in the IPA.
- 8.166 Having assessed this new analysis and evidence on patient complexity, we cannot rule out the possibility that our IPA analysis may not fully account for differences in patient complexity between HCA and TLC. As a result, we can no longer conclude with any precision on the size of the price difference between HCA and TLC when calculated on a robust like-for-like basis.

9. Profitability

Our findings in the Final Report

- 9.1 An indicator of the extent of competition in a market is the level of profits of the firms involved. In the Final Report we set out the evidence and analysis in relation to profitability in paragraphs 6.441 to 6.470 (supported by Appendices 6.13 and 6.14 on profitability and the cost of capital) and our conclusions were set out in paragraphs 6.471 to 6.477.
- 9.2 We found that, during the period of review (between 2007 and 2011), HCA had been earning returns that were substantially and persistently in excess of the cost of capital.¹ HCA made an average annual return of [≫]%, compared with a WACC of between 7.2 and 10.5%.
- 9.3 We assessed the profitability of HCA's UK operations as a whole, ie including insured, self-pay and international patients.

Further assessment during the Remittal of HCA profitability

- 9.4 In our Remittal PFs, we provisionally concluded that the evidence provided to us by Bupa on HCA's financial performance suggested that HCA's profits and hence its profitability, as measured by its return on capital employed (ROCE), may have increased since the period of review of our original investigation (2007 to 2011). However, as we did not receive any sub-missions, from HCA or other parties, providing evidence or argumentation which challenged the robustness of the original profitability analysis, or suggested that HCA's profitability had declined since 2011, we determined at that time that it was not necessary to carry out additional analysis in order to understand whether HCA's profits had increased since 2011, since this would not have an impact on our original conclusions on the existence of an AEC. Therefore, in the Remittal PFs we provisionally readopted our finding from the Final Report that HCA made profits that were substantially and persistently in excess of the cost of capital.
- 9.5 As set out in Section 8 of this report, our revised IPA no longer allows us to conclude on the size of the price difference between HCA and TLC, as we cannot be sufficiently certain that we have adequately controlled for any differences in patient complexity between HCA and TLC and are comparing like with like.² As a result, we are no longer able to use our IPA in order to

¹ We also found that BMI and Spire had made excess returns over the relevant period, although most or all of these operators' activities were outside central London.

² Remittal PFs, paragraphs 11.25–11.37.

assess the potential impact of divestiture on HCA's prices. Therefore, as part of our assessment of the proportionality of a divestiture remedy, we decided to use our profitability analysis to identify the extent to which HCA's prices exceeded the level at which it would have made a return in line with its cost of capital and, therefore, the potential impact of a divestiture remedy on the prices charged by HCA to its customers. For these purposes, we concluded that it was necessary to (*a*) update our profitability analysis to cover the period up to 2015,³ and (*b*) identify the relative profitability of HCA's UK (selfpay and insured) and overseas customers, through an allocation of overhead costs and capital between customer types.

9.6 In this section we set out the further analysis that we have undertaken, together with our consideration of the comments made by parties concerning our approach. The results of these analyses have been used (*a*) to assess whether HCA was making excess economic profits (to contribute to our assessment of whether there was an AEC), and (*b*) to estimate the potential impact of a divestment on HCA prices (to contribute to our assessment of the proportionality of potential remedies).

Approach to ROCE analysis

- 9.7 The basic approach that we have adopted to assessing the ROCE of HCA remains as set out in Section 6 of the Final Report and Appendices 6.13 to 6.17.⁴ In updating our analysis, we have adopted the same methodology, although we have made a number of adjustments to reflect the additional information that we have received during the remittal. We discuss each of these adjustments below.
- 9.8 HCA provided us with financial information (profit and loss accounts and balance sheets) for the period 2012 to 2015. We used this data to identify the earnings before interest, tax, depreciation and amortisation (EBITDA) of HCA's UK business, as well as the value of all capital employed, with the exception of land and buildings.

³ As set out in the Remittal 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).

⁴ Readers should refer to the relevant sections of the Final Report for a detailed discussion of the approach adopted to estimating both the ROCE and WACC of HCA (and other private hospital operators).

Land and buildings valuations

- 9.9 The carrying value of land and buildings on HCA's balance sheet was recorded at historical cost, rather than at the cost of acquiring such buildings in the current market (the modern equivalent asset value). As a result, the balance sheet values of buildings were likely to be underestimated in light of the significant appreciation of property values in central London over the last 15 years.
- In our analysis in the Final Report,⁵ we used two benchmarks for the value of 9.10 property employed by HCA. The first was a property valuation carried out by Altus Edwin Hill (for HCA) as of January 2013, which valued HCA's 'owned'⁶ buildings on the basis of their replacement cost, and its land on a residual value basis assuming that the building would have planning permission for commercial (office) use. In the Final Report, we observed that the rents charged for medical properties were similar to those assumed by Altus Edwin Hill for commercial buildings and, on this basis, concluded that the assumption of commercial alternative use was the most appropriate. We then applied an estimate of depreciation based on Valuation Office Agency (VOA) reports, which are used for the purposes of estimating business rates.7 We used Altus Edwin Hill's 2013 property valuations (adjusted for depreciation) as the basis for the analysis across the whole period, ie we did not make any adjustments for changes in the capital value of property over the 2007 to 2011 period.⁸ This property valuation formed the basis of our 'base case'.
- 9.11 The second benchmark used was based on a report prepared by KPMG (for HCA) as of early 2013, which valued HCA's 'owned' buildings on the basis of residential alternative use. In this case, we did not seek to apply depreciation to the value of the properties as we considered that this would already be captured in the price that a residential developer would be prepared to pay for the buildings. However, given the significant increases in the value of residential property in central London over the 2007 to 2011 period, we applied Land Registry price indices (for Westminster and Southwark) to KPMG's estimates of the total capital value of buildings. This gave a capital

⁵ Final Report. Appendices 6.13–6.17.

⁶ We defined 'owned' buildings to be those where HCA either held the freehold or where it held a long leasehold and paid a peppercorn (or nominal) rent. All buildings which HCA leased and on which it paid a substantive rent, were treated as rented, ie their capital value was not included in HCA's capital employed but the rent paid was deducted from HCA's EBITDA.

⁷ These reports are prepared by the VOA based on an inspection of the properties and an assessment of their level of obsolescence. We observed that the VOA estimates of obsolescence for HCA's buildings were lower than those estimated by Altus Edwin Hill, such that this approach resulted in a higher property value than if we had just used the Altus Edwin Hill valuations.

⁸ In light of the significant growth in the value of property over this period, this approach was likely to be conservative.

value that increased by around [\gg]% between the beginning of 2007 and the end of 2011. We considered this 'KPMG' approach as a sensitivity on our base case, estimating HCA's returns both taking into account the gain made on its properties over the period ('full articulation' of its accounts) ('KPMG valuation 1') and excluding this gain, ie just taking into account operating profits (but uplifting capital employed to reflect growth in property values) ('KPMP valuation 2').

9.12 In updating our analysis, we have estimated HCA's ROCE using both of these approaches (and both sensitivities on the KPMG approach), with the results set out in Table 9.1.

Results of our analysis

Table 9.1: HCA ROCE, 2007 to 2015

| | | | | | | | | | | % |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------------|
| | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | FY15 | Average (2007–2015) |
| Base case KPMG valuation 1* KPMG valuation 2† | [%] [%] [%] | [※] [※] [※] | [※] [※] [※] | [%] [%] [%] | [※] [※] [※] | [※] [※] [※] | [※] [※] [※] | [※] [※] [※] | [※] [※] [※] | [%] [%] [%] |

Source: CMA analysis.

*These results are based on the full articulation of HCA's accounts, ie the capital gains made on HCA's property portfolio is recognised (as income) through the P&L.

†These results are based on the partial articulation of HCA's accounts, ie the capital gains made on HCA's property portfolio is not recognised as income in the P&L. However, the level of capital employed is adjusted each year to reflect the growth in property values.

- 9.13 We compared these updated results with the original results⁹ and noted that:
 - (a) HCA's ROCE had increased by around one percentage point under the base case scenario (to [≫]%, compared with [≫]%);
 - (b) under the KPMG property valuation, with full pass-through of property gains, the ROCE result was broadly unchanged ([≫]%, compared with [≫]%); and
 - (c) under the KPMG property valuation, excluding the capital gains on property, HCA's ROCE had declined by around 1.5 percentage points (to [≫]%, compared with [≫]%).
- 9.14 These results indicate that HCA's profitability has not changed materially in the last few years. In addition, under all three scenarios, HCA's profits have persistently exceeded the firm's cost of capital. However, we observed that the range of ROCE estimates generated by this analysis [%] to [%]% –

⁹ See the Final Report, Appendix 6.13.

was quite broad. Therefore, we next considered which of these scenarios was the most relevant for the purposes of assessing the potential impact of remedies on prices, taking into account any new evidence that we have collected.

Consideration of scenarios

Property valuation

- 9.15 First, we considered which approach to property valuation (Altus Edwin Hill or KPMG) best reflected the costs (capital employed) that an efficient entrant would be likely to incur in seeking to enter the central London market. In the Final Report,¹⁰ we observed that the rents charged for medical properties were similar to those assumed by Altus Edwin Hill for commercial buildings and, on this basis, concluded that the assumption of commercial alternative use was the most appropriate, ie that the Altus Edwin Hill valuation was likely to be the most accurate and should, therefore, be used in our base case scenario. However, during the remittal we have collected several new pieces of evidence which suggest that property market conditions may have changed since 2011:
 - (a) A Cushman & Wakefield (C&W) report, prepared for Cleveland Clinic, indicates that there was a substantial increase in the rate of conversion of commercial properties to residential use (in Westminster) between 2009 and 2012.¹¹ Westminster City Council suggested that this was the result of strong growth in the value of residential property in recent years (relative to the value of commercial property), which had made it more attractive to convert buildings from office use.¹²
 - *(b)* In May 2013, secondary legislation was introduced by the government to facilitate change of use from offices (B1 (a)) to homes (C3). The aim of this change was to provide new homes in existing buildings. In October 2015, these (more liberal) permitted development rights were made permanent.¹³ Initially, Westminster was given an exemption to this legislation for its Central Activity Zone, an area that includes Marylebone where a number of HCA's hospitals are located. However, exempt areas

¹² WCC Report, slide 4.

¹⁰ Final Report, Appendix 6.17, paragraph 55.

¹¹ This report showed that in 2009, 66 buildings in Westminster were converted from commercial to residential use, while in 2012, the number of commercial to residential conversions increased to 120.

¹³ DCLG announcement.

will need to make an Article 4 direction¹⁴ (by May 2019) if they wish to continue determining planning applications for the change of use.

- (c) We have also taken into account Cleveland Clinic's evidence on the purchase cost of its building in 33 Grosvenor Place. While this is only one 'data point', we considered that it was potentially informative of the costs faced by a private hospital operator in entering the central London market.
- 9.16 We observed that an increase in the rate of conversions of commercial buildings to residential use could be expected to reduce the price differential between these two categories. In addition, to the extent that it has become easier for HCA to convert its hospital buildings to residential use (a higher-value use), this would suggest that the KPMG valuation may better represent the opportunity cost to HCA of operating in central London, at least towards the end of the 2007 to 2015 period.
- 9.17 However, we noted that *(a)* the price differentials between residential and commercial property have not disappeared (to date) and we would expect such convergence in prices to take a number of years to be realised (if at all); and *(b)* several of HCA's properties were located within the Westminster Central Activity Zone, which is currently exempt from the new permitted development rights and may continue to be so if WCC obtains an Article 4 direction to allow it to continue to determine planning applications for change of use. This evidence would suggest that the value of HCA's hospital buildings was likely to be somewhere between the Altus Edwin Hill and the KPMG valuations.
- 9.18 Next, we considered the price that Cleveland Clinic paid for 33 Grosvenor Place. It told us that it paid £[≫] million for a building with a net internal area of around 191,000 sq ft, ie a price of [≫]. We compared this with the building valuations carried out by Altus Edwin Hill (alternative commercial use method) and KPMG (alternative residential use method) on HCA's property portfolio:
 - (a) Altus Edwin Hill estimated an undepreciated replacement cost of approximately £[≫] per sq ft (which was around £[≫] on a depreciated replacement cost basis);

¹⁴ An Article 4 direction allows a local planning authority to remove permitted development rights, either by means of a condition on a planning permission, or by means of an Article 4 direction. The restrictions imposed will vary on a case-by-case basis and the specific wording of such conditions or directions. Planning guidance.

- (b) KPMG's valuation (as indexed by the CMA) was approximately $\pounds[\gg]$ per sq ft as of the end of 2015.¹⁵
- 9.19 [≫]. Evidence provided to us by Cleveland Clinic indicates that 33 Grosvenor Place is in a significantly more expensive location (next to Buckingham Palace) than the majority of HCA's hospitals (in Marylebone, St John's Wood and Southwark). For example, C&W's research indicates that prime capital values in Knightsbridge are £2,100 per sq ft, [≫], while prime capital values are only £1,350 in the Marylebone area and £1,150 in Southbank. This indicates that HCA's buildings should attract a lower average valuation per sq ft than 33 Grosvenor Place, and probably below the prime capital values in the relevant areas of central London.
- 9.20 Finally, in coming to a view on the appropriate property valuation, we considered the potential impact of the costs of reconfiguring a building to operate as a private hospital.¹⁶ We noted that the level of such costs would depend on the type of building purchased. For example, Cleveland Clinic would need to incur such costs in relation to 33 Grosvenor Place, while an acquirer of the Ravenscourt Park hospital, for example, would be likely to have much reduced costs in this respect as the building is already configured as a hospital. [≫]. Our view is that making specific assumptions in relation to such costs is unlikely to be reliable. However, we have taken these (potentially significant) costs into account in determining the relative weight to place on the Altus Edwin Hill and KPMG property valuations.
- 9.21 The evidence that we have collected indicated that the value of HCA's land and buildings was likely to be between the Altus Edwin Hill and the KPMG valuations. C&W's report, together with the information on the purchase price of 33 Grosvenor Place, might suggest that a value approximately midway between these two points would be appropriate. However, when taking into account the potential costs of converting a building to hospital use, which could add significantly to the overall cost of entry, we concluded that more weight should be placed on the KPMG valuation.

¹⁵ Altus Edwin Hill valued HCA's hospital buildings plus land at approximately $\pounds[\aleph]$, which is equivalent to $[\aleph]$ of net internal area (based on total net internal area of HCA's hospital buildings of just under $[\aleph]$ sq ft). The depreciated replacement cost used is approximately $\pounds[\aleph]$ per sq ft.

KPMG valued HCA's hospital buildings plus land at approximately $\pounds[\&]$ as of 2013, which we have indexed (using Land Registry price indices) to approximately $\pounds[\&]$ as of the end of 2015. This is equivalent to $\pounds[\&]$ per sq ft of net internal area.

¹⁶ In our analysis, we have included the net book value of HCA's fixtures, fittings and equipment (as shown on HCA's balance sheet), as well as capitalising IT systems. Therefore, no further adjustments are required to reflect these elements of fitting out a hospital.

Treatment of capital gains

- 9.22 As set out in Table 9.1, we estimated HCA's ROCE, using the KPMG property valuation, both passing through the capital gain HCA has made on its properties and excluding this capital gain. In the Final Report,¹⁷ we noted that the increase in value of central London hospital buildings may represent a 'windfall', which was unrelated to competitive conditions in the market for private healthcare. Our purpose in updating the profitability analysis has been to identify the economic profits currently being made by HCA and, thereby, to estimate 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. In the first instance, we noted that capital gains made in previous years may not be repeated in the future, ie HCA may make returns in line with the 'KPMG 2' scenario in the future if property prices stabilise at the current level. Second, regardless of property value appreciation or depreciation over time, we would not necessarily expect such changes, which are only discovered at the end of a period, to be reflected in the pricing of HCA or other competing hospital groups, ie we would not expect a private hospital operator to base its pricing on an estimate of its costs plus or minus any expected change in the value of its property over the coming year.
- 9.23 On this basis, we concluded that, for the purposes of assessing the potential impact of remedies, such as divestiture, it was appropriate not to take into account capital gains made over the period. As a result, in conducting our analysis of profits by customer type, we have used a range of returns between the 'base case' and 'KPMG 2' scenarios, as set out in Table 9.1, with more weight placed on the latter for the reasons set out in paragraphs 9.15 to 9.21.
- 9.24 However, in terms of assessing the level of profits realised by HCA in the past, we consider that some weight should also be placed on the 'KPMG 1' scenario, ie recognising the capital gains that HCA has made.¹⁸

Allocation of profits between UK and overseas patients

9.25 Having identified the relevant range of overall returns made by HCA, the next step was to estimate the breakdown of returns between HCA's UK

¹⁷ Final Report, Appendix 6.13, paragraph 181.

¹⁸ We note that this approach is logically consistent since it reflects the overall change in the value of capital employed by HCA over the period with depreciation charged on some assets (ie equipment and leasehold building improvements and refurbishments) to reflect their decrease in value and the increase in value of other assets (ie the owned hospital buildings) also taken into account.

insured and self-pay patients, for whom we have identified an AEC, and its overseas patients.

9.26 HCA provided us with information on its gross margins by patient type, as set out in Table 9.2. This shows that HCA's margins on 'embassy' patients, which comprise the large majority of overseas patients, have [≫] since 2011, such that in 2015 there were [≫] between the margins earned on these patients and those earned on UK insured and self-pay patients.

| | | | | | % |
|--|--|--|--|-----------------------------|--|
| Payor | 2011 | 2012 | 2013 | 2014 | 2015 |
| Embassy NHS Other* PMI International PMI UK PMI Self-pay | $[K] \\ [K] \end{bmatrix}$ | [%] [%] [%] [%] [%] [%] | [%] [%] [%] [%] [%] [%] | [%] [%] [%] [%] [%] [%] [%] | [%] [%] [%] [%] [%] [%] |
| Grand total | [≫] | [≫] | [≫] | [≫] | [≫] |

Table 9.2: HCA gross margin by patient type (or 'payor')

Source: HCA.

*Other includes sponsored patients, travel insurance and any remaining smaller payors.

- 9.27 In order to estimate ROCE by patient type, it was necessary to split overhead costs and capital employed between the various patient types. There are a number of potential approaches that can be adopted to allocate shared costs between different activities within a business. For the purposes of this analysis, we considered that the most straightforward approach (and the one requiring the fewest assumptions) was to allocate such costs on the basis of relative activity levels across customer types.¹⁹ We used information on levels of activity by patient type in order to do this: specifically, we took into account the number of inpatient nights, day case admissions and outpatient visits, combining these in four different scenarios:
 - (a) Scenario 1: we assumed that one inpatient night was equivalent in terms of overhead costs and capital employed to one day-case treatment and that either of these was equivalent to three outpatient visits.
 - (b) Scenario 2: we assumed that one inpatient night was equivalent in terms of overhead costs and capital employed to one day-case treatment and that either of these was equivalent to five outpatient visits.

¹⁹ This approach seeks to identify the average cost of providing treatment to a patient of each type (ie UK or overseas), across the total number of patients treated. It assumes that overhead and capital costs are incurred approximately in proportion to the level of activity by patient type. We consider this to be a reasonable approach.

- (c) Scenario 3: we assumed that one inpatient night was equivalent in terms of overhead costs and capital employed to 1.5 day-case treatments and that either of these was equivalent to three outpatient visits.
- (*d*) Scenario 4: we assumed that one inpatient night was equivalent in terms of overhead costs and capital employed to 1.5 day-case treatments and that either of these was equivalent to five outpatient visits.
- 9.28 These assumptions were 'high level', based on our broad understanding of the time taken and capital involved in various treatment modalities. All of these scenarios assumed that the costs of treating a UK patient and an overseas patient are the same for the same length of stay/treatment modality. We recognised that there are significant uncertainties with making these types of assumptions given the broad range of medical treatments offered and differing needs of patients, which we sought to reflect in the range of scenarios considered. However, we noted that the results of the analysis are not particularly sensitive to which of these scenarios is used.
- 9.29 The results of this analysis are shown in Table 9.3. This suggests that in 2015 between [≫]% and [≫]% of overhead costs and capital should be allocated to UK patients and between [≫]% and [≫]% to overseas patients.

Table 9.3: Weighted split of activity by patient type (or 'payor')

| Scenario 1 | % |
|--|-------------------|
| UK patients Overseas patients NHS | [※] [※] [※] |
| <i>Scenario 2</i> UK patients Overseas patients | [%] [%] |
| NHS patients | [≫] |
| Scenario 3 UK patients Overseas patients NHS patients | [%] [%] [%] |
| Scenario 4 UK patients Overseas patients NHS patients | [%] [%] [%] |

Source: CMA analysis.

9.30 We excluded all income from NHS patients from this analysis as well as [≫]% of total overhead costs and capital, which corresponded to the NHS share of total patient activity in 2015. Table 9.4 shows the returns and economic profits earned on each of UK and overseas customers as of 2015, under both the base case and the KPMG 2 scenarios. This analysis indicated that HCA's prices to UK patients (in 2015) exceeded the level where it would have earned its WACC (of 10%) by between 3.1% and 10.7%. As explained in paragraph 9.22, we have placed more weight on the

KPMG 2 scenario, which gives a range of between 3.1% and 6.2%. Similarly, when using a WACC of 9% (the midpoint of our range) HCA's prices to UK patients (in 2015) exceeded the level where it would have earned its WACC by between 4.5% and 11.5%. Under the KPMG 2 scenario, the range becomes 4.5% to 7.5%. In our NPV analysis discussed in Appendix J, we consider scenarios in which HCA's current prices exceed the competitive level by between 3.0% and 7.5%.

Table 9.4: ROCE and economic profit by customer type

WACC of 10%

| Cost allocation (UK/overseas) | UK pat | ients | International patients | | |
|--|--------------------|-------------------|------------------------|-------------------|--|
| 77/22 | 'Base case' | 'KPMG 2' | 'Base case' | 'KPMG 2' | |
| ROCE (%) Economic profits (£m) EP / revenues (%) | [≫] [≫] 7.9 | [%] [%] 3.1 | [≫] [≫] [≫] | [※] [※] [※] | |
| 73/26 ROCE (%) Economic profits (£m) EP / revenues (%) | [≫] [≫] 10.7 | [%] [%] 6.2 | [※] [※] [※] | [※] [※] [※] | |

WACC of 9%

| Cost allocation (UK/overseas) | UK pat | ients | International patients | | |
|--|--------------------|-------------------|------------------------|-------------------|--|
| 77/00 | 'Base case' | 'KPMG 2' | 'Base case' | 'KPMG 2' | |
| 77/22 ROCE (%) Economic profits (£m) EP / revenues (%) | [≫] [≫] 8.7 | [≫] [≫] 4.5 | [%] [%] [%] | [※] [※] [※] | |
| 73/26 ROCE (%) Economic profits (£m) EP / revenues (%) | [≫] [≫] 11.5 | [≫] [≫] 7.5 | [%] [%] [%] | [※] [※] [※] | |

Source: CMA analysis.

Parties' views on profitability

HCA

9.31 HCA reiterated its view that, for the purposes of a ROCE analysis:

- (a) property leases should be capitalised and included in the capital base;
- (b) intangible assets, such as HCA's reputation and the value of HCA's hospital brands should be assigned a value and included in the capital base; and
- *(c)* reinstatement values could not be used as a proxy for the Value to Business (VTB) of HCA's hospital buildings. Rather, these buildings

should be valued at their highest value alternative use, which HCA considered was for conversion to residential property.²⁰

- 9.32 An expert report submitted by HCA stated that CMA should have assigned value to a range of intangible assets that HCA had developed and that were key to its business, including brand, reputation, specialist staff, relationships with GPs, consultants and patients, including self-pay patients, embassies and international patients. It noted that the CMA appeared to recognise the importance of brand and reputation in the private healthcare market and should, therefore, have recognised the value to the business of this intangible asset.
- 9.33 HCA told us that its contribution margin had declined between 2011 and 2015 (from [≫]% to [≫]%), which was consistent with increasing PMI bargaining power and increasing competition more generally.
- 9.34 HCA stated that the UK PMI contribution margins were lower than those for Embassy patients and international PMI patients, due to the higher levels of acuity for overseas patients. HCA suggested that, given the competitive alternatives available to international patients, the comparison of contribution margins on UK and international patients provided further evidence to contradict the CMA's suggestion that HCA's profits were driven by any ability to charge higher prices, or by a lack of effective competition.
- 9.35 HCA noted that LaingBuisson's comparison of the margins earned by a number of the central London operators between 2006 and 2014, showed that these were closely grouped for the larger hospital operators, with the margins for HCA International, St Martin's Healthcare, TLC and the Bupa Cromwell often overlapping during the period. HCA told us that this was not consistent with the CMA's finding that TLC's ROCE was in line with the estimated industry WACC, but that HCA's ROCE was 'excessive'. HCA put forward the view that this finding was the result of the CMA's failure to value HCA's assets appropriately, thereby underestimating the capital employed by HCA and overestimating the ROCE.
- 9.36 An expert report,²¹ submitted by HCA, put forward the view that high profitability provided poor evidence for an AEC since there were many

²⁰ HCA told us that the International Accounting Standards Board (IASB) had recently adopted a new standard, IFRS 16 Leases, which recognised all major leases on the balance sheet and supported HCA's position that HCA's leases should be capitalised. HCA submitted a report by Gregory & Lyons in support of this view. This report, noted that 'what matters for the purposes of measuring HCA's economic profitability is the economic substance of the transaction, rather than the accounting rules'. G&L put forward the view that leasehold and freehold property should, therefore, be treated similarly in our analysis.

²¹ This report was prepared for HCA by Alan Gregory and Bruce Lyons.

reasons that at least some firms would make returns above the cost of capital in a competitive market. In particular, the report highlighted that:

- (a) if differences in efficiency and managerial skill across firms were not fully reflected in salaries and bonuses, then firms with superior efficiency and management would earn greater returns in the form of 'efficiency rents';
- *(b)* firms which undertook riskier investments should expect higher returns under the 'fair bet' principle;²² and
- (c) there was an option value of waiting to see how a market evolved before investing. As a result, a firm which chose to invest in an uncertain market at an early stage would require a higher return to compensate it for the lost option value of waiting.
- 9.37 The expert report stated that it was entirely inappropriate to use the fact that one firm's estimated ROCE was greater than the estimated cost of capital as evidence that prices might be higher than competitive levels, and ultimately as evidence of an AEC, without clear evidence linking higher profits to a lack of effective competition.

Bupa

9.38 Bupa expressed the view that HCA's prices remained substantially above cost, citing analysis by LaingBuisson showing that HCA was on a rapid growth trajectory with strong EBITDAR performance (see Figures 9.1 and 9.2).²³

²² G&L noted that if a hospital were considering making an investment with a 50% chance of failure, the firm would need to expect to earn at least twice its cost of capital in order to be willing to undertake the investment. As a result, in a well-functioning market, one should expect to observe periods of time where certain firms earn relatively high levels of profit reflecting risky investment that has paid off.
²³ Bupa response to comment and submit further evidence.

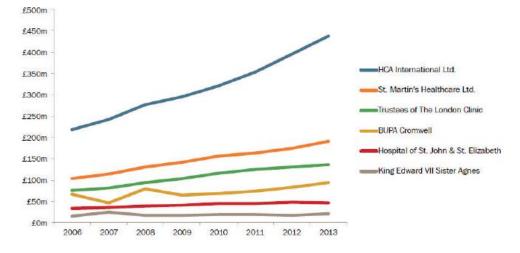


Figure 9.1: Revenue growth by independent hospitals (central London)

Source: LaingBuisson, Private Acute Medical Care in Central London: Market Report, Figure 3.9.

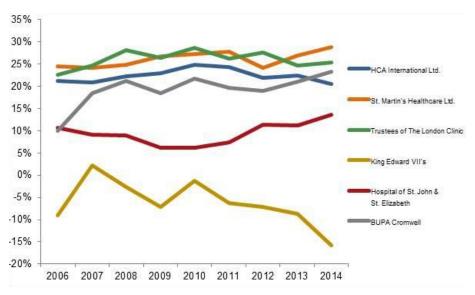


Figure 9.2: EBITDAR as % of revenue

Source: LaingBuisson, Private Acute Medical Care in Central London: Market Report, Figure 3.11.

9.39 Bupa told us that we were incorrect in excluding capital gains from our calculation. Bupa said that it was clear that HCA had enjoyed substantial capital appreciation – in eight of the nine years – and so capital gains; and there was no evidence presented that this would not continue. Furthermore, Bupa expressed the view that our decision to rely on price reductions estimated from KPMG 2 was an assumption that favoured HCA materially and substantial customer detriment was unaddressed in our current modelling.²⁴

²⁴ Bupa response to the Remittal PDR, pp58–59.

AXA PPP

9.40 AXA PPP indicated that it was not aware of any material change in circumstances that was likely to have reduced HCA's profit levels.²⁵

Our assessment

- 9.41 We note HCA's view that property leases should be capitalised and included in the capital base. However, as discussed in Appendix 6, paragraphs 59 and 60 of the Final Report, our approach to the recognition of these assets has generally followed the accounting treatment adopted by HCA, ie where HCA has capitalised a building on its balance sheet, we have also done so. For those leasehold assets where HCA paid an 'up-front' purchase price and subsequently incurs only peppercorn rents, we have treated them on the same basis as freehold assets, ie their value has been estimated on a freehold basis and they have been depreciated over their useful economic life rather than over the remaining term of the lease under which they are held. As a consequence, any rental payments made on these buildings have been removed from operating costs.²⁶ Where a firm has chosen to rent a building rather than purchase it, it would be inappropriate to capitalise the value of that building on the firm's balance sheet as such an approach would not reflect the economic substance of the transaction the firm has chosen to undertake
- 9.42 In relation to HCA's intangible assets, we note our Guidelines which state that:

... the [CMA] may consider the inclusion of certain intangible assets where the following criteria are met:

- it must comprise a cost that has been incurred primarily to obtain earnings in the future;
- this cost must be additional to costs necessarily incurred at the time in running the business; and
- it must be identifiable as creating such an asset separate from any arising from the general running of the business.²⁷
- 9.43 HCA put it to us that it had invested in developing a range of intangible assets, such as HCA's reputation and the value of HCA's hospital brands,

²⁵ AXA PPP initial submission.

²⁶ Final Report, Appendix 6.13.

²⁷ CMA Guidelines, Annex A paragraph 14.

that were employed in generating returns for its business and which should, therefore, be recognised as part of the capital employed. We recognise that the reputation of a business, either a group or a local hospital, may be developed over time by providing high-quality products or services. However, as set out in the Final Report,²⁸ we do not consider that the costs incurred in directly providing a good or service should be capitalised as creating an intangible asset for the business, since they were necessarily incurred in running the business.

- 9.44 We also note HCA's view that its properties should be valued with reference to their highest value potential alternative use, which was for conversion to residential properties. We agree with HCA that the value to the business of a hospital may be influenced by the feasible alternative uses to which that building could be put, since a new entrant would have to pay a price that at least matched that offered by those alternative uses. We have considered the appropriate valuation of HCA's land and buildings carefully. The evidence that we have collected during the remittal indicates that, once the costs associated with reconfiguring a hospital are taken into account, most weight should be placed on the 'KPMG' property valuation.
- 9.45 We note Alan Gregory and Bruce Lyons' report submitted as part of HCA's response to our approach on profitability. We agree that there are many reasons why firms may make returns above the cost of capital, such as economies of scale and other efficiencies. However, as discussed earlier in this section, another reason is market power and the consequent ability to charge prices above the level that would occur in a well-functioning market. In Section 12 and Appendix J, we consider the extent of any superior efficiencies realised by HCA, in the form of any economies of scale, as well as the potential impact of these efficiencies on the extent to which HCA's prices might be expected to decline following a divestiture remedy. We recognise that there is some uncertainty regarding both the precise extent to which HCA's prices (to UK self-pay and insured patients) exceed the level at which HCA would make returns in line with its cost of capital, the extent of any economies of scale and the WACC of a typical private hospital operator. We have, therefore, considered a range of estimates in our analysis, based on prices being between 3.0% and 7.5% above the level at which HCA would make returns in line with its WACC. This range encompasses a WACC of between 9% and 10% and an average ROCE of $[\approx]$ %.

²⁸ Final Report, Appendix 6.13.

- 9.46 We considered the relevance of the 'fair bet' principle in the Final Report.²⁹ We found that in recent years various hospital operators in central London, including HCA and TLC, had invested in expanding the range of treatments provided (including complex treatments) and/or improving the product offer at their hospitals (for example, through the adoption of new equipment or hospital expansions and refurbishments). Moreover, we observed that HCA's investments were sometimes offensive and sometimes defensive in nature, ie sometimes HCA invested ahead of competitors and sometimes it invested as a follower. While we agreed that temporarily high margins may result from investments, we observed that HCA did not appear to have invested more over recent years than its closest competitor, TLC, but that its profitability was significantly higher. On this basis, we did not find any evidence to support the view that HCA earned higher returns either for assuming the risk of investing ahead of others, or for making more risky investments.
- 9.47 We have considered Bupa's submission in paragraph 9.39 in paragraphs 9.22 and 9.23.

Our conclusion on profitability

- 9.48 One potential indicator of the extent of competition in a market is the level of profits of the firms involved. The assessment of profitability requires some estimation and reliance on assumptions. In this case we have used accounting information provided by HCA but made a number of adjustments to the values of capital employed to reflect economic rather than accounting costs. We have relied on a range of information on the replacement cost of assets, including accounting records and external reports.
- 9.49 We assessed the profitability of HCA between 2007 and 2015. Our analysis shows that HCA has made returns that have persistently exceeded its WACC over the 2007 to 2015 period, on both our 'base case' and the two KPMG scenarios. On the basis of our preferred estimate ('KPMG 2'), HCA made average returns of [≫]% per year between 2007 and 2015, compared with a WACC of between 9% and 10%.
- 9.50 We sought to identify the returns made on UK patients as separate from those made on overseas patients by allocating costs between these customer types according to the scenarios discussed in paragraph 9.27(*a*), (*b*), (*c*) and (*d*). The results shown in Table 9.3 suggest that in 2015 between [≫]% and [≫]% of overhead costs and capital should be allocated to UK patients and between [≫]% and [≫]% to overseas patients. This analysis

²⁹ Final Report, paragraphs 6.406–6.409.

indicates that HCA's prices to UK patients (in 2015) exceeded the level where it would have earned its WACC (of between 9% and 10%), on the KPMG 2 scenario, by between 3.1% and 7.5%.

9.51 Therefore, we readopt our finding from the Final Report that HCA made profits that were substantially and persistently in excess of the cost of capital (Final Report, paragraph 6.474). This suggests that the price of private healthcare services may be high in relation to the costs incurred by HCA in providing those services, and thus higher than we would expect in a wellfunctioning market.

10. Self-pay patients analysis and AEC

. . .

10.1 In the Final Report, in Section 10 on our findings regarding AECs, we identified:

... [t]wo structural features in the provision of privately-funded healthcare services by private hospital operators:¹

- (a) high barriers to entry and expansion for private hospitals; and
- *(b)* weak competitive constraints exerted on private hospitals in many local markets including central London.

In combination, the features ... give rise to AECs in the markets for the provision of hospital services which lead to higher prices for inpatient and some day-case and outpatient hospital services to self-pay patients at private hospitals in local markets which are subject to weak competitive constraints across the UK, including in central London.²

- 10.2 These structural features were also identified as those that '... give rise to AECs in the markets for the provision of hospital services which lead to higher prices being charged by HCA to PMIs across the range of treatments for insured patients in central London.'³
- 10.3 On the basis of these AECs (the self-pay AEC decision and the insured AEC decision), the CMA decided in the Final Report to require HCA to divest itself of one or two of its hospitals in central London (the divestment decision).
- 10.4 The evidence supporting the features and AECs as they relate to central London was largely the same for self-pay patients and for insured patients, as much of this evidence related to competition both for insured and for selfpay patients. As set out in the Findings section of Section 6 of the Final Report, the evidence supporting these features included the following:
 - (a) The Final Report stated that the 'set of private hospitals and PPUs located in central London should be regarded as a distinct geographic market', based on, among other pieces of evidence, patient travel patterns, strong reputations of some private providers and PPUs for quality of care compared with providers elsewhere in the UK, and the

¹ Final Report, paragraph 10.3.

² Final Report, paragraph 10.5.

³ Final Report, paragraph 10.5.

views of insurers and some operators on which hospitals were considered close substitutes.⁴

- (b) Barriers to entry and expansion caused by high sunk costs, long lead times and, in central London, a lack of suitable sites and difficulty obtaining planning permission.⁵
- *(c)* High levels of concentration and weak competitive constraints between private hospitals including PPUs in a number of areas, with HCA facing weak competitive constraints in central London, both from private providers and PPUs there and from those in Greater London, as well as facing 'very limited', if any, constraint from the NHS.⁶
- (*d*) An analysis of pricing for insured patients in central London found that 'HCA charges significantly higher prices to PMIs than TLC'⁷ which 'support[s] our hypothesis that local substitutability plays a role in determining insured price outcomes'.⁸ An analysis of pricing for self-pay patients across the UK found 'a causal relationship between local concentration and self-pay prices for inpatient treatments', with 'private hospitals including PPUs, on average, charg[ing] higher self-pay prices for inpatient treatments in local areas where they face weaker competitive constraints'.⁹
- *(e)* An analysis of providers' profitability found that HCA, BMI and Spire earned 'returns substantially and persistently in excess of their cost of capital'.¹⁰
- 10.5 As set out above, there were a number of areas where the same evidence base was relied upon in coming to a view on competition for self-pay and insured patients. However, in relation to prices, separate analyses were conducted for insured patients (the insured pricing analysis or IPA) and for self-pay patients (the price-concentration analysis or PCA).
- 10.6 The CAT's Order of 12 January 2015 quashed the central London insured AEC decision and the divestiture decision and remitted these decisions back to the CMA to reconsider. The self-pay AEC decision was not quashed, although the CAT stated in its Ruling on 23 December 2014 that:

⁴ Final Report, paragraph 5.59.

⁵ Final Report, paragraph 6.479.

⁶ Final Report, paragraphs 6.480 & 6.481.

⁷ Final Report, paragraph 6.380.

⁸ Final Report, paragraph 6.381.

⁹ Final Report, paragraph 6.274.

¹⁰ Final Report, paragraph 6.491.

... if ... anything emerges which ... does have an indirect knockon effect on the reasoning in relation to the self-pay AEC decision, the CMA will need to give careful consideration to that question and the implications it may have for the overall reasoning in the Final Report.¹¹

- 10.7 Given that the self-pay AEC decision has not been quashed, it has not been reconsidered as part of this remittal. However, the self-pay AEC decision (insofar as it relates to central London) remains a relevant issue in the remittal, as it formed part of the basis for the divestment decision which has been quashed and which the CMA has reconsidered as part of the remittal. As indicated by the CAT, we have therefore given careful consideration as to whether anything which has emerged during the remittal could materially affect the reasoning in support of the self-pay AEC decision.
- 10.8 In the course of this remittal, as we have examined new evidence and arguments put to us by the parties and reassessed our reasoning and findings in relation to the central London insured AEC, we have also considered whether our self-pay findings may be impacted. In response to our Remittal PFs, HCA responded to our provisional conclusion that the evidence supporting the self-pay AEC had not been impacted to the extent that our overall conclusion on this AEC had changed. Its points are set out in the relevant sections below.
- 10.9 We have identified four areas where evidence and arguments that we have considered in relation to the evidence supporting the insured patients central London AEC could have an impact on the self-pay AEC decision (insofar as it relates to central London). These are:
 - (a) the competitive constraint from day-case- and outpatient-only providers;
 - (b) the competitive constraint from PPUs;
 - (c) the competitive constraint from the NHS; and
 - (d) HCA's criticism of the methodology used in analysing insured prices as it applies to our results for self-pay prices and local concentration.
- 10.10 We deal with each of these issues in turn, setting out the issue in relation to our assessment of competition for private patients (as a whole) in central London, how each issue may have an impact on the self-pay findings, setting out and responding to HCA's views where relevant, and outlining our

¹¹ CAT judgment of 23 December 2014, paragraph 60.

conclusion on whether the self-pay AEC for central London has been impacted. As set out below, a number of the points that HCA has made in relation to the PCA and the self-pay AEC in general had been raised before during the original investigation, and were not related to changes to the IPA or to developments in the central London market. Where we respond to these below, we refer to the relevant parts of the original Final Report.

- 10.11 We have also included a section setting out, and responding to, a number of high-level points on the self-pay AEC that HCA has put to us in response to our Remittal PFs.
- 10.12 As set out in Section 4 on competitive constraints, we have concluded that our assessment of the competitive constraints from day-case- and outpatient-only providers, PPUs and the NHS does not change our overall findings in relation to the weak competitive constraints facing HCA.¹² In relation to the IPA, as set out in Section 8, above, our conclusion in relation to the results of that analysis is different to our conclusion in the Final Report. Having assessed new arguments and evidence on patient complexity from HCA, we cannot rule out the possibility that the IPA analysis may not fully account for differences in patient complexity between HCA and TLC. Hence we cannot conclude on the precise size of the price difference between HCA and TLC, as we cannot be sufficiently confident that we have compared prices on a like-with-like basis.¹³

Day-case- and outpatient-only providers

Our findings in relation to the insured AEC for central London

10.13 As set out in Section 4 on competitive constraints, HCA has argued that we did not take into account competition from day-case and outpatient-only providers.¹⁴ In coming to a view on insured patients, we considered shares of supply, internal documents and views of the parties. In relation to shares of supply, we have concluded that taking account of non-inpatient providers' admissions is unlikely materially to affect the shares of total admissions in central London that we previously calculated. This is the case for both day-case-only clinics and outpatient-only clinics, though the constraint from the former appears to be weaker, as these account for a very small share of claims and of spend in central London for both Bupa and AXA PPP.¹⁵ We have come to the same view in relation to shares of revenue in central

¹² Paragraphs 4.181.

¹³ See Section 8 on the empirical analysis of insured prices.

¹⁴ Paragraphs 4.41 and 4.117 to 4.1.119.

¹⁵ Tables 4.6 & 4.7.

London. In analysing HCA's internal documents we found very little evidence of HCA taking account of non-inpatient providers and, where these were mentioned, they mainly referred to providers of imaging and diagnostic services.¹⁶ Therefore, in relation to competition from non-inpatient providers, we conclude that, on the basis of this evidence, non-inpatient facilities compete with HCA only on a narrow set of services, primarily imaging and diagnostic procedures, where HCA itself holds a strong position.¹⁷

Our assessment of the impact on the self-pay AEC for central London

- 10.14 Our findings in relation to insured patients were based, to some extent, on the proportion of PMIs' claims and spend with these non-inpatient providers in central London. In principle, the constraint on private hospitals for self-pay patients from non-inpatient providers may be stronger than in relation to insured patients for two reasons:
 - (a) Non-inpatient providers may be more effective at attracting self-pay patients than insured patients, as self-pay patients are likely to be more responsive to pricing of treatments than insured patients.
 - (b) As AXA PPP noted, as PMIs contract over the full range of inpatient, outpatient and day-case treatments, inpatient providers (all of which provide day-case and outpatient services too) hold an important means of leverage should a PMI attempt to divert a large amount of its day-case and outpatient spend away from those inpatient providers.¹⁸ As such, we may expect non-inpatient providers to be in a position to impose a stronger competitive constraint when competing for self-pay patients than may be the case for insured patients. However, in relation to selfpay patients, inpatient providers may still have an advantage for a number of treatments due to the patient journey and consultant practices (as AXA PPP also noted).¹⁹ For example, most consultants perform a mix of inpatient, day-case and outpatient work, and prefer to work from a single private facility for a variety of reasons (such as to reduce travelling between facilities, running different practice management systems, and scheduling difficulties). It is much more convenient for surgeons to fit in day-case and outpatient work, regardless of its complexity, into the parts of their working week that they spend at a single inpatient facility. Even if an individual treatment or patient does not require inpatient back-up,

¹⁶ Paragraph 4.124.

¹⁷ Paragraph 4.125 & 4.126.

¹⁸ Paragraph 4.121.

¹⁹ Paragraph 4.120.

consultants may still take patients to the facility where they undertake the majority of their work.

- 10.15 Having identified that non-inpatient providers could impose a stronger constraint for self-pay patients than for insured patients, we also note that the non-inpatient providers' share of PMIs' activity and revenues may not be reflective of these providers' share of activity and revenue among self-pay patients. However, on the basis of the evidence set out in paragraphs 4.123 to 4.126 of the section on competitive constraints, we consider that differences in these shares of supply would be unlikely to change our overall conclusions. As we note above, HCA's business cases indicate that non-inpatient facilities are only likely to compete with HCA for a narrow set of services, primarily imaging and diagnostic procedures.²⁰
- 10.16 In relation to shares of supply, we concluded that, for self-pay patients, noninpatient providers may well account for a higher share of activity and revenue than the PMI data would suggest is the case for insured patients. However, in relation to competition from non-inpatient providers, based on HCA's business cases, we conclude that the constraint from these providers on HCA, in relation to self-pay patients, is likely to be on a narrow set of services, primarily imaging and diagnostic procedures, where HCA holds a strong position, as we have concluded in Section 4, above.²¹

Private patient units

Our findings in relation to the insured patients AEC for central London

10.17 As set out in Section 4 on competitive constraints, HCA noted that our shares of supply calculations had excluded a number of PPUs in central London and, as a result, had overstated HCA's share of supply.²² Recalculating these shares for 2011 we found that including the seven NHS trusts with PPUs in central London that we had previously omitted lowers HCA's share of total revenues by [[∞]] percentage points to 48.5%.²³ Most of the difference in HCA's share is due to the inclusion of these seven NHS trusts rather than changes over time in the relative market position of the providers that we did include in our previous calculations. We note that HCA's share of total revenue is still high, at 48.5%.²⁴

²⁰ Paragraphs 4.124 to 4.126.

²¹ Paragraph 4.126 & 4.127.

²² Paragraph 4.33.

²³ Table 4.1.

²⁴ Paragraph 4.36.

10.18 Overall, we remain of the view that central London is a highly-concentrated market, that HCA has high shares of supply relative to its competitors and that the overall pattern of shares of supply in central London remains unchanged since 2011.²⁵ In reaching our decision on the competitive constraints from PPUs we also took into account evidence from internal documents²⁶ and our surveys of patients and of consultants.²⁷

Our assessment of the impact on the self-pay patients AEC for central London

- 10.19 As with the issue of non-inpatient providers, in principle, PPUs may be more attractive for self-pay patients than for insured patients, as self-pay patients are likely to be more responsive to the prices of treatments than insured patients. As such, self-pay patients may well be more willing to accept the (potentially) lower quality of patient experience at a PPU in return for a lower price, although we note that some PPUs derive a relatively small share of their private patient revenue from self-pay patients.²⁸
- 10.20 However, based on limited data, PPUs' shares of self-pay patient revenue in central London did not appear to indicate that they imposed a stronger constraint on HCA for these patients than the overall shares of revenue and admissions would indicate. For example, based on our incomplete data set of self-pay revenues for central London private hospitals and PPUs, HCA's share of self-pay patient revenue in central London was [50–60]% in 2011 (compared with about [%]% based on total revenue), whereas Imperial College Healthcare NHS Trust (the largest PPU in central London)²⁹ had a share of [5–10]%. Some other NHS providers had somewhat lower shares, for example, Guy's and St Thomas' NHS Trust and King's College Hospital NHS Foundation Trust (two of the top four PPUs in central London in terms of revenue)³⁰ each accounted for less than [0–10]% of self-pay revenue in central London.³¹ In addition, HCA's internal documents and our patient and consultant surveys suggested that PPUs placed a weak competitive constraint on HCA.32

²⁵ Paragraph 4.72.

²⁶ Paragraphs 4.83–4.97.

²⁷ Paragraphs 4.110 & 4.116.

²⁸ For example, in 2011, while Imperial College Healthcare NHS Trust derived over [\gg]% of its private patient revenue from self-pay patients, for Guy's and St Thomas' NHS Trust the equivalent share was [\gg]% and for King's College Hospital NHS Foundation Trust it was just [\gg]%.

 ²⁹ Based on inpatient admissions, revenue and bed numbers in 2011. See Appendix A, Tables 1 and 2.
 ³⁰ Based on 2011 revenue data. See Appendix A, Table 1.

³¹ Again, we note that these shares are based on incomplete data, as data for only a subset of central London PPUs was available, and, so, HCA's shares are overstated. However, these shares do indicate that PPUs' position relative to HCA is unlikely to be significantly stronger for self-pay than for overall private patient revenues. As set out above, even relatively large PPUs attract self-pay revenues that are a small fraction of those at HCA.

³² Paragraphs 4.83–4.97, 4.110 & 4.116.

10.21 Overall, we conclude that for self-pay patients the constraints imposed by PPUs in aggregate on HCA are weak.

NHS

Our findings in relation to the insured patients AEC for central London

10.22 As set out in Section 4 on competitive constraints, HCA has argued that our assessment of the constraints imposed on it by the NHS underestimated the strength of the constraint.³³ However, based on HCA business cases, we concluded that while HCA does take a general interest in the NHS as a public funder of healthcare services, this interest is usually not in terms of the NHS as a competitor to HCA, but in the context of seeking to create new demand for private hospital services. Our view is that, overall, NHS services are not a close substitute for private patient services provided by HCA and the competitive constraints exerted by the NHS on HCA are limited.³⁴

Our assessment of the impact on the self-pay patients AEC for central London

- 10.23 Again, to the extent that self-pay patients are likely to be more responsive to the price of treatments than insured patients, in principle, publicly-funded NHS care may well impose more of a constraint for self-pay patients than for insured patients. The decision of a self-pay patient on where to seek care will involve trading off the cost of paying for the treatment privately against the NHS option of free treatment which is likely to involve a longer wait, poorer customer service and patient experience, poorer patient amenities, less choice of consultant or even restrictions on what treatments are available. For some patients considering self-pay private care, an NHS provider may well be an attractive option. As we note in Section 4, the NHS provides a minimum on the value for money that private healthcare must deliver, and this minimum may be higher in central London than in other parts of the UK due to the presence of major research and teaching hospitals.³⁵
- 10.24 However, as with our overall conclusions, the evidence from HCA's business cases points to relatively few instances where HCA considers the competitive threat from the NHS as a provider of publicly-funded healthcare services (as opposed to PPUs),³⁶ suggesting that the threat of losing self-pay patients

³³ Paragraphs 4.131–4.136.

³⁴ Paragraph 4.146.

³⁵ Paragraph 4.145.

³⁶ Paragraphs 4.139–4.143.

to the NHS is not a strong constraint on HCA. Indeed, a number of cases $[\gg]$.^{37,38} $[\gg]$

10.25 Overall, we conclude that the constraint imposed on HCA by publicly-funded NHS provision is limited in relation to self-pay patients in central London.

Insured pricing analysis and price-concentration analysis methodologies

Our findings in relation to the insured AEC for central London

- 10.26 As set out in Section 8 on the empirical analysis of insured prices, HCA has argued that our analysis of price differences between HCA and TLC for insured patients did not adequately control for patient complexity and that, once this is controlled for (using additional data from invoices), there is no statistically significant price difference between HCA and TLC.
- 10.27 We have explained in that section that, while HCA charges higher insured prices than TLC, we can no longer be sufficiently certain that we have adequately controlled for any differences in patient complexity and, hence, we cannot conclude on the precise size of the price difference, when compared on a like-with-like basis.³⁹

Our assessment of the impact on the self-pay AEC for central London

10.28 HCA's argument that the IPA does not adequately control for differences in patient complexity between hospitals could, in principle, apply to the PCA too.

The PCA results

10.29 The analysis for self-pay prices covered five providers and used data from across Great Britain⁴⁰ (including central London). This analysis aimed to estimate the relationship between local concentration and the price paid by self-pay patients for a number of inpatient treatments, using a regression approach to conduct a price-concentration analysis (PCA).⁴¹ This analysis used invoice-level data provided by the five main private hospital operators – HCA, BMI, Nuffield, Ramsay and Spire – which was consolidated into a single data set. The prices were then analysed at the episode level, as in the

^{37 [%]}

³⁸ Paragraph 4.141.

³⁹ Section 8 on the Empirical analysis of insured prices.

⁴⁰ We did not have self-pay patient pricing data for Northern Ireland private hospitals. Final Report, Appendix 6.9, Table 1.

⁴¹ Final Report, Appendix 6.9.

IPA. The price-concentration relationship was estimated by modelling episode prices as a function of concentration in the local market,⁴² while controlling for a number of patient-, hospital-, and location-specific variables. Many of these variables, in particular patient age, gender and length of stay, were the same variables as were used in the IPA.

- 10.30 In the Final Report we reported that the self-pay prices were on average lower by around 3 to 9% when an additional competitive fascia is present.⁴³ In concluding on self-pay prices, the Final Report stated that: '[t]he results of our PCA show that there is a causal relationship between local concentration and self-pay prices for inpatient treatments.'⁴⁴
- 10.31 Alongside the features of the London market set out in paragraph 10.4 above, these PCA results were used in support of the central London self-pay AEC finding.
- 10.32 In relation to the IPA, HCA put forward the view that our analysis did not adequately control for differences in patient complexity and that, as it treated more complex patients, any higher prices that we observed at HCA compared with TLC were due to its higher patient complexity.

Patient complexity and the PCA results

- 10.33 We have considered two questions in assessing whether this criticism could apply to the PCA methodology and results:
 - (a) Does our PCA adequately control for differences in patient complexity?
 - (b) Is there a plausible reason why we might expect our observed relationship between high prices and high local concentration to be affected by patient complexity?
- 10.34 In discussing complexity in this context, we again make a distinction between the complexity of the range of a hospital's treatments ('treatment

⁴² These are LOCI and fascia count. As set out in Appendix 6.4 of the Final Report, LOCI (LOgit Competition Index) is a measure of competition that is based on the weighted average market shares of providers in a market, where the weighting is based on the hospital's market share of patients in different geographic 'sub-markets'. Fascia count is simply the number of different fascias – both private providers and PPUs - within a hospital's catchment area, defined in terms of a fixed radius around the hospital.

⁴³ Final Report, paragraph 6.264.

⁴⁴ Final Report, paragraph 6.274.

complexity')⁴⁵ and the complexity of its patients within any given treatments ('patient complexity').46

- On the first question, (paragraph 10.33(a)) we note HCA's point that the 10.35 patient characteristics in the PCA were the same as those in the IPA, so were subject to the same criticism – that these were not adequately capturing differences in patient complexity.⁴⁷ However, while the PCA (like the IPA) uses patient age, gender and length of stay to control for differences in patient complexity, the PCA also includes two additional variables which could also act as proxies for quality and/or patient complexity:48
 - (a) a measure of 'average direct cost' for each hospital;^{49,50} and
 - (b) a dummy to indicate whether a hospital has any CCL3⁵¹ beds.⁵²
- 10.36 As such, the PCA may be more effective at capturing any potential differences in patient complexity.
- We also note that the coefficients on patient age, gender and length of stay 10.37 are generally statistically significant in the PCA suggesting that these patient characteristics are controlling for factors which may drive differences in provider costs that may be passed through to self-pay prices and, so, are likely to be effectively controlling for differences in patient complexity. See, for example, the Final Report, Appendix 6.9, Tables 4 and 5, where gender and length of stay are statistically significant at the 95% confidence level or

⁴⁷ HCA response to the Remittal PFs, paragraphs 8.41–8.44.

⁴⁵ The complexity of the treatments and services that a hospital provides (which we deal with in relation to range) relates to the level of specialised staff, equipment and so on and is generally associated with higher costs of provision.

⁴⁶ The complexity of patients, in the context of the IPA, refers to factors that may result in a patient being more expensive to treat than other patients being admitted for the same treatment, for example, due to co-morbidities or the severity of the patient's illness which may mean the patient requires more theatre time, more (and/or more expensive) drugs, more pathology tests, more nursing time or monitoring, etc.

⁴⁸ Comparable line-item data from invoices are not available for the self-pay prices data set. As such we cannot replicate HCA's additional analysis of the IPA which sought to control for differences in patient complexity by adding the number of pathology charges to the analysis.

⁴⁹ As set out in the Final Report, Appendix 6.9, footnote 32, this is calculated as the total direct cost of each hospital site, divided by the total number of patients (itself the sum of inpatient, day-patient and outpatient visits). Cost data was available for almost all hospitals in our analysis. For hospitals with missing cost data, we have imputed the data on the basis of hospitals owned by the same operator in the same region and year; if data for the desired year is not available, we use the average for the operator and region over years that are available. ⁵⁰ Final Report, Appendix 6.9, paragraph 37(e). The PCA included the average direct cost of the hospital to account for 'differences in input or labour costs', but we believe that this could also account for differences in quality or patient complexity. This cost variable is not statistically significant in any model of the PCA reported. ¹ 'Critical Care – Level 3' refers to patients requiring advanced respiratory support alone, or monitoring and support for two or more organ systems. This level includes all complex patients requiring support for multi-organ failure. See the Health and Social Care Information Centre website.

⁵² Final Report, Appendix 6.9, paragraph 37(f). This dummy indicates whether a hospital provides critical care level 3 beds to 'account for potential differences associated with hospitals providing this level of care (eg as a result of perceived or actual differences in quality or cost of services or case mix). This CCL3 dummy is positive and statistically significant at the 95% level - see Final Report, Appendix 6.9, Tables 4 & 5.

above, while age is statistically significant at the 90% level. Length of stay is of particular interest here, as (in contrast to our IPA results) the PCA is based on inpatient treatments only⁵³ where length of stay is likely to be a good proxy for patient complexity whereas for day-case treatments it is not informative, as there is no overnight stay.

- 10.38 On the second question, there are three possible implications for our results if levels of patient complexity are correlated with differences in local concentration in a way that is not captured by the patient characteristics or other variables in our PCA regressions:
 - (a) The PCA results may overestimate the effect of high concentration in driving prices if high-complexity patients are likely to be treated in highly-concentrated areas.
 - (b) The PCA results may underestimate the effect of high concentration in driving prices if high-complexity patients are likely to be treated in low-concentration areas.
 - *(c)* If patient complexity and concentration are uncorrelated (or patient complexity is adequately controlled for within our regressions) then our PCA estimates are unbiased.
- 10.39 If our PCA results were overestimating the relationship between local concentration and prices then this could have an impact on our findings in relation to competition for self-pay patients. For this to be likely, it requires a mechanism whereby highly-concentrated local markets display high prices and high patient complexity within the treatments that are being compared across hospitals. A possible, hypothetical mechanism may be as follows:
 - (a) A high-quality hospital attracts high-complexity patients within the relevant treatments (that is, not just having a wider range of more complex treatments) from other local markets.
 - (b) This leads to high concentration in that local market and also to higher prices at the leading hospital.

⁵³ As set out in paragraph 2.259 of the Final Report, the PCA focused on inpatient treatments (as opposed to day-case and outpatient treatments) for two reasons. First, as our analysis focused on general private hospitals and PPUs providing inpatient care, we excluded a substantial number of day-case-only clinics (see paragraph 5.47 of the Final Report). It follows that the concentration measures that we used were more accurate in reflecting local competitive constraints for inpatient treatments. Second, the provision of inpatient care is offered by fewer providers and is therefore more concentrated than the provision of day- and outpatient care (see paragraph 5.48 of the Final Report) and, other things being equal, we would expect the effect of concentration on prices to be more pronounced for inpatient care.

- (c) This leads to surrounding local markets having lower patient complexity for these treatments, as the more complex patients are attracted to the increasingly concentrated market.
- *(d)* The local market with the high-quality provider then has higher concentration, while the surrounding local markets display lower concentration, relative to the increasingly concentrated market,⁵⁴ but have lower-complexity patients and, so, lower prices.
- 10.40 While we have not collected empirical evidence on this specific question, we took the view that this mechanism is unlikely to be driving the positive price-concentration relationship that we have estimated, as none of the evidence that we have collected in the course of the market investigation or this remittal has pointed to a process whereby more complex patients travel outside their local market in such a way that drives high concentration (and high prices) in some local markets and results in low complexity, low concentration and low prices in others for specific treatments.⁵⁵ In any case, our patient characteristics and CCL3 dummy variable are likely adequately to capture any differences in patient complexity between providers and local markets, although we note that the cost variable was not statistically significant in our PCA regressions.
- 10.41 HCA responded to this reasoning by pointing out that the mechanism described above higher-complexity patients being attracted to a high-quality hospital from other local markets, which then leads to high prices at the leading hospital and high concentration in that market was, in its view, consistent with what happens in central London. It pointed out that complex patients travelled from surrounding areas to a high-quality provider (HCA) and this led to high concentration and higher prices in central London. In HCA's view, the CMA should not have dismissed this mechanism, as the evidence available to the CMA was entirely consistent with this pattern existing throughout the UK.⁵⁶
- 10.42 We do not accept HCA's criticism on this point. HCA gained a high market share by acquiring a number of large, high-profile private hospitals in central London.⁵⁷ In addition, as set out in Section 7, while we recognised that some

⁵⁴ For the relationship between concentration and prices to hold requires that concentration in the lowercomplexity markets is lower than in the higher-complexity markets. Whether it changes as a result of this mechanism is not important, as long as it is lower than in the higher-complexity, higher-concentration, higherprice markets.

⁵⁵ Again the distinction between more complex patients travelling in order to receive a treatment that is available locally and patients travelling further to access a more complex treatment is crucial here. ⁵⁶ HCA response to the Remittal PFs, paragraph 8.48.

⁵⁷ As set out in paragraph 3.16 of the Final Report, HCA acquired the Harley Street Clinic, Wellington Princess Grace and Portland Hospitals (50% share in 1996 and increased to 100% in 2000), followed by the London Bridge, Lister and Devonshire Hospitals in 2000.

central London providers were higher quality than providers in the rest of the UK, we concluded that HCA was not higher quality than its close competitors in central London.⁵⁸

Additional points on the PCA raised by HCA in response to Remittal PFs

- 10.43 In addition to the patient complexity points set out above, HCA made a number of additional points in response to our Remittal PFs.⁵⁹ These covered five areas:
 - (a) An analysis of the underlying data could have revealed similar issues with the PCA as had been uncovered in relation to the IPA.
 - (b) PCA results based on data for Great Britain were not applicable to central London.
 - (c) The data used in the PCA were for 2009 to mid-2012 and a number of material changes had impacted the self-pay market since then.
 - (d) PCA did not establish causality between high concentration and high prices.
 - *(e)* Even if PCA results were accurate, the results suggest a 'minimal' impact on self-pay patients from any divestment in central London.
- 10.44 These are set out in more detail below.
- 10.45 First, HCA made the point that KPMG's analysis of the raw data underlying the IPA had allowed it to identify additional relevant variables contained in the raw Healthcode invoice data, which included information on the individual items that insurers had been charged for as part of a patient episode. Its analysis of this additional line-item data had, in its view, called into question the overall results and led to the CMA changing its conclusions on the IPA (as set out in detail in Section 8, above). HCA pointed out that it had not been able to test whether similar considerations applied to the PCA data and HCA had not seen the raw data underlying the PCA results, which could have pointed to similar sources of additional variables or to data cleaning issues, as had been present in the IPA data.⁶⁰

⁵⁸ See paragraphs 3.34 & 7.3.

⁵⁹ HCA's response to the Remittal PDR also stated that the PCA is 'similarly flawed' when compared to the IPA. HCA response to the Remittal PDR, paragraph 3.4 (iv).

⁶⁰ HCA response to the Remittal PFs, paragraphs 8.11–8.17.

- 10.46 Second, HCA put forward a number of reasons why the results of the PCA, which were based on data for Great Britain, should not be applied to the central London market. These were:
 - (a) Data covering self-pay patients at PPUs, at TLC and at other central London private providers were not included in the PCA, with central London missing 55% of invoices.⁶¹ HCA also pointed out that the concentration measure used (LOCI) may also have been less accurate for central London, as the CMA acknowledged in the original Final Report.⁶²
 - (b) In HCA's view, central London providers had a strong reputation for higher quality and quality was likely to determine both market shares and prices. Assuming a constant relationship between concentration and prices across markets where quality differs was, therefore, 'incorrect'.⁶³
 - *(c)* Differences in patient complexity between central London and the rest of Great Britain, due to patients' willingness to travel further to access central London providers, meant that the PCA could not compare prices on a like-with-like basis and the results from the Great-Britain-wide analysis could not be applied to central London, in HCA's view.⁶⁴
 - (d) HCA's different treatment mix, compared with other private providers, meant that the high-volume treatments included in the PCA only accounted for a small share of HCA's activities [≫] of HCA's self-pay inpatient episodes and [≫] of its UK self-pay inpatient revenues. In HCA's view, this meant that any relationship between local concentration and self-pay prices would not be representative of HCA's prices.⁶⁵
 - (e) The results and conclusions that the CMA drew from the IPA were different for central London and for the rest of the UK. In HCA's view, the same rationale – leading to separate analyses – implied that the PCA results for Great Britain as a whole should not be applied to central London.⁶⁶

⁶¹ Final Report, Appendix 6.9, paragraphs 18 & 19, and Table 1.

⁶² HCA response to the Remittal PFs, paragraphs 8.25–8.28.

⁶³ HCA response to the Remittal PFs, paragraphs 8.23 & 8.24.

⁶⁴ HCA response to the Remittal PFs, paragraphs 8.31 & 8.32.

⁶⁵ HCA response to the Remittal PFs, paragraphs 8.29 & 8.30.

⁶⁶ HCA response to the Remittal PFs, paragraph 8.34.

- 10.47 Third, HCA pointed out that the PCA data covered the period 2009 to mid-2012 and that there had been a number of material changes to the London market since then:⁶⁷
 - (a) As discussed in Section 4, HCA put forward the view that there had been an increasing constraint from PPUs since then.
 - *(b)* HCA had introduced 'innovative package pricing products for self-pay patients' packages for common procedures which were, in its view, evidence that it was responding to commercial pressures and competition, and that these called into question the CMA's finding that the pricing policies of the five main operators were broadly similar.⁶⁸
- 10.48 Fourth, HCA stated that a correlation such as the one identified in the PCA results need not be causal and may have been caused by investment in quality leading to higher costs (and so prices) and higher volumes (and so concentration).⁶⁹
- 10.49 HCA made the point that patients' preferences for quality may be an unobserved demand factor in the PCA and that the CMA had been wrong to conclude in the original Final Report that these were likely to have been negatively correlated with local concentration, as high demand would attract entry.⁷⁰ As such, the CMA's view set out in the original Final Report was that the PCA could have underestimated the 'true' relationship between prices and concentration.⁷¹
- 10.50 HCA believed that this thinking that areas of high demand would attract entry and expansion – was at odds with the CMA's findings on barriers to entry and expansion. Also, HCA stated that one would traditionally expect that failing to control for unobserved demand factors would be likely to overestimate the relationship between prices and concentration, rather than underestimate it.⁷² The failure to account for quality meant that the PCA could not be relied upon to establish a causal relationship between concentration and self-pay prices.⁷³
- 10.51 In HCA's view, the CMA's failure to identify a causal relationship meant that:⁷⁴

⁶⁷ HCA response to the Remittal PFs, paragraphs 8.68–8.79.

⁶⁸ Final Report, Appendix 6.9, Annex B, paragraph 4.

⁶⁹ HCA response to the Remittal PFs, paragraphs 8.52–8.55.

⁷⁰ HCA response to the Remittal PFs, paragraph 8.56.

⁷¹ Final Report, Appendix 6.9, paragraph 62.

⁷² HCA response to the Remittal PFs, paragraph 8.57.

⁷³ HCA response to the Remittal PFs, paragraphs 8.58.

⁷⁴ HCA response to the Remittal PFs, paragraphs 8.59–8.62.

- (a) PCA could not be relied upon to support a self-pay AEC linked to local market concentration;
- (b) PCA could not be used to support an analogous relationship for insured prices; and
- (c) PCA results could not be used to estimate the impact of any change in local market concentration (for example, following a divestment remedy) on self-pay prices.
- 10.52 Finally, HCA referred to the fact that the results of the PCA suggested that changes in concentration had, in its view, only small impacts on prices, with a 20 percentage point fall in average local market share leading to a fall of only 3.4% in prices. As such, the benefits from any divestment were, in its view, 'minimal', with the divestment of London Bridge and Princess Grace Hospitals leading to benefits of just £[≫] per year for self-pay patients.⁷⁵

Our response to HCA's additional points

- 10.53 We respond to HCA's points in turn below, pointing out, where relevant, where these had been dealt with already in the original Final Report.
- 10.54 On HCA's point that it had not had a chance to review the data underlying the PCA, HCA was given access to the PCA as part of the original market investigation. The CMA has not amended the PCA as part of this remittal. Our approach has been to respond to the substantive issue that HCA has raised in relation to the IPA that it treats more complex patients than TLC and to assess the likely impact of that issue in the context of the PCA.
- 10.55 In any case, an analysis of the underlying, raw data akin to the line-item analysis of the IPA data that KPMG conducted is not possible. As set out in the original Final Report, the data set for the PCA was collected from five separate providers, rather than being made up of a set of relatively comparable invoices (as the Healthcode data set was) and so did not contain comparable additional detailed data of the sort contained in the Healthcode invoice data.⁷⁶
- 10.56 In response to HCA's detailed points on why the PCA results should not be applied to central London, we note that a number of these points were made in the course of the original investigation (and dealt with in the original Final Report) and respond as follows:

⁷⁵ HCA response to the Remittal PFs, paragraphs 8.10.

⁷⁶ Final Report, Appendix 6.9, paragraphs 7 & 8; see also Annex A to Appendix 6.9.

- (a) In relation to the data coverage for central London in the PCA, as noted in the original Final Report, the fascia count (a simple measure of local competition) does not suffer from the lack of London data for many providers and this yields broadly similar results.⁷⁷
- (b) On central London's higher quality, the PCA already included, as set out above, a number of variables that were likely to capture quality differences included in the PCA:
 - (i) a measure of average costs;
 - (ii) the presence of CCL3 beds; and
 - (iii) an operator-specific dummy variable for each of the five main operators, including HCA.

Central London providers' higher quality would be captured by some or all of these variables, as the PCA seeks to isolate the effect of local competition, controlling for other characteristics of the hospitals and of the local market.

- (c) On central London providers' different patient complexity, while differences in distances that patients have travelled, comparing central London to other local markets, could result in central London having a different patient mix to other local markets, this is unlikely to be an important issue for the small number of high-volume, common procedures included in the PCA. Again, as set out above, we have included a number of additional variables in the PCA (compared with the IPA), which are likely to capture any systematic differences in patient complexity across local markets.
- (d) On HCA's different treatment mix and the low proportion of its activity covered by the PCA data, HCA's submissions noted that the four treatments included in the main version of the PCA were among HCA's top seven for self-pay inpatients in the cleaned data set, although it also noted that they were the 3rd, 4th, 49th and 54th treatments in terms of revenues in HCA's own database.⁷⁸ We noted this issue in the original Final Report and concluded that the results were representative of selfpay inpatient treatments.⁷⁹ However, the PCA can only compare prices for those treatments that are commonly provided and the treatment mix will, of course, vary by hospital. This does not, in our view, invalidate the

⁷⁷ Final Report, Appendix 6.5, paragraphs 20 & 21.

⁷⁸ HCA response to the Remittal PFs, footnote 214.

⁷⁹ Final Report, paragraph 2.268.

finding that, for some very common treatments, there is a relationship between local competition and prices.

- (e) As explained in the Final Report, conducting the PCA just for London was not possible, due to the small data set and the fact that the PCA relies on comparing a cross-section of local prices and local concentration for a range of local markets, which, obviously, is not possible for central London on its own.
- 10.57 On causality, the aim of the PCA was to isolate the effect of local concentration on prices, by controlling for other relevant features of the patient, provider and local market. Price-concentration analysis of this type is a well-accepted approach in competition economics and in the work of competition authorities, and it is standard practice to use and interpret an analysis of this type in the way that the CMA has done here.⁸⁰
- 10.58 To the extent that HCA's specific argument on controlling for quality differences relies on its view of itself as high quality in contrast to other providers, we noted that quality differences were likely to be captured by the operator-specific variables (for each of the five operators), the average cost measure and the CCL3 beds dummy, as set out above.
- 10.59 On the two 'material' changes to the central London market that HCA pointed to, we respond by saying:
 - (a) On PPUs, we have taken account of the impact of PPUs quantitatively and qualitatively – in Section 4, above, and have assessed the impact of any changes on self-pay explicitly in paragraphs 10.19 and 10.20 above.
 - (b) On new self-pay products, it is far from clear that HCA's introduction of new pricing structures for some procedures should change how we analyse the central London market. These new pricing structures may have led to prices that are higher or lower than before, or higher or lower than other central London providers, or may have been set in response to the pricing practices of any close competitor or in response to any other changes in the competitive constraints facing HCA in the central London market.

⁸⁰ Bishop and Walker, a widely-used textbook among competition practitioners, describes price-concentration analysis as 'a potentially powerful, and intuitively appealing, empirical technique that can be used in a range of antitrust settings', Bishop and Walker (2010), *The Economics of EC Competition Law: Concepts, Application and Measurement*, pp.605-606.

- 10.60 On the proportionality of a divestment remedy when the scale of detriment to self-pay patients is, in HCA's view, relatively small, we note that:
 - (a) As set out in paragraph 10.30, above, the PCA gave a range of figures for the relationship between concentration and prices, with the 3% figure that HCA quoted being at the bottom of the range. An additional fascia was found to lead to prices that were 3 to 9% lower, which is not a trivial price effect.
 - (b) In any case, as set out in Section 12 on remedies, our assessment of the proportionality of each remedy is based on its impact on customers impacted by both the self-pay and the insured AECs, so looking at one of these in isolation is not instructive and is not indicative of the overall level of customer detriment that could be remedied by any particular remedy.

High-level points raised by HCA on the self-pay AEC finding

- 10.61 HCA raised a number of high-level points disagreeing with our provisional conclusion that, having considered a number of ways in which our findings in relation to the self-pay AEC could have been impacted by evidence submitted in relation to the insured market in central London, we found that HCA still faced weak competitive constraints for self-pay patients in central London.
- 10.62 First, HCA disagreed with our conclusion that, if less weight were put on the PCA results, then the other evidence, such as on barriers to entry, internal documents, market shares and parties' views, would still indicate that weak competitive constraints were likely to drive self-pay prices in some local markets, including central London. HCA took the view that, absent the PCA results, the evidence on these other issues would not, on its own, justify an AEC finding for self-pay patients.⁸¹
- 10.63 In response, we point out that our provisional conclusion, as with our final conclusion set out below, did not state that we could base the self-pay AEC on these other pieces of evidence, absent the PCA; only that, even if we were to put less weight on the accuracy or robustness of the PCA results, then we would still have other evidence that weak competition is likely to drive higher self-pay prices in some local markets, including central London.
- 10.64 Second, HCA put forward the view that the CMA's findings on quality and range (indicating that there was a degree of competition), our finding that

⁸¹ HCA response to the Remittal PFs, paragraphs 8.8-8.9.

self-pay patients had a wider range of options (compared to PMIs), and our view that self-pay patients were likely to be more price-sensitive than PMI patients,⁸² together meant that it was 'inconsistent' for us to find a self-pay AEC.⁸³ HCA's view was that the price sensitivity of self-pay patients would 'put pressure' on hospital operators' pricing decisions.⁸⁴

- 10.65 Our response to this point is that:
 - (a) While we would expect self-pay patients to be relatively more price sensitive than insured patients, this does not imply that providers would necessarily compete effectively on price for self-pay patients.
 Consumers' price sensitivity is not the only determinant of effective competition between providers.
 - (b) As set out above, the evidence on entry barriers, weak competitive constraints on HCA, and on the role played by local competitive constraints in determining prices for self-pay patients all suggested that a concentrated market like central London would be expected to display higher prices for self-pay patients than would prevail in a more competitive market. In other words, the fact that self-pay patients may be more price sensitive than insured patients is not sufficient to conclude that there is, therefore, effective price competition for these self-pay patients.

Conclusion in relation to the self-pay AEC for central London

- 10.66 Having considered three sources of potential competitive constraints on HCA that may impact on competition for self-pay patients to a greater extent than for insured patients (non-inpatient providers, PPUs and the NHS), we concluded that, in principle, these could provide a stronger constraint for self-pay patients than for insured patients. However, we concluded that the competitive constraints that these were likely to impose on HCA are weak, for the reasons set out in paragraphs 10.15, 10.20 and 10.24, above.
- 10.67 In relation to the PCA, we did not believe that patient complexity within the relevant treatments across different local markets was likely to be systematically correlated with local concentration to an extent that would call into question our results. Even if we had put less weight on the accuracy and robustness of the PCA, we would, in any case, have concluded that the other evidence, such as barriers to entry, internal documents, market

⁸² Which is relevant to our assessment in this section – see paragraphs 10.14 (a), 10.19 and 10.23 above.

⁸³ HCA response to the Remittal PFs, paragraphs 8.63–8.67.

⁸⁴ HCA response to the Remittal PFs, paragraph 8.66.

shares, and parties' views, indicated that local self-pay prices are likely to be driven by weak competition in some local markets including central London.

10.68 Therefore, we have concluded that there has not been a material change in the evidence or reasoning in relation to the self-pay AEC decision in relation to central London.

11. Our findings and AEC

11.1 In the previous sections we set out our views on the different building blocks of our competitive assessment, which we show again in Figure 11.1. We now draw together our conclusions from each of these in making our findings on the features of the markets for privately-funded healthcare services in central London and the AEC(s) that flow from these.



Figure 11.1: The key building blocks of our competitive assessment of private hospital operators in central London

- 11.2 Both in this remittal and in the Final Report, we have assessed a large body of evidence received from a range of parties, relevant market data, and internal documents from parties.
- 11.3 We have considered the evidence and/or arguments put to us by parties, in particular on whether anything has changed in the markets for privately-funded healthcare services in central London since our Final Report, in addition to any issues not previously raised by parties/addressed in the Final Report or where parties disagreed with our reasoning in the Final Report. We have taken into account both the analysis in the remittal and the prior evidence/ analysis contained in the Final Report, in reaching our findings as set out below.

Market definition

11.4 As set out in detail in Section 3, we have readopted our conclusions in relation to product and geographic market definition as set out in our Final Report (see paragraphs 3.18, 3.19 and 3.35 of this report). We continue to find:

- *(a)* distinct product markets in the provision of hospital services for individual specialties and, for each individual specialty, separate markets for inpatient, day-patient and outpatient services; and
- *(b)* the area covering the private hospitals and PPUs in central London as a separate geographic market.
- 11.5 On the basis of these findings we took the following approach to our competitive assessment:
 - (a) We have focused largely on hospitals and PPUs providing inpatient care, although we have also taken into account specialist and non-inpatient providers in central London, on a case-by-case basis (see further explanation in paragraph 3.19).
 - (b) We have aggregated a set of 16 specialties where we considered it appropriate and looked at oncology separately where possible (see paragraph 3.20).
 - (c) We have taken into account competitive constraints exerted from outside the markets by NHS hospitals on a case-by-case basis (see paragraph 3.20).
 - (*d*) We have taken into account the relative strength of the competitive constraints exerted by private hospitals/PPUs both within central London and also considered constraints from outside central London (see paragraph 3.34).

Market structure

Competitive constraints from other providers

- 11.6 We have found that private healthcare services in central London remain highly concentrated. As set out in Section 4, HCA continues to have high shares of supply relative to other hospital providers (50% share of total revenue and admissions) across many of the 16 specialities plus oncology, even when other specialist/non-inpatient providers are included. Its share is particularly high in some specialties such as oncology and cardiology. We have found there has been little change in the pattern of overall shares since the Final Report.
- 11.7 We recognise that there has been some growth in PPUs in central London since the Final Report. However, this has been broadly in line with overall growth in private healthcare in central London and PPUs continue to have a small share of private admissions. HCA's internal documents suggested that

it did view PPUs as a potentially significant source of competitive constraint, and we judged that a small number of PPUs appear capable of imposing a competitive constraint on HCA, in particular specialist PPUs, such as those at the Royal Marsden and Great Ormond Street. On the whole, however, our view is that the constraints imposed by PPUs in aggregate remain weak at present (see paragraph 4.98).

- 11.8 Similarly, we find that the constraint from non-inpatient providers in aggregate is weak. Non-inpatient facilities have a very small share of Bupa and AXA PPP's overall admissions (both inpatient and day-case) and a small share of their revenues. In particular, we note that the vast majority of day-case claims for insured patients took place at inpatient providers. Furthermore, on the basis of the evidence, we conclude that non-inpatient facilities currently compete with HCA only on a narrow set of services, primarily imaging and diagnostic procedures, where HCA itself holds a strong position (see paragraph 4.97).
- 11.9 Despite some changes in the market, in our view HCA continues to face weak competitive constraints, whether from other central London hospital providers/PPUs or these providers together with those outside central London. We remain of the view that NHS services are not a close substitute for private patient services provided by HCA (see paragraph 4.118). We also do not consider that competition from international providers constrains pricing to non-overseas patients due to HCA's ability to price discriminate, as evidenced by the fact that self-pay prices on its UK websites are 'For UK Residents Only' (see paragraph 4.143).
- 11.10 Although TLC remains HCA's closest competitor, it is much smaller in size (one hospital in comparison with HCA's seven hospitals and [one quarter] of HCA's revenues). We also note that PMIs themselves consider HCA to be 'must have' in particular for their large corporate clients (see paragraph 4.105).
- 11.11 Our conclusions on competitive constraints are set out in paragraph 4.181.

Barriers to entry and expansion

11.12 Having found that there are weak competitive constraints on HCA, we then looked at the extent to which the threat of entry or expansion might provide a constraint, as set out in Section 5. As in our Final Report, we noted that in spite of the attractiveness of the growing privately-funded healthcare services market in central London, there has been no substantial entry or change in the structure of the market over the last ten years or more (and only limited incremental expansion/changes in ownership).

- 11.13 Given the evidence provided to us during the remittal suggesting increased interest in entry/expansion in the central London market and the expected continued growth in demand within central London,¹ 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 smaller, more specialised entrants (such as Schön Klinik). However, it is not possible for us to predict the scale or timing of this with any degree of certainty
- 11.14 If the above entry takes place, we recognise that this, in association with the existing constraints on HCA, would be likely to increase significantly the level of competitive constraint on HCA. However, we have concluded that entry is unlikely to be sufficiently timely to act as a constraint on HCA in the near future (ie in the next two years).
- 11.15 Our view is that over a longer time frame, for example the next seven to 12 years, there is a real prospect of large-scale entry into the central London market. However, the possibility of new entry in the medium term does not change our view that there are substantial barriers to entry into this market, nor have we seen any evidence to suggest that the threat of such entry has placed any significant constraint on HCA (or will in the near future).
- 11.16 Our review of the evidence indicates that long lead times, exacerbated by the existence of high sunk costs, the limited availability of suitable sites and planning constraints, remain the principal barriers to entry in central London. We noted that the reorganisation of many NHS trusts' estates (if it goes ahead) has the potential to ease constraints on the availability of suitable sites (see paragraph 5.44). However, our view is that this is unlikely to take place in a sufficiently timely manner to facilitate the new entry of private hospital operators that could constrain HCA in the near future.
- 11.17 Therefore we remain of the view that entry (or the threat of entry) is not currently acting as a significant competitive constraint on HCA. Our conclusions on barriers to entry and expansion are set out in paragraph 5.70.

Bargaining between PMIs and HCA

11.18 We also sought to understand the relative bargaining power of both HCA and PMIs as set out in Section 6. Prices charged by hospital operators to

¹ 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.

PMIs typically focus on the price of the overall bundle of services/treatments and are the same across the provider's portfolio of hospitals.

- 11.19 We continue to find that that it is not possible to quantify each side's relative bargaining power. However, it is clear from the evidence we have seen that both parties are dependent on each other and have some power in the bargaining relationship, ie neither side are 'price-takers'. We do not agree with HCA that an extreme 'sharing rule', in which HCA receives a very small share of the bargaining surplus, is a plausible description of its negotiations with PMIs in the central London private healthcare services market. The evidence put to us suggests that PMIs are not able (or anywhere close to being able) to negotiate on a 'take-it-or-leave-it' basis with HCA (see paragraph 6.77).
- 11.20 We have also considered the extent to which PMIs can use/create alternative products or contracting strategies to increase their outside options (eg restricted networks, service-line tenders, open referrals). We have found that, although there has been some growth in their use by PMIs, they have not materially improved PMIs' outside options vis-à-vis HCA (see paragraphs 6.34 to 6.74).
- 11.21 Therefore we remain of the view that, while PMIs have some bargaining (or buyer) power, they do not have countervailing buyer power which is sufficient to offset the exercise of market power by HCA. Our conclusions on bargaining are set out in paragraphs 6.75 to 6.78.

Market outcomes

- 11.22 Outcomes of the competitive process in a market can also provide evidence about how a market functions and the extent of competition. Evaluating these outcomes helps to determine whether there is an AEC and, if so, the extent to which customers may be harmed and the degree of customer detriment.
- 11.23 Competition in private healthcare is characterised in terms of quality (level of service provided), range (which and how many treatments are provided) and price.

Quality and range

11.24 We have considered the extent to which there are differences in quality and range between HCA and other hospital operators (see Section 7).

- 11.25 On quality, we continue to find that there is no evidence of material quality differences between HCA and TLC in central London, although we note that there is a lack of objectively comparable data (see paragraph 7.15).
- 11.26 Similarly, in relation to product range, while we recognise that HCA offers a wider range of treatments than TLC, we consider that both operators nonetheless offer a broad set of treatments (see paragraph 7.26).
- 11.27 Notwithstanding the weak competitive constraints and barriers to entry and expansion, the evidence suggests that there is a degree of competition over both quality and range in central London. We note that this is not inconsistent with our findings of a lack of competition on price, particularly in the insured segment (see paragraphs 7.23 to 7.25).
- 11.28 The evidence indicates that overall, quality and range will not worsen with greater rivalry, and we continue to consider that quality and range will improve in more competitive markets. Our conclusions on quality and range are set out in paragraphs 7.27.

Insured prices

- 11.29 We also assessed pricing outcomes in central London using the IPA, which specifically assesses whether there is a price difference between HCA and its closest competitor, TLC, by comparing prices that HCA and TLC charge to PMIs for the treatments in the common basket (set out in detail in Section 8).
- 11.30 As we explained in the Final Report, this comparison of prices between HCA and TLC was a complex task because we needed to take into account any differences between the treatment mix and patient mix of the two providers (see paragraph 8.13).
- 11.31 In order to compare prices on a like-for-like basis, our analysis controlled for:
 - (a) differences in the range of treatments that each provider offers by only comparing those that both HCA and TLC provide to PMIs' patients, that is, the 'common basket' of treatments; and
 - (b) differences in the complexity of patients at HCA and TLC for the same set of treatments by controlling for length of stay, patient age and gender in our treatment-level regressions.

- 11.32 As explained above,² there were some errors in the analysis presented in our Final Report which we have corrected during the remittal.³ We have also undertaken a significant amount of additional work during the remittal, in particular in response to detailed comments from parties on the revised IPA Working Paper published during the remittal. In particular, HCA submitted a number of new submissions and evidence which suggested that:
 - *(a)* the IPA did not fully account for differences in patient complexity between HCA and TLC;
 - (b) that HCA, in its view, attracted more complex patients than TLC; and
 - (c) that when this was taken into account, there was no statistically significant price difference between HCA and TLC.
- 11.33 The revised results of the IPA are set out in paragraphs 8.120 to 8.127. We have produced estimates of price differences between HCA and TLC for 36 insurer-year pairs which show that, for many insurers in many years, HCA charged higher prices than TLC. Looking in addition at the overall average price difference across all insurers and all years, the analysis suggests that HCA's prices were higher than TLC's for the same treatment by between [≫]%, and that this difference was statistically significant.
- 11.34 While HCA's suggested reasons why it attracts more complex patients than TLC (for the same treatments) are plausible, in our view there are difficulties in quantifying the effect of this. With the exception of HCA, no other parties considered that HCA treated more complex patients than TLC for the same treatments. However, we cannot rule out the possibility that any differences in patient complexity are not fully controlled for in the IPA (see paragraph 8.150). As a result, we cannot be confident that the price difference is as high as the IPA results suggest, as we cannot be confident that we are comparing like with like.
- 11.35 In coming to a view on how this evidence relates to our overall assessment of competition in central London, we gave further consideration to the possible reasons behind such a price difference, alongside the other evidence and analysis set out in our findings.
- 11.36 In relation to whether the price difference can be explained by any quality differences between HCA and TLC, on the basis of available evidence we did not find any evidence of material quality differences between HCA and

² See paragraphs 8.112 to 8.113 and 8.121.

³ The Remittal IPA Working Paper.

TLC. Therefore we do not consider that this is likely to explain the price difference.

- 11.37 In relation to patient complexity, as we conclude above, while overall there are weaknesses with the evidence on whether HCA attracts more complex patients than TLC, we cannot rule out the possibility that this may explain some of the price difference. In other words, we consider that the price difference we find between HCA and TLC is not likely to be fully explained by systematic differences in complexity, though it may be partly driven by this.
- 11.38 There is a substantial body of evidence and analysis indicating that HCA has a strong position in central London and faces weak competitive constraints (see our findings above). Our finding that there is a price difference between HCA and TLC is consistent with that evidence. Taking into account all of the evidence, we consider the weak competitive constraints we have identified are likely to explain at least some of the price difference.
- 11.39 We therefore still conclude that HCA charges higher insured prices than TLC. However, unlike at the time of our Final Report, we can no longer conclude with any precision on the size of this price difference, as we cannot be sufficiently certain that we have adequately controlled for any differences in patient complexity, and hence are comparing like with like.

Profitability

- 11.40 A further indicator of the extent of competition and whether prices are above the competitive level is profitability (see Section 9). We previously found that HCA earned returns substantially and persistently in excess of the cost of capital, despite the data being used relating to a period when there was a severe recession. As noted in the Final Report, this suggested that the price of private healthcare services may be high in relation to the costs incurred by HCA in providing those services, and thus higher than we would expect in a competitive market.
- 11.41 We did not receive any submissions, from HCA or other parties, providing new evidence or arguments which either challenged the robustness of the original profitability analysis, or suggested that HCA's profitability had declined since 2011.
- 11.42 However, given that our revised IPA no longer allowed us to conclude on the size of the price difference (as described earlier), we decided to revisit the profitability analysis to cover the period up to 2015 in order to obtain current estimates of the economic profits made by HCA to assist in our assessment

of the potential impact of a divestiture remedy on the prices charged by HCA. Having updated our analysis in this way for the purposes of our remedies assessment, we have also taken these more recent results into account when considering the outcomes observed in the market for the purposes of assessing whether there is an AEC.

11.43 Our revised analysis, covering the period 2007 to 2015, suggests that HCA has continued to make returns that were substantially and persistently in excess of the cost of capital. This confirms our view that the price of private healthcare services is high in relation to the costs incurred by HCA in providing those services, and thus higher than would be expected in a competitive market. Our conclusions are set out in paragraph 9.7.

Findings on the AEC for insured patients in central London and customer detriment

- 11.44 Taken together, based on the evidence and findings set out in Sections 4 to 9, we conclude that there are two structural features in the markets for the provision of privately-funded healthcare services to insured patients in central London, which are in combination leading to an AEC:
 - (a) high concentration, with HCA having a large market share; and
 - (b) high barriers to entry and expansion, arising primarily from high sunk costs and long lead times, the latter being exacerbated by limited site availability and planning constraints.
- 11.45 In combination, these features result in weak competitive constraints on HCA in the provision of privately-funded healthcare services for insured patients in central London.
- 11.46 We also conclude that the AEC is leading to customer detriment in the form of higher prices being charged by HCA than we would expect in a wellfunctioning market, although we are not able to quantify with confidence the scale of this detriment. This is supported by, in particular:
 - (a) The revised IPA, which we consider demonstrates that, on average, HCA charges higher prices than its closest competitor, TLC, across the treatments that they both provide. In contrast to the position at the time of the Final Report, we can no longer conclude on the size of this price difference, as we cannot be sufficiently confident that we have adequately controlled for any differences in patient complexity between HCA and TLC, and hence are comparing like with like. However, as discussed in paragraphs 11.37 to 11.38, above, we are confident there is sufficient evidence to indicate there is a difference in prices.

- *(b)* The profitability analysis, which demonstrates that HCA has made returns that are substantially and persistently in excess of its cost of capital, unlike TLC.
- 11.47 We note that some of the evidence in support of the AEC is now less certain than at the time of the Final Report, and that we are no longer able to conclude on the extent of the customer detriment arising from the AEC. We remain of the view that there is an AEC. We have, however, taken these matters into account in assessing the effectiveness and proportionality of potential remedies.

Findings on the self-pay AEC in central London

- 11.48 As explained in paragraph 1.21, the self-pay AEC decision has not been quashed by the CAT, however, we have considered whether any of the analysis undertaken during the remittal in relation to the insured AEC decision has a material effect on the reasoning in relation to the self-pay AEC decision.
- 11.49 Our assessment on self-pay is set out in Section 10. We consider that three sources of potential competitive constraints on HCA (non-inpatient providers, PPUs and the NHS) may impact on competition for self-pay patients to a greater extent than for insured patients, however we consider that the competitive constraints that these are likely to impose on HCA are weak (see paragraphs 10.40).
- 11.50 In relation to the PCA, we do not consider that patient complexity within the relevant treatments across different local markets is likely to be systematically correlated with local concentration to an extent that would call into question our results. Our conclusions are set out in paragraphs 10.40 and 10.41.
- 11.51 We therefore conclude that there has not been a material change in the evidence or reasoning in relation to the self-pay AEC decision such as to call into question our conclusions set out in the Final Report.

12. Remedies

Background

- 12.1 In Sections 4 to 11 we set out our findings in this remittal. In summary, we find that there are two structural features in the markets for the provision of privately-funded healthcare services to insured patients in central London, which are in combination leading to an AEC:
 - (a) high concentration, with HCA having a large market share; and
 - *(b)* high barriers to entry and expansion, arising primarily from high sunk costs and long lead times, the latter being exacerbated by limited site availability and planning constraints.
- 12.2 In combination, these features result in weak competitive constraints on HCA in the provision of privately-funded healthcare services for insured patients in central London.
- 12.3 We also conclude that the AEC is leading to customer detriment in the form of higher prices being charged by HCA than we would expect in a well-functioning market, although we are not able to quantify the scale of this detriment precisely.
- 12.4 In reaching our decision on remedies to address the above AEC, together with the separate AEC relating to self-pay patients, and/or the customer detriment arising from the AECs, we have taken into account the expected impact of the remedies that have already been introduced in the private healthcare market by the CMA. These include measures to:
 - (a) allow the CMA to undertake a competition review of new PPU arrangements;
 - (b) prohibit certain types of incentive schemes operated by private hospitals which reward referring clinicians for treating patients at particular facilities; and
 - (c) require the publication of performance information on private healthcare facilities and consultants, and the provision of information on the fees charged by consultants.
- 12.5 As we set out in our Final Report, we expect the remedies introduced after the original investigation to reduce prices throughout the UK, irrespective of whether there is an additional remedy in central London. For example, the PPU remedy should increase local rivalry by facilitating market entry and/or

expansion.¹ In the case of the information remedy, we noted that this was largely focused on facilitating patient choice on hospital quality rather than on price; however, we tentatively assessed that this remedy may have an impact on price of around 1% over the longer term.²

- 12.6 Although we expect that these existing remedies will improve competition within the private healthcare market in central London, we do not consider that they will fully address the insured AEC or self-pay AEC or the resulting customer detriment.
- 12.7 Consequently, in the rest of this section, we consider whether additional remedial action is required to address the AECs identified in this remittal. We begin by setting out the framework that we have used for consideration of remedies. We then provide a detailed discussion of the remedies outlined in our Remittal Remedies Notice and other alternative remedies that some parties³ proposed in their responses to the Remittal PDR. We discuss the remedies that we have considered to address the AECs we have identified and/or any resulting customer detriment.
- 12.8 For each of these remedies we discuss how it could address the AECs and/or the resulting customer detriment and set out the views of parties. We then consider the design and implementation of these remedies, before assessing and concluding on their effectiveness and proportionality.
- 12.9 As part of this assessment, we have considered further the potential scale of the customer detriment. We have also considered what we believe the impact of the remedies considered might be on prices, and certain other areas of uncertainty (such as timing of new entry) which have an impact on the assessment of the proportionality of the remedies.

Framework for the assessment of remedies

12.10 When deciding whether any remedial action should be taken and, if so, which action should be taken, the CMA will consider how comprehensively the possible remedy options – individually or as a package – address the AECs and/or the resulting detrimental effects on customers, and whether they are reasonable and practicable.⁴

¹ Final Report, paragraph 11.253.

² Final Report, paragraph 11.234: '.... 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.'

³ Bupa and Spire.

⁴ CC3, paragraph 330.

- The CMA will assess the extent to which different remedy options are likely 12.11 to be effective in achieving their aims, including whether they are practicable and when they are likely to have effect.⁵ In particular, a remedy must be capable of effective implementation, monitoring and enforcement. The effectiveness of any remedy may be reduced if elaborate monitoring and compliance programmes are required. The CMA will generally look to implement remedies that prevent an AEC by addressing its underlying causes, or by introducing ongoing measures that can be put in place for the duration of the AEC. The CMA will tend to favour remedies that can be expected to show results within a relatively short period of time. In line with our revised guidelines⁶ and EU case law, the CMA will also consider whether or not to limit the duration of individual remedies by including sunset provisions in their design. This approach might be appropriate if, for example, the relevant competitive dynamics of a market are likely to change materially over the next few years or the measure in question is intended to have a transitional impact, while other longer-term measures take effect.⁷
- 12.12 The CMA will be guided by the principle of proportionality in ensuring that it acts reasonably in making decisions about which remedies to impose. The CMA will therefore assess the extent to which different remedy options are proportionate, and in particular it will be guided by whether a 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.⁸
- 12.13 In reaching a judgement on whether to implement a particular remedy, the CMA considers its potential effects on those persons most likely to be affected by it, generally customers and the businesses subject to the remedies. The CMA seeks to quantify the costs and benefits associated with a remedy where it is reasonably practicable to do so, taking into account any relevant customer benefits arising from the adverse features of the market concerned.

⁵ CC3, paragraphs 327 & 330.

⁶ Market studies and market investigations: Supplemental guidance on the CMA's approach (CMA3), paragraphs 4.14–4.25.

⁷ CMA3, paragraphs 4.14–4.25.

⁸ CC3, paragraphs 335–337.

- 12.14 In response to the Remittal PDR and Remittal Supplemental PDR, several parties referred to the CMA as having a 'duty' to remedy the AEC it has identified. The CMA's duties are set out in section 134 of the Act. Section 134(4) provides that, once it has identified an AEC, the CMA must decide *whether* action should be taken for the purpose of remedying, mitigating or preventing the AEC or any resulting customer detriment and, *if* action should be taken, what action to take. In doing so, the CMA is obliged under section 134(5) to have regard to the need to achieve as comprehensive a solution *as is reasonable and practicable*.
- 12.15 The circumstances in which we 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 relevant customer benefits accruing from the market features are large in relation to the AEC and would be lost as a consequence of any appropriate remedy.⁹

Remedy measures that we have considered during the remittal

- 12.16 In the course of the remittal, we have considered seven potential remedies to the features identified as giving rise to AECs in central London. These were:
 - (a) Remedy 1 divestiture of one or more of HCA's hospitals and/or other facilities in central London;
 - (b) Remedy 2 require HCA to give competitors access to its hospital facilities in order to compete ('access' remedy);
 - (c) Remedy 3 restrictions on further expansion by HCA in central London;
 - (d) Remedy 4 a price control on HCA;
 - (e) Remedy 5 preventing tying and bundling, including the removal of restrictive contract clauses with insurers (as proposed by Bupa and Spire);
 - *(f)* Remedy 6 measures to enhance the availability of sites for private hospitals in central London; and

⁹ CC3, paragraphs 355–369.

- (g) Remedy 7 imposing further constraints on HCA's relationships with consultants, proposed by Bupa.
- 12.17 In the following section, we set out our consideration of the potential design, effectiveness and proportionality of each of these remedies in turn. We conclude that there are no potential remedies available to us that would be both effective and proportionate in addressing the AECs and/or their detrimental effects on customers.

Remedy 1: divestiture

Aim of remedy

- 12.18 The aim of divestiture in market investigations is generally to address competition problems arising from structural features of the market. This may be done either by creating a new source of competition through disposal of a business or assets to a new market participant, or by strengthening an existing source or sources of competition through disposal of a business or assets to an existing market participant that is independent of the divesting party (or parties).
- 12.19 This remedy would require HCA to divest a hospital or hospitals and related assets (the divestiture package) to a suitable purchaser or purchasers in order to impose a stronger competitive constraint on HCA's remaining hospitals in central London. The rationale for requiring a divestiture is that by putting additional capacity in the hands of operators other than HCA, this remedy would make it easier for PMIs to offer credible products to their customers which did not rely on including HCA facilities. As a result, the reduced reliance of insurers on HCA would increase the competitive constraint on the firm. This could lead prices for insured and self-pay patients to fall.
- 12.20 In the Remittal Remedies Notice, we asked parties for their views on whether a divestiture remedy would address the insured AEC and self-pay AEC in central London effectively and comprehensively, and whether a divestiture package, comprising either the Wellington Hospital or the London Bridge Hospital and Princess Grace Hospital, would effectively constrain HCA in terms of the range of specialisms offered and the capacity of the hospitals (ie theatres, beds, ICU, etc). These were the same divestiture packages that we concluded would be effective in the Final Report.
- 12.21 In the Remittal Supplemental PDR, we provisionally concluded that we would not pursue a divestiture remedy. We gave 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 divestiture remedy. In light of all these, we concluded that we were unable to form an expectation that the benefits of such a remedy in addressing the AECs would outweigh its costs. We therefore provisionally concluded that a requirement to divest a central London hospital would not be proportionate.

- 12.22 In this section, we set out our assessment of divestiture as a remedy to the AECs identified, taking into account the submissions that we received in response to the Supplemental PDR. Our assessment is structured as follows:
 - (a) First, we summarise parties' views on divestiture and set out our assessment of the design of and effectiveness of the divestiture package.
 - (b) Next, we discuss the evidence that we have collected on the likely development of the central London market in the absence of divestiture. This constitutes the counterfactual situation against which we assess the likely costs and benefits of the remedy.
 - (c) We then consider the potential costs and benefits of divestiture in detail, including:
 - the expected impact on prices resulting from a divestiture, taking into account any loss of economies of scale arising as a result of the remedy and the greater uncertainty since the Final Report about other aspects of our analysis, including the IPA and the evidence on spare capacity; and
 - (ii) the expected costs of a divestiture remedy, including transaction and reorganisation costs.
 - (*d*) We draw these elements of our assessment together in our net present value (NPV) analysis, the results of which indicate that under a range of plausible assumptions divestiture may have either net costs or net benefits.
 - (e) Finally, we set out our conclusions on the proportionality of divestiture, notably that, although divestiture is likely to be an effective remedy, it would not be proportionate since we are not able to form an expectation on the basis of the evidence that the benefits of the remedy would outweigh the costs.

Design and effectiveness

- Views of parties
- PMIs
- • **AXA PPP**
- 12.23 AXA PPP told us that it continued to believe that divestiture was the only remedy which would resolve the current lack of competition in central London. However, AXA PPP also said that it remained concerned that the divestiture packages proposed by the CMA did not contain all of the components required to create a credible third competitor in central London, in particular with respect to oncology. AXA PPP stated that the essential components of a credible proposition in central London were:
 - (a) a significant flagship hospital in central London;
 - (b) Harley Street provision;
 - (c) coverage for a full range of specialties;
 - (d) high-acuity cover; and
 - (e) a full cancer service, including radiotherapy.¹⁰
- 12.24 AXA PPP told us that HCA should be required to divest the London Bridge Hospital (including the London Radiotherapy Centre and the outpatient facilities at the Shard) and the Princess Grace Hospital. The only alternative package that would comprise all of the necessary elements would be the divestiture of the Wellington Hospital and the Harley Street Clinic.
- 12.25 AXA PPP also told us that, following divestiture, neither hospital should be acquired by TLC but instead should be acquired by an independent provider to ensure that each provider in central London was suitably constrained by others, and that the divestiture remedy should be implemented as soon as possible.¹¹

¹⁰ AXA PPP response to Remedies Notice, p14, section 6.

¹¹ AXA PPP response to Remedies Notice, p15, section 6.1.

- o o Bupa
- 12.26 Bupa submitted that requiring HCA to divest a package of hospitals was the only effective way to address the AECs in central London.¹² Bupa said that divestiture offered a clear-cut and timely solution, introducing real and immediate rivalry into the market, without the need for costly ongoing monitoring and the risk of circumvention. Bupa indicated that competition in the market would not improve without the CMA's intervention.¹³
- 12.27 Bupa told us that the remedies package should be designed with a forwardlooking view. It should account for market concentration, HCA size and current customer detriment which Bupa stated was very high and potentially underestimated by the analyses based on the 2011 data in the Remittal PFs. Bupa said that it should also take into account the further planned expansion HCA already had in motion.¹⁴
- 12.28 Bupa told us that either of the two divestiture packages set out in the Remedies Notice would be practicable, but it did not believe that either would be sufficient as proposed.¹⁵
- 12.29 Bupa told us that the scope of the divestiture package should be expanded in order to address effectively HCA's 'dominance' (particularly at the specialism level).¹⁶ Bupa proposed the following packages instead:
 - (a) Package A:
 - (i) the London Bridge Hospital (sold to one acquirer);
 - (ii) the Harley Street Clinic (sold to a separate acquirer);
 - (iii) the main primary care and outpatient facilities that fed these two facilities (eg the Roodlane GP practice); and
 - (iv) behavioural undertakings on HCA in relation to its contracts with insurers (see paragraph 12.30 below).
 - (b) Package B:

¹² Bupa response to Remedies Notice, p5, paragraph 1.9.

¹³ Bupa response to Remedies Notice, p5, paragraph 1.10.

¹⁴ Bupa response to Remedies Notice, p5, paragraph 1.11. Bupa told us this expansion includes HCA's lease on three floors at the Shard, its radiotherapy centre for private patients on the Guy's Hospital campus, as well as the new NHS and private patient cancer centre at Guy's Hospital, a new advanced screening outpatient clinic on Devonshire Street, and HCA's expansion of the Portland Hospital into an adjacent building, with the aim of doubling the paediatric activity at the hospital.

¹⁵ Bupa response to Remedies Notice, p6, paragraph 1.16.

¹⁶ Bupa noted that its alternative proposed divestiture packages would address HCA's market power in particularly important specialisms, [%]. Bupa response to Remedies Notice, p6, paragraph 1.23.

- (i) the London Bridge Hospital (sold to one acquirer);
- (ii) the Wellington Hospital (sold to a separate acquirer);
- (iii) additional oncology services in central London;
- (iv) the main primary care and outpatient facilities that fed these two facilities (eg the Roodlane GP practice); and
- (v) behavioural undertakings on HCA in relation to its contracts with insurers (see paragraph 12.30 below).
- 12.30 In Bupa's view behavioural undertakings should include obligations on HCA to remove [≫] restrictive contractual clauses with insurers that could jeopardise the success of the newly divested facilities, and options for insurers to renegotiate pricing with the HCA group.
- 12.31 Bupa believed that HCA divesting the London Bridge Hospital was a necessary and fundamental element to any effective remedies package as it was critically important to corporate customers. As a result, Bupa told us that, if London Bridge Hospital remained in HCA's control, it would continue to confer 'must have' status on all of the remaining facilities in the HCA group. Bupa submitted that insurers would have increased countervailing bargaining power in respect of the London Bridge Hospital if it were a standalone facility. Furthermore, if HCA were allowed to retain its facility at the Shard and the PPU at Guy's and St Thomas', there would be some increased options for customers (both insurers and individual consumers) in the local area and rivalry between the facilities may grow over time.¹⁷
- 12.32 In response to the Remittal Supplemental PDR, Bupa suggested that if our final decision was not to order a divestiture package of the size set out above, based on the scale of divestiture costs on HCA, then we should consider smaller-scale divestitures that may only be partially effective but which would improve outcomes for customers. Bupa said that we should further consider one of the following two narrower packages:
 - (a) Divest the London Bridge Hospital to reduce HCA's control over the Corporate market segment; or

¹⁷ Bupa response to Remedies Notice, p6, paragraphs 1.17 & 1.18.

- (b) Divest (i) Leaders in Oncology Care (The London Oncology Clinic or LOC) or The Harley Street Clinic and (ii) The London Radiotherapy Centre (LRC) to address HCA's control over oncology.¹⁸
- 12.33 Bupa told us that, in its view, divestiture of the London Bridge Hospital would have a significant impact on pricing in central London. Bupa noted that the London Bridge Hospital offered a broad range of specialisms, including oncology and cardiology and that it would increase competitive rivalry across the market and in key specialisms.
- 12.34 Bupa submitted that insurers could credibly offer products to some customers that excluded the remainder of the HCA group (ie offered only the London Bridge Hospital, TLC and the Bupa Cromwell etc in the product). Furthermore, in Bupa's view, insurers would also have more bargaining power against a stand-alone London Bridge hospital.
- 12.35 Bupa said that this remedy would not fully address the AECs or customer detriment, but would still deliver much improved outcomes to customers.
- 12.36 Bupa noted that Cleveland Clinic would place little constraint (if any) on HCA in oncology and no other compelling evidence was presented in the Remittal PDR of other operators expanding their oncology services at scale and pace. Bupa also noted that, in its view, the AECs would persist in oncology,¹⁹ even if Cleveland Clinic entered, and HCA would be able to leverage this power across other aspects of its business with insurers. Therefore, in Bupa's view, a divestiture targeted at this specialism would be appropriate.
 - Hospital operators
 - • **HCA**
- 12.37 HCA stated that the divestiture remedies being considered by the CMA would not be effective for a number of reasons, given the basis of the CMA's Remittal PFs, and that a divestiture remedy would be disproportionate. These reasons included, among other things, the lack of evidence of a price differential with TLC on a like-for-like basis, and the evidence that there were no alternative capacity constraints in central London. This, in HCA's view,

¹⁸ ¹⁸ Bupa response to Remittal PDR, p43, paragraphs 4.7–4.19.

¹⁹ We note that although the London Bridge Hospital offers some oncology services, it does not provide radiotherapy.

showed that there was no basis for asserting that divestiture would lead to any price benefits.²⁰

- 12.38 HCA told us that a forced divestiture of one or more of its hospitals would cause a range of economic and other costs to HCA, to patients and to other potential investors. HCA stated that a divestiture remedy would interfere with incentives to invest and innovate. Furthermore, HCA submitted that divestiture would result in the loss of a range of relevant customer benefits both at HCA's remaining hospitals and at the divested hospital(s) and would also impose a number of one-off costs of divestiture to HCA and to the purchaser(s) of the divested asset(s).²¹
- 12.39 HCA told us that a divestiture remedy would not be effective, would be more onerous than needed to achieve the CMA's stated aim, would not be the least onerous alternative and would produce disadvantages which were disproportionate to the aim.²² In particular, HCA stated that the evidence from the CMA's revised IPA showed that its insured prices were comparable to those of TLC when compared on a like-for-like basis (in particular when differences in patient complexity were more fully controlled for), such that divestiture was unlikely to result in a decrease in its prices. In addition, HCA submitted analysis, carried out by KPMG, relating to the availability of spare capacity in central London. Based on data for 2011, this analysis, in HCA's view, indicated that there was sufficient spare capacity across a range of non-HCA private hospitals and PPUs [%]. In other words, there was sufficient non-HCA capacity in central London in order to allow insurers to move all of this activity from HCA to other providers and to delist HCA if they so wished.
- 12.40 HCA noted that PMIs such as AXA PPP and Bupa had themselves accepted that there was sufficient spare capacity in the market to direct their patients away from HCA facilities. HCA noted that even if all PPUs were excluded from the spare capacity analysis, there was still sufficient capacity for: (a) every insurer to move all its patients away from HCA on any day; (b) both Bupa and AXA PPP to move all their patients on any day.
- 12.41 Even if divestiture were effective in terms of reducing prices to PMIs, HCA submitted that such reductions would be unlikely to be passed to policyholders. HCA also told us that, irrespective of any effect on prices, a divestiture remedy was highly unlikely to lead to better outcomes for customers in the form of better quality and range of private healthcare

²⁰ HCA response to Remedies Notice, p6, paragraphs 3.3 & 3.4.

²¹ HCA response to Remedies Notice, p6, paragraphs 3.8 & 3.9.

²² HCA response to Remedies Notice, p6, paragraph 3.10.

services, either at HCA's remaining hospitals or at the divested hospital(s). On the contrary, HCA told us that it was likely to lead to worse outcomes by *(a)* increasing costs of delivering services and reducing the incentive and ability for private hospital operators to invest; *(b)* the loss of relevant customer benefits from HCA's network of hospitals relating to range of services, innovation and quality; and *(c)* subject the hospitals concerned to considerable asset risk during the divestiture process.²³ Therefore, the remedy would not lower prices for a given level of quality and range of private healthcare services.²⁴

- o o TLC
- 12.42 TLC told us that it considered that divestiture of hospitals (and other assets) by HCA would in principle be a practical, effective and proportionate remedy.
- 12.43 However, TLC said that it remained concerned that the specific divestiture package identified by the CMA would not effectively and comprehensively address the AEC or constrain HCA as it would not deal with HCA's very high market shares in certain sub-specialties.
- 12.44 TLC said that, in the field of oncology, HCA's market power was entrenched by its super-dominant position in relation to certain sub-specialties: chemotherapy and radiotherapy. Therefore, TLC told us that for the divestiture remedy to be effective in respect of oncology in central London, the divestiture package must include LOC and the NHS PPUs operated by HCA in central London in addition to the Wellington Hospital or the London Bridge Hospital and the Princess Grace Hospital.²⁵
 - o o Spire
- 12.45 Spire told us that a divestiture remedy was essential to addressing the competition issues in central London in the short term due to the long lead time and material commercial investment involved in establishing a new hospital.
- 12.46 Spire submitted that the success of the remedy was dependent upon the divested assets being bought by a hospital operator that was able to ensure from the start that the assets were strong competitors in the London market.

²³ Asset risk is the measure of an asset's default potential or market value fluctuation. In this case, the asset risk is the risk associated with the overall robustness of the real estate market and the default potential of the investment.

²⁴ HCA response to Remedies Notice, p6, paragraphs 3.11 & 3.12.

²⁵ TLC response to Remedies Notice, p2.

Spire believed that the divestiture package should include any associated outpatient diagnostic and treatment centres such as Old Broad Street and Canary Wharf. In Spire's view, the package should include the divestiture of other primary care practices such as GP practices owned by HCA that primarily referred to the divested asset(s).²⁶

- 12.47 In regard to the remedy's effectiveness, Spire said that the disposal of the Wellington Hospital (including the Platinum Medical Centre) or both the London Bridge Hospital and Princess Grace Hospital were key to opening the market up. No other combination would be as effective.²⁷
 - Our assessment of remedy design and effectiveness
- 12.48 Our framework for analysing the effectiveness of divestiture package options is as set out in the Final Report.²⁸ In considering the scope of the divestiture package that would be effective in addressing the AECs, we have taken account of: the range of services provided by each of HCA's hospitals; their customer bases; and the size and scale of HCA's hospitals in terms of the volume of their admissions, their turnover and capacity. In addition, we identified the following factors as being salient in assessing the effectiveness of a potential divestiture package:
 - (a) The importance of oncology in a hospital's offering to PMIs whether additional oncology services should be included in the divestiture packages.
 - (b) The location of HCA's hospitals within central London. In particular, we considered the importance of Harley Street and/or London Bridge to insurers.
 - (c) The amount of spare non-HCA capacity, where the evidence is mixed, and the link between the availability of non-HCA spare capacity and HCA's excess profits. We have taken these points into account in our assessment of the likely impact of a divestiture remedy on HCA's prices.
 - (d) How prices are set in this sector and the extent to which they would fall following divestiture – the evidence we reviewed indicated that prices are determined through a series of bilateral negotiations between HCA and each insurer, but it has not been possible to model the process of price setting in this market in a way that leads to predictions of how

²⁶ Spire Healthcare response to Remedies Notice, p1.

²⁷ Spire Healthcare response to Remedies Notice, p2.

²⁸ Final Report, paragraphs 11.68–11.72.

much prices could be expected to change in response to additional competition either from a divested hospital or from a new entrant.

- 12.49 As we set out in the original market investigation, in considering the scope of the divestiture package we took account first of the range of specialties each of HCA's hospitals provided. Our reasoning was that divesting a highly specialised hospital would not, certainly in the short term, enable the new owner to compete effectively with the retained hospitals operated by HCA. We therefore sought to identify hospital assets which provided a broad range of services and identified the London Bridge, the Wellington, the Princess Grace, and (to a lesser extent) the Lister hospitals as falling into this category.²⁹
- 12.50 Next, we considered the scale or size of HCA's hospitals in terms of shares of admissions, revenues and capacity. We noted that there were several potential measures of capacity, including overnight beds, operating theatres, consulting rooms and ICU beds, and that the interpretation and the collection of capacity data had presented certain problems.³⁰
- 12.51 In the original market investigation, we concluded that the divestiture of either the Lister or the Princess Grace on their own would not create sufficient incremental non-HCA supply to constrain HCA effectively, but that requiring HCA to divest either the London Bridge and Princess Grace hospitals, or the Wellington hospital (together with the Platinum Medical Centre) would create an effective constraint on HCA, thereby addressing the AECs.³¹
- 12.52 We concluded that it was not necessary for the effectiveness of the divestiture remedy to require HCA to divest additional outpatient or diagnostic facilities.³² We found that the Wellington together with the Platinum Medical Centre and the London Bridge together with Princess Grace would be likely to provide an effective competitive constraint on the remaining HCA hospitals if they were to be divested in these combinations.
 - Further assessment of remedy design and effectiveness
- 12.53 In this remittal, we have considered the various further submissions that we have received on the potential design and effectiveness of the divestiture

²⁹ Final Report, paragraphs 11.72–11.75.

³⁰ Final Report, paragraph 11.79.

³¹ Final Report, paragraphs 11.112–11.124. Either of these divestiture packages was considered to be sufficient to create an effective competitive constraint on HCA in combination with other non-HCA hospitals in central London.

³² Final Report, paragraphs 11.133–11.136.

packages set out in the original market investigation and in the remittal Remedies Notice.

- Range of services
- 12.54 We considered AXA PPP's and Bupa's submissions that a divestiture package would need to include additional oncology services in order to be effective.³³ First, we observed that both of the potential divestiture packages included some oncology services and that there were already groups of specialist (oncology) consultants practising at these facilities.³⁴ However, neither of the potential divestiture packages included radiotherapy facilities. Therefore, we considered whether such facilities should be included in any divestiture package in order for it to constrain HCA effectively.
- 12.55 The evidence gathered during the remittal indicates that HCA has approximately half of the private linear accelerators in central London:
 - (a) HCA's Harley Street Clinic has two linear accelerators and a CyberKnife, and operates a Gamma Knife Centre in partnership with Barts, and a TrueBeam at UCLH.
 - (b) The London Bridge Hospital has a 'sister site' in the London Radiotherapy Centre, which is operated in partnership with Guy's and St Thomas', which has a TrueBeam.
 - (c) Bupa Cromwell has a GammaKnife and a linear accelerator, which offers TomoTherapy.
 - *(d)* TLC has a CyberKnife and two other linear accelerators, with image guided radiotherapy.
- 12.56 In addition, we observe that several PPUs in central London also have radiotherapy facilities (eg the Royal Marsden) and that a new operator, Advanced Oncotherapy (in partnership with Circle Hospitals), has signed an

³³ We consider AXA PPP's related submission that, in the absence of further non-HCA capacity in oncology (particularly radiotherapy), AXA PPP would have no choice but to continue to contract with HCA, such that HCA could continue to exert market power across the range of specialties, in paragraph 12.80.
³⁴ Final Report, paragraphs 11.76.

See also, London Bridge Cancer Services and Wellington Hospital Cancer Services. In the Final Report, we concluded that, on balance, we had insufficient evidence that consultant incentive schemes constituted a barrier to entry or expansion. Further, because we had other competition concerns as regards such arrangements, we adopted measures to restrict or prohibit them. Therefore, we concluded that a rival to HCA would not be prevented from expanding its services in these specialisms because of difficulties in attracting or retaining consultants (paragraph 11.141). While AXA PPP, Bupa and TLC have suggested that such schemes may create a barrier to entry, we have not received any evidence or argumentation during the remittal that gives us reason to change our conclusion on this point.

agreement to lease a Harley Street location and has applied for planning permission. It plans to operate the UK's first Proton Beam Therapy Centre.³⁵

- 12.57 On the basis of this evidence, we considered that it was not clear that additional non-HCA radiotherapy facilities were required for effective competition in central London. We reasoned that insurers needed to have access to a full range of services from non-HCA providers (as a whole) in order to offer their customers credible products but that not all services would have to be provided by the divested hospital(s) for the remedy to be effective.
- 12.58 Furthermore, we reasoned that the purchaser(s) of one of the divestiture packages could install the required facilities to provide radiotherapy services if there was an economic case to do so. We considered how long it would take the purchaser(s) to develop radiotherapy services at the premises. The most recent example of a central London hospital operator developing these services was that of TLC's Cancer Centre. The construction of the Cancer Centre, which included radiotherapy equipment, took around three and a half years. However, we noted that this was for construction of the whole site. We reasoned that for an existing hospital operator to install radiotherapy facilities (only) and the associated infrastructure, could take less time, although the exact period would depend on the existing configuration of the site.³⁶
- 12.59 Given the existing non-HCA radiotherapy capacity in the market and the time frame over which a purchaser of the divestiture package could develop radiotherapy, our view is that it would be disproportionate to require HCA to divest additional radiotherapy facilities.
- 12.60 Next, we considered the various submissions we received that HCA should divest primary care facilities. While Spire, AXA PPP and Bupa suggested that HCA should be required to divest some of its primary care practices, we noted that we have not found vertical integration between HCA's hospitals and GP practices to give rise to an AEC (for example, the ability to foreclose rivals). Therefore, we have concluded that including such assets in the divestiture packages would not be necessary to ensure their effectiveness and would, therefore, be disproportionate.

³⁵ London Stock Exchange announcement http://www.londonstockexchange.com/exchange/news/market-news/market-news-detail/AVO/12229431.html

The clinic is expected to have two treatment rooms. The planning consent is expected in October 2016 and it will take 2 to 2.5 years for the site to become operational.

³⁶ Within this same time period, we would expect such an operator to be able to attract suitable consultants and specialist staff to provide radiotherapy treatments.

• Location of hospitals within central London

- 12.61 We also considered the geographic location of HCA's hospitals and the area from which they drew patients. In particular, we considered AXA PPP's submissions on the importance of including Harley Street facilities in the divestiture package and Bupa's submissions on including the London Bridge Hospital. In the case of the former, we observed that there were already several non-HCA hospitals located in and around Harley Street, including TLC, such that it was not clear that additional non-HCA capacity was required in this area. In the case of the London Bridge Hospital, we noted that it was the only private hospital in that location, such that divesting it to another operator would not address any competitive advantage derived from its location but would only transfer that advantage to the purchaser. While allowing HCA to retain the Shard and the PPU at Guy's and St Thomas' (as Bupa suggested) might (partially) mitigate such a locational advantage, we concluded that this effect would be minimal since the Shard facility focuses on outpatient and diagnostic services only and is currently operated in conjunction with the London Bridge Hospital.³⁷ while the Guy's PPU specialises in cancer treatments. Moreover, our review of the catchment areas of HCA's hospitals demonstrated a high level of geographical overlap. which supported our conclusion that any of HCA's hospitals could compete effectively for patients across the central London market and beyond.³⁸
- 12.62 Therefore, we saw no new evidence that would lead us to change our view from the Final Report that any of HCA's hospitals could compete effectively for patients across the central London market and beyond and that therefore location within central London was not a relevant factor in designing an effective divestiture remedy.³⁹
 - Evidence on spare capacity
- 12.63 We found that there was mixed evidence on the extent of spare capacity in the central London market.⁴⁰ Analysis provided to us by HCA suggests there is spare capacity in some areas (such as overall bed numbers and modelled theatre capacity), while views (and actions) of parties and internal documents suggest there is a lack of effective capacity using other measures, for example theatre capacity at peak times and available ITU beds.

³⁷ www.hcatheshard.com/.

³⁸ Final Report, paragraphs 6.176 to 6.185.

³⁹ Final Report, paragraph 11.99.

⁴⁰ Section 4: Competitive Constraints, paragraphs 4.181 to 4.182.

- 12.64 Our view is that there are some constraints on overall effective capacity, which is determined by a range of factors beyond overall bed numbers. 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. On this basis, we reasoned that a divestiture package comprising a substantial number of overnight and ICU beds, theatres, consulting rooms and other facilities was likely to provide an effective competitive constraint in HCA (in combination with existing non-HCA facilities in central London). However, we note that these uncertainties regarding the nature of capacity constraints feed into how confident we can be about how effective any given divestiture package would be, including the likely price impact of any divestiture remedy.⁴¹
 - Price impact of divestiture
- 12.65 First, we considered HCA's submission that the revised IPA showed that there was no difference between its prices and those of TLC, when compared on a like-for-like basis and, as a result, that there was no basis for concluding that divestiture would lead to any price benefits. As set out in Section 8, we have found that HCA charged higher insured prices than TLC,⁴² although our revised IPA no longer allows us to conclude on the size of this price difference, as we cannot be sufficiently certain that we have adequately controlled for any differences in patient complexity between HCA and TLC, and are thus comparing like with like.⁴³ However, this finding of higher prices is consistent with the results of our profitability analysis, which shows that HCA has made returns that are substantially and persistently in excess of its cost of capital. This could be a result of several factors, including the exploitation of economies of scale; however, our analysis suggests that HCA's prices are likely to be above what they would be in a well-functioning market.44
- 12.66 This indicates that a remedy that increases competitive constraints could be expected to result in a decline in prices, and therefore, result in a customer benefit. However, the extent of such a fall in prices post divestiture is unclear. We discuss the extent of the likely price impact of divestiture in detail in paragraphs 12.136 to 12.141. In the discussion, we conclude that

⁴¹ Section 4: Competitive Constraints, paragraphs 4.181 to 4.182.

⁴² Remittal PFs, paragraphs 8.149 & 8.150.

⁴³ Section 8: IPA, paragraphs 8.162 to 8.167.

⁴⁴ As set out in 12.141 to 12.147, we have assessed HCA's estimates of the loss of economies of scale that it might suffer following divestiture. We note that these are lower than our estimates of the extent to which HCA's prices have exceeded the level at which it would make returns in line with its cost of capital. This indicates that its higher returns may not solely be due to superior efficiency.

the estimate of economic profits (ie profits in excess of the WACC) from the profitability analysis provides an upper bound on the extent to which HCA's prices could be expected to decline.

- 12.67 Finally, we noted HCA's argument that the benefit of any price reductions would not be passed through to patients. However, these arguments were addressed in the Final Report⁴⁵ and HCA has not provided any further reasoning or evidence that gives us reason to revise our conclusions that the large majority of any price reductions would be passed through to patients.
 - Conclusions on effectiveness
- 12.68 On the basis of the evidence that we have collected, we remain of the view 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 is likely to be effective in remedying or at least mitigating the AECs we have identified and thereby reducing prices. However, given the mixed evidence about spare capacity, the range of estimates of profits in excess of the cost of capital produced by our profitability analysis and the lack of a reliable model of price setting in this market, it is not possible to predict reliably the extent to which prices would fall following a divestiture remedy. We discuss the potential impact of divestiture and/or entry on prices further in paragraphs 12.69 to 12.74 below.

Assessment of the costs and benefits of divestiture

- 12.69 In order to inform our assessment of the proportionality of our divestiture package, we have considered both the quantifiable costs and benefits of divestiture and the potential impact on the quality and range of services offered in central London. In the case of the former, we have sought to quantify the costs and benefits and have carried out an NPV analysis, whereas, in the case of the latter, we have conducted a qualitative assessment. We have compared these costs and benefits against those expected in a range of plausible counterfactual situations, in terms of the development of the central London healthcare market over the next 20 years.
- 12.70 In coming to a range of estimates of the likely impact of the divestiture, we have made an assessment of the price, and hence, revenue impact of any divestiture, taking into account any loss of scale economies, the potential

⁴⁵ Final Report, paragraphs 11.157–11.172.

impact of new entry, and the extent of any transaction costs that should be balanced against any price benefits in the market.

- 12.71 We have also taken into account the increased uncertainty about certain aspects of our analysis since the Final Report. In particular, as noted in Section 8, our IPA no longer allows us to conclude on the size of the price difference between HCA and TLC, as we cannot be sufficiently confident that we have adequately controlled for any differences in patient complexity, and hence are comparing like with like. In addition, as set out in Section 4, further analysis undertaken and evidence received during the remittal have also cast some doubt on the extent of spare capacity in the central London market. The combination of these factors has made it less certain what the likely impact of any divestment would be in terms of reduced prices. This makes it very difficult for us to conclude that a divestment remedy would be proportionate.
- 12.72 In the following paragraphs, we set out the views of the parties, together with the other evidence that we have collected on each of the elements that have informed our cost-benefit analysis, and our conclusions on each of the points raised. We then draw these together in our NPV analysis, which shows the net costs/benefits of a divestiture remedy under a range of plausible assumptions.
 - The development of the central London market
- 12.73 In order to understand the impact of divestiture, we compared the expected outcomes in the central London market in the absence of the remedy with those expected following divestiture. In this respect, we gathered evidence on the likelihood, timing and impact of potential new entry on competition and prices in central London.
- 12.74 We received evidence on a number of potential new entrants, including Cleveland Clinic, Spire, Nuffield Health at the Barts PPU, Schön Klinik, and Advanced Oncotherapy, among others. Full details of the evidence that we have collected on the entry plans of these firms are set out in Appendix H.
 - Parties' views on new entry
 - • **AXA PPP**
- 12.75 AXA PPP stated that the CMA's analysis (as set out in the Remittal PDR) 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.

- 12.76 AXA PPP told us that relying on a five-year time frame for entry 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.
- 12.77 AXA PPP said that it was clear from the information available to it that neither Cleveland Clinic nor the other smaller entrants who had opened or had taken concrete steps towards entry were likely to provide anything close to a 'broad range of specialties'. AXA PPP estimated that the specialties listed by Cleveland Clinic in its hearing summary accounted for less than [≫]% of AXA PPP's overall spend in central London.⁴⁶
- 12.78 AXA PPP said that we could not rely on third party entry as sufficiently likely to justify no divestiture.⁴⁷ AXA PPP submitted that Cleveland Clinic's 'vague aspirations' did not have the same quantitative meaning as when imminent, full-scale entry was predicted, and could not support the same NPV scenarios.⁴⁸
- 12.79 Furthermore, AXA PPP said that while entry by small providers was welcome, such entry [≫]. Similarly, in AXA PPP's view, Schön Klinik and Barts PPU were focused on narrow specialties, and there was no indication that they would exercise a constraint on HCA in other areas. AXA PPP also submitted that both VPS's and Spire's interests in entering the central London market had been raised over the years but neither operator had secured a site, let alone planning permission.⁴⁹
- 12.80 AXA PPP submitted that entry by Cleveland Clinic and/or by the various other entrants considered by the CMA, even if it were to occur, would be unlikely to [≫]. In particular, AXA PPP told us that it would continue to have no choice but to contract with HCA for oncology services and that [≫].⁵⁰
- 12.81 Therefore, AXA PPP told us that it strongly disagreed with the assumptions that formed the 'central estimate' of our NPV analysis in the Remittal

⁴⁶ AXA PPP response to the Remittal Supplemental PDR, p6, section 2.3.

⁴⁷ AXA PPP response to the Remittal Supplemental PDR, p3, section 2.1.

⁴⁸ AXA PPP response to the Remittal Supplemental PDR, p5, section 2.2.

⁴⁹ AXA PPP response to the Remittal Supplemental PDR, p4, section 2.3.

⁵⁰ AXA PPP response to the Remittal Supplemental PDR, p7, section 2.3.

Supplemental PDR given the uncertainty around the prospect of new entry, the timing of entry and the resulting impact on prices. AXA PPP said that the evidence from Cleveland Clinic fundamentally undermined the shorter-term scenario analyses.⁵¹

- o o **Bupa**
- 12.82 Bupa submitted that the evidence on possible future entry in the London market, which was already limited (in the Remittal PDR), had become even weaker and more uncertain (in the Remittal Supplemental PDR). Bupa said that the evidence of entry by a few small niche players, previously rejected by us as insufficient to constrain HCA, was given too much weight in the Remittal Supplemental PDR. Bupa said that there was no material new evidence or reasoning to support this change of position since the Remittal PDR, in relation to small new entry.⁵²
- 12.83 In particular, Bupa told us that there was significant uncertainty as to whether Cleveland Clinic would enter the central London market at all and further uncertainty over whether it would do so in the five- to ten-year time frame set out in the Remittal Supplemental PDR. Bupa noted that the ongoing (and complex) commercial discussions between Cleveland Clinic and the Grosvenor Estate, the fact that no planning application had been submitted, and the potential impact of Brexit, supported its view of the uncertainties regarding entry. In addition, Bupa pointed to the Cleveland Clinic's statement that the lack of a constraint on HCA's growth appetite (if there were no divestiture) changed one of its key planning assumptions.⁵³
- 12.84 Bupa also submitted that the evidence provided by Cleveland Clinic indicated that it did not expect to be able to constrain HCA effectively due to its relatively limited size (smaller than TLC), the fact that it would not provide the full range of services, and as a result of actions that HCA might take to make it difficult for it to compete in the marketplace (including tying up clinicians).⁵⁴
- 12.85 Bupa told us that it did not believe that Cleveland Clinic, if it were to enter the central London market, could be expected to place significant downward pressure on HCA's prices since [[∞]].⁵⁵

⁵¹ AXA PPP response to the Remittal Supplemental PDR, p8, section 2.4.

⁵² Bupa response to the Remittal Supplemental PDR, p3, paragraph 1.3.

⁵³ Bupa response to the Remittal Supplemental PDR, p9, paragraphs 2.7 & 2.8.

⁵⁴ Bupa response to the Remittal Supplemental PDR, p10, paragraph 2.10 & 2.11.

⁵⁵ Bupa response to the Remittal Supplemental PDR, p10, paragraph 2.13.

- 12.86 Bupa submitted that there was no evidence that entry by other operators was more likely to take place than previously, or likely to have a material impact on the market. In particular:
 - (a) The only progress in terms of entry plans comprised, (i) the submission of a planning application by Schön Klinik, and (ii) the announcement by Nuffield that it was the preferred bidder for the Barts PPU. Bupa noted that both of these were small players focusing on a narrow set of specialisms.
 - *(b)* The CMA could not rely on expressions of interest in coming to a view on the likelihood of entry, as there had been such expressions for a number of years, none of which had resulted in material entry.⁵⁶
- 12.87 Bupa disagreed with the CMA's reasoning (in the Remittal Supplemental PDR) that even if there were some specialities where HCA retained a strong position (eg oncology), greater competition in other services would reduce its overall bargaining position. Bupa submitted that this reasoning ignored the disproportionate strategic importance of oncology. It stated that none of the entrants identified would be offering credible oncology services and, therefore, would not constrain HCA either in oncology, or in other specialisms.⁵⁷
- 12.88 Bupa told us that HCA was growing much more rapidly than its competitors in central London and submitted analysis of HCA's projected market share over the next decade if no divestiture was ordered, at a growth rate for HCA revenues of [≫]% a year. According to Bupa, this analysis demonstrated that HCA's aggregate share in central London was on track to exceed [≫]% by 2022. Bupa also said that we had not provided any meaningful analysis of this growth trajectory or whether it was realistic to believe that the putative entry (by Cleveland Clinic and others) would be sufficient to address the AECs in light of this increased market share.⁵⁸
- 12.89 As a result, Bupa told us that the impact of entry in terms of reducing HCA's prices to the competitive level could in theory range from 0% to 100%, with 25% representing a reasonable assumption and 75% representing the maximum upper bound.⁵⁹

⁵⁶ Bupa response to the Remittal Supplemental PDR, p11, paragraph 2.16.

⁵⁷ Bupa response to the Remittal Supplemental PDR, p11, paragraph 2.24.

⁵⁸ Bupa response to the Remittal Supplemental PDR, p15, paragraph 2.33.

⁵⁹ Bupa response to the Remittal Supplemental PDR, p18, paragraph 3.6.

The 75% figure is based on Bupa's observation [\gg].

• • **HCA**

- 12.90 HCA stated that we were right to recognise that there was growing interest by investors as a result of continued growth in demand for private healthcare services in central London, and that new operators were expected to enter the market. HCA went on by saying that we could not logically argue that there were structural barriers which deterred entry, when there was clear evidence that large- and small-scale operators were in the process of establishing new facilities. HCA said that investors were prepared to commit significant funds to new hospital projects; were securing large sites for new facilities; and were successfully navigating their way through the planning regime.⁶⁰
- 12.91 HCA said that, in its view, there was clear evidence that Cleveland Clinic was actively pursuing its plans for its new facility in central London, and there was every expectation that it was likely to start treating patients by 2020.⁶¹ HCA told us that it saw no reason for us to change our original assessment that Cleveland Clinic was likely to constrain HCA by 2022 at the latest. In HCA's view, based on its progress to date, there was every expectation that Cleveland Clinic would be able to commence operations well within a five-year time frame. ⁶²

• • **TLC**

- 12.92 TLC submitted that the provisional conclusion on remedies as set out in the Remittal Supplemental PDR was not supported by the evidence available to us. In TLC's view, it was clear that the evidence from Cleveland Clinic was that new entry into the central London market was not likely, and would not be timely enough or of sufficient scale to be an effective constraint on HCA. TLC said that we received this evidence directly from Cleveland Clinic, but had failed to take it into account properly.⁶³
- 12.93 Furthermore, TLC said that even if entry took place, the evidence submitted by Cleveland Clinic indicated that it would not be sufficient to constrain HCA, since it would be smaller than TLC.⁶⁴
- 12.94 TLC said that no effective entry over a 20-year period following divestiture remained the most likely scenario. In TLC's view, entry by Cleveland Clinic

⁶⁰ HCA response to the Remittal Supplemental PDR, p2, paragraph 6.

⁶¹ HCA response to the Remittal Supplemental PDR, p6, paragraph 25.

⁶² HCA response to the Remittal Supplemental PDR, p6, paragraph 29.

⁶³ TLC response to the Remittal Supplemental PDR, p1, paragraph 3.

⁶⁴ TLC response the Remittal Supplemental PDR, p4, paragraph 32.

could not be considered to be 'fully effective'. Furthermore, no smaller-scale entry by a specialist operator would be effective in constraining HCA. TLC concluded that there was no evidence to support a conclusion that 'fully effective' entry was likely at all.⁶⁵

o o **Spire**

12.95 Spire noted that we received evidence from various parties, including Cleveland Clinic, that there was still considerable uncertainty as to whether effective entry would occur (and if so in what timescale). [%].⁶⁶

• Our assessment of the likelihood, timing and effectiveness of new entry

12.96 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.⁶⁷ We note that the central London market has continued to grow at a similar rate in the last couple of years.⁶⁸ Since 2014, there has been entry by a small number of specialist operators, such as Optegra (in ophthalmology),⁶⁹ Fortius (orthopaedic) and Nuada (urology and gynaecology),⁷⁰ and there are advanced entry plans from others, such as Schön Klinik (focused on orthopaedics), Advanced Oncotherapy (focused on Proton Beam therapy) and Nuffield Health at the Barts PPU (largely focused on cardiovascular).^{71,72} In addition, as well as Cleveland Clinic, Spire has expressed an intention to open large-scale facilities in central London,73 although it has yet to acquire suitable properties. See Appendix H for a detailed overview of the evidence we have collected on the plans of potential entrants.

⁷² See Schön Klinik website: 'Opening soon in London'.

⁶⁵ TLC response to the Remittal Supplemental PDR, p5, paragraph 42.

⁶⁶ Spire response to the Remittal Supplemental PDR, p1, paragraph 3.

 ⁶⁷ Between 2006 and 2013, LaingBuisson estimated that the central London market grew by 8.9% per year on average. Source: LaingBuisson (2015), *Private Acute Medical Care in Central London: Market Report*, p12.
 ⁶⁸ LaingBuisson estimates growth of around 9% in 2014 and 2015. Source: LaingBuisson (2015), *Private Acute Medical Care in Central London: Market Report*, pg xviii.

⁶⁹ See article on Launch of Optegra Eye Hospital.

⁷⁰ LaingBuisson, *Private Acute Medical Care in Central London: Market Report*, pp42–46, sets out a number of examples of recent and imminent entry and expansion in central London.

⁷¹ 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 Remittal 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.

⁷³ Spire's strategy is to open two large-scale hospitals in central London – see financial investors' reports.

- We considered Bupa and AXA PPP's submissions on the likelihood of entry 12.97 by Cleveland Clinic and other operators. As we set out in the Remittal Supplemental PDR, while Cleveland Clinic has faced delays in progressing its plans for entry, we still consider it to be a credible entrant, with a strong interest in entering the central London market. It has demonstrated its credibility by, among other things, purchasing a site in central London, developing a detailed business plan, and employing a number of business, property and medical consultants to support it in realising these plans. Therefore, we do not agree with AXA PPP that Cleveland Clinic's plans for entry represent 'vague aspirations'. With regard to the steps that Bupa suggested HCA might seek to take in order to frustrate entry, we did not find that there was any evidence to support the view that these were likely to be effective. For example, we have not found the ability to attract consultants to create a barrier to entry, nor do we consider that HCA's plans for expansion⁷⁴ are sufficiently large such as to undermine the business case for new entry in a growing market.
- 12.98 [≫] However, on balance, we consider that there is still the real prospect of entry by Cleveland Clinic.
- 12.99 The position of the other potential entrants is as follows:
 - (a) Nuffield Health is the preferred bidder for the Barts PPU and expects to open in mid-2018.
 - *(b)* Schön Klinik and Advanced Oncotherapy have identified sites and submitted planning applications.
 - (c) Spire continues to search for a site and has indicated to its investors that it aims to open two full-service hospitals in central London.
- 12.100 On the basis of this evidence, we conclude that entry by Nuffield Health at the Barts PPU is likely. With respect to the other potential entrants, we find that there is uncertainty. There is a reasonable probability that either or both of Schön Klinik and Advanced Oncotherapy will enter the market, but entry by Spire is less likely.
- 12.101 Next, we considered the timing of any entry. In the case of Nuffield/Barts PPU, we observed that the timing of entry was reasonably clear and that this was likely to happen within the next two years, ie by mid-2018.

⁷⁴ For example, HCA's expansion of its paediatric facilities at the Portland Hospital (Press release).

- 12.102 In the case of Cleveland Clinic, we observed that the delays it has experienced have pushed back the expected date of entry On this basis, we can no longer conclude that entry is likely to take place in 2019 to 2020, with any competitive constraint being exerted by 2022 (as we envisaged at the time of the Remittal PDR). Similarly, in the case of potential entrants such as Schön Klinik and Advanced Oncotherapy, the timing of their entry is uncertain and likely to depend on a range of factors, including whether, and the speed with which, they are able to obtain planning permission. In the case of Spire, we note that, in spite of a clear intention to enter the market, it has not yet been able to secure a suitable site from which to operate a hospital. As a result, the timing of any entry by Spire is uncertain and unlikely in the next five years.
- 12.103 On the basis of the evidence we have collected, we find that there is likely to be small-scale entry in the next couple of years (Nuffield/Barts PPU). In contrast to the position at the time of the Final Report,⁷⁵ and notwithstanding the increased uncertainty in respect of Cleveland Clinic's plans since the PDR, there is a real prospect of large-scale entry by Cleveland Clinic, as well as entry by other smaller and/or more specialised providers in the medium term. (By 'medium term', we mean entry exerting a competitive constraint in central London in the next 7 to 12 years). It is also plausible that there may be additional large-scale entry by Spire, although this remains uncertain [≫].
- 12.104 Finally, we considered the likely impact of this expected entry in terms of the level of competitive constraint it would be expected to exert on HCA. We reasoned that the extent to which entry would constrain HCA depended largely on the combined scale (capacity) of, and the range of services offered by, all new entrants. Given its size (around 200 beds) and the broad range of services it plans to offer (12 out of the 16 core specialities), we consider that, if Cleveland Clinic enters the market, it is likely to exert significant downward pressure on HCA's prices in the future. We do not agree with Bupa's and TLC's argument that Cleveland Clinic would not be of a sufficient size to constrain HCA. In particular, we note that Cleveland Clinic's size would be similar to that of either divestiture package.⁷⁶ In response to AXA PPP's argument that the specialties provided by Cleveland Clinic would only account for a small proportion of AXA PPP's spend in

⁷⁵ Final Report, paragraph 11.236.

⁷⁶ As set out in Appendix H, Cleveland Clinic is planning to open a facility with approximately 215 beds, of which 40 would be intensive care beds. In comparison, as set out in the Final Report (Section 11), the Wellington Hospital has 226 beds (20 intensive care beds), while London Bridge and the Princess Grace Hospitals have 215 overnight beds between them (12 intensive care beds).

central London, it appears that this argument is based on a misunderstanding by AXA PPP as to the range of services to be provided by Cleveland Clinic. Although Cleveland Clinic mentioned at its hearing with the CMA that it intended to focus on four main specialities, as noted above it has confirmed that it plans to offer 12 of the 16 specialties considered by the CMA as part of its analysis of competitive constraints.

- 12.105 We consider that entry by other smaller and/or more specialist potential new entrants, if it occurs, could also result in downward pressure on HCA's prices, although we would expect this to be limited.⁷⁷ We did not agree with AXA PPP's and Bupa's submissions that a lack of competitive constraint in one specialism (eg oncology) would allow HCA to continue to exert market power across all specialisms and, thereby, avoid pressure to reduce its prices. Given that prices are generally set across the bundle of services offered by private hospital operators, a strong market position in one or a small number of specialties (eq in oncology) would allow HCA to exert market power, which may 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), we would expect increased competition for certain treatments to have an impact on the average level of prices charged by HCA. As such, we do not accept the argument that maintaining a strong market position in one specialty means that increased competition in others will have no effect on HCA's overall prices. We note that the logic of Bupa's submission in paragraph 12.32, supports our view that it is reasonable to expect at least some price effect as the result of a partial competitive constraint on HCA.
- 12.106 We considered Bupa's submission that it was most reasonable to assume that entry would reduce HCA's prices by 25% of the difference between its current price level and the level at which it would make normal profits, and that a 75% reduction represented an upper bound. Given the range of services that Cleveland Clinic and the other potential entrants are planning to offer (see Appendix H), we considered that this range (25% to 75%) was too low. As noted above, Cleveland Clinic is planning to offer 12 out of 16 core specialties and, while Cleveland Clinic is not planning to offer medical

⁷⁷ 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.

oncology, another potential entrant (Advanced Oncotherapy in partnership with Circle) is planning to open a new radiotherapy facility on Harley Street.⁷⁸

- 12.107 Given the uncertainties outlined above, we do not consider that it is appropriate to model exact entry scenarios in our NPV analysis, as this would be spuriously precise. As set out further below, we have instead modelled three scenarios: (a) a scenario in which entry removes 100% of the profits in excess of the cost of capital estimated from our profitability analysis; (b) a scenario in which entry removes 75% of the profits in excess of the cost of capital estimated from our profitability analysis; and (c) a scenario in which entry removes 50% of the profits in excess of the cost of capital estimated from our profitability analysis. While we recognise that the potential entrants in relation to whom we have specific evidence may not (by themselves) be 100% effective (ie reduce HCA's prices to the level where it makes normal profits), we consider that the most likely new entrant (Cleveland Clinic) will have a significant impact and could, in combination with other new entrants, result in a fully effective competitive constraint on HCA. On this basis, we concluded that it was more reasonable to consider scenarios in which entry was able to reduce the difference between HCA's current prices and those at which it would make normal returns by between 50% and 100%. This range reflects the uncertainty over the extent to which new entry will constrain HCA.
- 12.108 As we set out in the Remittal PDR, if and when entry occurs, a new entrant could have an impact on prices even prior to opening,⁷⁹ in particular where contracts with PMIs are renegotiated after it has become clear entry was going to happen.

Modelling the counterfactual scenario

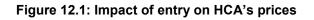
12.109 As set out above, in light of the increased interest and the expected continued growth in demand within central London,⁸⁰ we believe that there is now a greater prospect of new entry in the future, compared with that which existed at the time of the Final Report – of both larger hospital operators (such as Cleveland Clinic) and particularly smaller, more specialised entrants (such as Nuffield/Barts PPU and Schön Klinik).

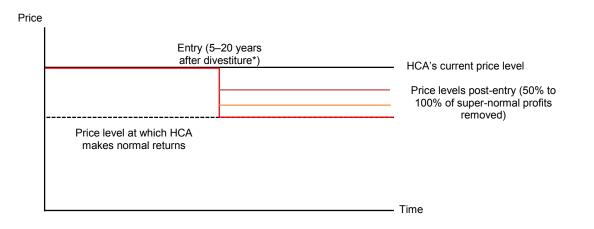
⁷⁸ Advanced Oncotherapy is planning to open a proton beam therapy facility in partnership with Circle. Press Notice. This project would, if it is realised, result in additional non-HCA radiotherapy facilities in central London (Harley Street).

⁷⁹ Remittal PDR, paragraph 1.82.

⁸⁰ 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.

12.110 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 (ie the next 7, 9 or 12 years) and reduces the difference between HCA's current prices and the level of prices at which HCA would make returns in line with its cost of capital by 100%, 75% or 50%. Although we remain of the view that there is a real prospect of new entry and that, when it occurs, it is likely to have a significant impact on HCA's prices, we have also included a scenario where there is no effective entry over a 20-year period following divestiture. These assumptions are illustrated in Figure 12.1.





*This time period is equivalent to between 7 and 22 years from the date of this Final Report.

Quantifying the price benefits from divestiture

- 12.111 Having established the range of counterfactual situations against which to assess the costs and benefits of the divestiture remedy, we next assessed the likely benefits of divestiture in terms of the expected reduction in prices to customers.
 - Our approach to quantifying the likely price benefit of divestiture
- 12.112 During our original investigation, we used our IPA and our PCA results to estimate the likely impact on prices that could be expected to result from the increased competition in the market brought about by a divestiture remedy.⁸¹

⁸¹ Final Report, Appendix 11.2: Quantifying the Price Benefits of Divestitures.

The results of these analyses were broadly consistent with those of our profitability analysis. However, errors found in the IPA presented in the Final Report were the basis for the remittal back to the CMA. Having amended the IPA to correct these errors, and considered in detail the additional submissions and evidence received from parties during the remittal, we can no longer conclude on the size of the price difference between HCA and TLC, as we cannot be sufficiently confident that we have adequately controlled for any differences in patient complexity, and hence are comparing like with like.

- 12.113 Given the limitations of the revised IPA, we have had to rely much more heavily on our profitability analysis in the remittal in order to assess the extent to which HCA's prices exceed the competitive level. In order to assess the potential impact of a divestiture remedy, 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 had current estimates of the economic profits made by HCA.⁸² 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.
- 12.114 This analysis indicated that HCA's prices to UK patients (in 2015) exceeded the level where it would have earned a return equal to its WACC⁸³ by between around 3% and 11.5%. As explained in paragraph 9.18 of the Profitability section, we have placed more weight on the KPMG 2 scenario, which gives a range of between 3% and 7.5%. Given the assumptions we have to make in order to derive this range, these figures should be treated with a significant degree of caution.
- 12.115 We applied this price reduction to UK self-pay and insured revenues from inpatient, outpatient and day-case treatments. In the Remittal Supplemental PDR, we deducted any loss of economies of scale to HCA from the price benefit of divestiture.

⁸² As set out in the Remittal PFs, Section 9, we 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 weighted average cost of capital (WACC) calculation).

⁸³ We have used a range of WACC values of between 9% and 10%. See Appendix I.

- Views of the parties
- • **AXA PPP**
- 12.116 AXA PPP told us that the evidence from all sources pointed to an expectation of a price benefit of at least 6%, not 3%. 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:
 - (a) take the midpoint of the KPMG range ([%]);
 - (b) take the lower bound of the CMA estimate ([%]);
 - (c) take the midpoint of (a) and (b) above ([%]);
 - (d) take the upper bound of the KPMG range ([\gg]);
 - (e) take the average of (a)–(d) ([\gg]).⁸⁴
- 12.117 We have set out our profitability analysis in detail in section 9. In that section, we explain our reasons for using the 'KPMG 2' scenario as our preferred estimate.
- 12.118 In addition, AXA PPP submitted that we had 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 a little below 50%, in AXA PPP's view the CMA had applied the price benefit to less than half the market.⁸⁵
- 12.119 AXA PPP told us that our analysis 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. ⁸⁶
- 12.120 AXA PPP submitted that we should not reflect the loss of economies of scale in our NPV analysis, for a number of reasons:⁸⁷

⁸⁴ AXA PPP response to the Remittal PDR, section 3.

⁸⁵ AXA PPP response to the Remittal PDR, section 3.

⁸⁶ AXA PPP response to the Remittal PDR, section 3.

⁸⁷ AXA PPP response to the Remittal 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.
- 12.121 AXA PPP told us that there was no more reason to believe that the most likely purchaser would be a small player or new entrant than a larger established player. In AXA PPP's view, a large overseas operator would be able to replicate the economies of scale.
 - ∘ ∘ Bupa
- 12.122 Bupa told us that our estimate of HCA's economic profits was underestimated – Bupa said the CMA had selected the most conservative estimate of customer detriment – and that the cost allocation placed disproportionate excess profits on the international patients segment.⁸⁸ We have addressed parties' views on our profitability analysis in Section 9.
- 12.123 Bupa told us that any economies of scale available to HCA could not be treated as a relevant customer benefit 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, TLC.

⁸⁸ Bupa response to the Remittal PDR, paragraphs 3.17–3.110, pp26–41.

- 12.124 Bupa submitted that it was extremely likely that potential acquirers of the divested hospital(s) such as large hospital groups like Spire, Nuffield or Ramsay could replicate some or all of the alleged economies of scale losses (and that they would pass these through to customers in lower prices, which HCA does not). Bupa also said that it believed that the economies of scale losses should taper off relatively quickly. In Bupa's view, all the cost items put forward by HCA were operational costs that could be scaled back over time, particularly if they were inefficiently incurred in the first place.⁸⁹
- 12.125 Bupa told us that any loss of economies of scale should not be included in our analysis because it would have been inflated as a result of the AEC. In particular, Bupa stated that the AEC meant that HCA's cost base in central London had not been exposed to effective downward pressure due to competition and, therefore, was likely to be inflated relative to that which would arise in a well-functioning market. Moreover, Bupa suggested that the alleged scale economy losses related to contributions HCA's UK business made to HCA's Global headquarter costs and that these would have been increased by the UK business's high profits.⁹⁰
- 12.126 In addition, Bupa told us that other central London hospitals, as stand-alone facilities which were much smaller than HCA, were able to earn returns in line with their cost of capital while charging market prices significantly below those of HCA. Bupa said that by including HCA's loss of economies of scale, we were assuming that HCA should continue to cover its cost of capital after divestiture, which would be an inefficient outcome if HCA was inefficient.⁹¹
 - • **HCA**
- 12.127 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; and

⁸⁹ Bupa response to the Remittal Supplemental PDR, p22, paragraphs 3.25 & 3.28.

⁹⁰ Bupa response to the Remittal Supplemental PDR, p21, paragraph 3.19.

⁹¹ Bupa response to the Remittal Supplemental PDR, p21, paragraphs 3.21 & 3.22.

- *(d)* the CMA disregarded the future impact of the information remedy imposed following the original investigation.⁹²
- 12.128 HCA submitted that by including outpatient revenues, the calculation overstated the NPV of divestiture by between £[10-20] million and £[200-300] million relative to NPV scenarios that exclude these revenues.⁹³
- 12.129 HCA also said that by including the scenario where only 50% of the price benefits of new entry were realised, we undermined the causal relationship that we are relying on to support the effectiveness of divestment. In HCA's view, if the entry of a credible competitor, which would serve to reduce HCA's market share, did not have the result of lowering HCA's prices, then it called into question whether there was any causal relationship between market share and price.⁹⁴
- 12.130 HCA submitted that: *(a)* either the CMA believed that there was a robust causal relationship between market concentration and prices and profits, and therefore a divestment remedy or new entry could be effective in exerting downward pressure on prices and profits; or *(b)* the CMA was hesitant about the robustness of this relationship, and therefore the effectiveness of a divestiture remedy would be called into question.⁹⁵
- 12.131 HCA also submitted that Bupa had misunderstood the CMA's arguments as to why economies of scale should be included in the proportionality assessment.⁹⁶ 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. HCA told us that patients benefited from its economies of scale and outcomes, in terms of quality, choice/range, investment and innovation, which would not have been possible absent the economies of scale available to HCA and an efficient running of its network of hospitals. HCA said that a divestment remedy, which would remove the ability to achieve such economies, would, therefore, put such patient benefits at risk.

⁹² HCA response to the Remittal PDR, p9, paragraphs 2.14–2.16.

⁹³ HCA response to the Remittal Supplemental PDR, Annex 2, p6, paragraph 26.

⁹⁴ HCA response to the Remittal Supplemental PDR, Annex 2, p8, paragraph 29.

⁹⁵ HCA response to the Remittal Supplemental PDR, Annex 2, p8, paragraph 30.

⁹⁶ Bupa response to PDR, paragraphs 3.65 to 3.70.

• Our assessment of the likely price impact of divestiture

- 12.132 First, we considered HCA's submission that, in the absence of a robust causal relationship between market concentration, prices and profits, the CMA could not be sure of the effectiveness of divestiture. We observed that prices are set via a series of bilateral negotiations between insurers and private hospital operators. However, given that these negotiations lead to different hospital operators charging different prices to different insurers, it has not been possible to model the process of price setting in this market in a way that leads to predictions of how much prices could be expected to change in response to additional competition (be it a divestiture or new entry). We still consider that divestiture would increase the competitive constraint on HCA and thereby lead to a reduction in prices. However, we agree with HCA that there is significant uncertainty regarding the extent of the impact of divestiture on prices. This uncertainty is increased due to the mixed evidence on spare capacity.
- 12.133 As a result of the uncertainties regarding the process of price setting, we have had to make a number of assumptions as to the development of prices over time in response to divestiture. In particular, we have assumed that:
 - (a) following divestiture, HCA's prices would fall to the level at which HCA makes a 'normal' return, ie returns in line with its cost of capital, taking into account any loss of economies of scale (see paragraphs 12.142 to 12.147); and
 - (b) any divested hospital's prices would be likely to decline to approximately the same level as HCA's post-divestiture prices.

However, as we discuss in the following paragraphs, we consider that the actual impact on HCA's prices is likely to be less than this.

12.134 We considered Bupa's submission that HCA's cost base was likely to be inflated due to the AECs and that the assumption that the extent of price falls would be limited to the level at which HCA made normal returns may understate the likely benefits of divestiture. First, we noted that we do not have any direct evidence on the absolute or relative efficiency of hospital operators in central London. The (indirect) evidence that we have (ie our IPA and profitability analysis) does not allow us to reach any firm conclusions. As explained in paragraph 12.71, while the IPA indicates that HCA charges higher prices than TLC, we cannot be sufficiently certain that we have adequately controlled for differences in patient complexity between HCA and TLC, and are thus comparing like with like. Similarly, the profitability analysis indicates that HCA is more profitable than TLC and Bupa Cromwell but does not allow us to identify the cause of that difference, ie whether it is due to HCA charging higher prices, or operating more efficiently.⁹⁷ On this basis, we found there was no evidence to support Bupa's assertion that HCA was inefficient.

- 12.135 Furthermore, as set out in paragraph 12.68, while we consider that the specified divestiture package was likely to be effective, in combination with other non-HCA hospitals in central London, in increasing the competitive constraint on HCA and result in a fall in prices, the mixed evidence on spare capacity means that our assumption that HCA's prices (and those of the divested hospital(s)) would fall to the level at which it was only able to make returns in line with its cost of capital, may overstate the potential benefits.
- 12.136 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. If the buyer of the divested assets were an established operator, then it may benefit from economies of scale and be able to replicate some or all of the economies of scale that HCA may lose. In this case, the unit costs of the purchaser may decline to around the level of HCA's current (ie pre-divestment) 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.⁹⁸ However, while a purchaser may be able to reduce its average costs to a similar extent to HCA's loss of economies of scale, the impact on prices would also depend on the purchaser's incentives to undercut HCA's minimum non-loss-making price. We concluded that a purchaser would have an incentive to price at broadly the same level as HCA.99
- 12.137 Therefore, to the extent that divestiture results in a loss of economies of scale for HCA (and, consequently, an increase in unit costs), we note that this could be expected to reduce the size of any price benefits. In other words, the maximum price fall that we could expect from HCA is smaller than our range of estimates of HCA's excess profits, because the loss of scale economies increases HCA's unit costs and so the minimum price it

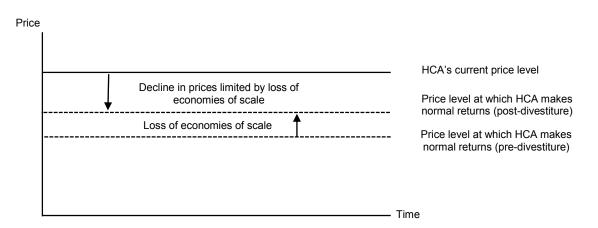
⁹⁷ As discussed in footnote 46 to paragraph 12.66, the combination of our estimates of the extent of HCA's supernormal profits and the size of HCA's potential losses of scale indicates that a portion of HCA's super-normal profits are currently earned as a result of charging higher prices.

⁹⁸ In this scenario, the purchaser of the divested assets would choose to price below the level at which the postdivestiture HCA business could make a normal return on capital employed. It may do this in order to gain market share.

⁹⁹ In a well-functioning market, an operator with a single hospital in central London could expect to fill that hospital to capacity by offering prices that were only marginally lower than those charged by HCA. On this basis, we considered that it would not have an incentive to significantly price below this level.

could charge and still make 'normal' returns has increased. This effect is illustrated in Figure 12.2.





Note: Divestiture is assumed to take place at the start of the period shown.

- 12.138 In addition, we considered HCA's submission that our analysis should take into account the potential impact of the hospital performance (or quality) information remedies imposed after the original investigation since these may be expected to reduce prices, irrespective of whether there is a divestiture. 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 original Final Report that the information remedies may result in a reduction in prices of 1%.¹⁰⁰ 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.¹⁰¹ (In Figure 12.2, any impact of the information remedies would result in a downward shift of the solid line HCA's current price level and a consequent reduction in the decline in prices that resulted from divestiture).
- 12.139 We also considered how any loss of economies of scale for HCA following divestiture might be expected to impact prices in the market if new entry were to occur. We concluded that, under certain circumstances, a divestiture remedy could lead to higher prices following entry than would have obtained

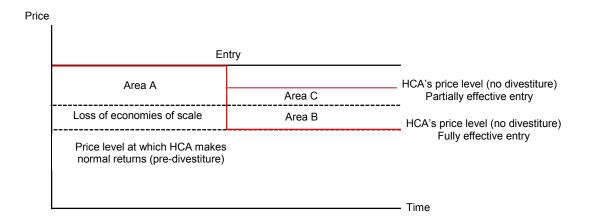
¹⁰⁰ Final Report, paragraphs 11.586 to 11.587 and 11.234.

¹⁰¹ If these information remedies were to have a 1% impact on prices, this would reduce the extent to which HCA's prices exceeded the level at which it made normal returns to between 2% and 6.5% (compared with our range of 3% to 7.5%). For this reason, we have shown a range of 2% to 7.5% in the NPV tables below.

otherwise, by increasing the unit costs (and, therefore, the minimum nonloss-making price) of HCA's remaining hospitals.

12.140 As set out in paragraph 12.105, the extent to which any entrant would constrain HCA's prices depends on a number of factors. Where an entrant provided a limited constraint, either due to the scope of services offered and/or due to having a higher cost base than HCA, we reasoned that there would be no incremental fall in HCA's prices following new entry, beyond that already resulting from the divestiture. Where, in contrast, an entrant was able to price below HCA on a broad range of services, we observed that it might choose to do so, lowering prices further. However, we reasoned that such an entrant would not necessarily have an incentive to offer a materially lower price than HCA since it was likely that any entrant (even a 'large' one) would be able to fill its capacity by only marginally undercutting HCA (and HCA's divested facilities) on price. In this case, there would be no further decline in prices following entry. As a result, we consider that there is a risk that, under some scenarios, divestiture might lead to higher prices following entry than would have obtained otherwise, due to the loss of economies of scale for HCA. As above, the lost scale economies would have the effect of increasing the lowest possible profitable price that HCA could charge, as the loss increases its unit costs. In this case, the shorter-term benefits of divestiture (area A) are partially/fully offset by longer-term costs (area B). In other scenarios, divestiture continues to have an incremental benefit, ie area C. This is illustrated in Figure 12.3.

Figure 12.3: Impact of the combination of divestiture and entry on prices



12.141 We considered HCA's submission that any price benefits of divestiture should only be applied to inpatient and day-case revenues, rather than all (UK) revenues. We did not agree that this was the correct approach. Our analysis in Section 9 estimates the extent to which HCA's prices exceeded the level at which it would have made returns in line with its cost of capital on an absolute basis, ie as a £ figure ('economic profits'). We then divided this figure by total revenues from UK patients (inpatient, day-case and outpatient), in order to achieve the 3% to 7.5% range. To the extent that such profits were only earned on inpatient and/or day-case treatments, we note that the same economic profits figure would be divided by a smaller revenue figure to give a larger range of potential price reductions. However, this larger range should be applied to the smaller revenue base (ie inpatient and day-case revenues only) when estimating the potential price benefit resulting from the remedy. This would give the same absolute figure for price benefits that we have used in our NPV analysis.¹⁰²

Economies of scale

- 12.142 We received a number of submissions from the parties in respect of economies of scale. In particular, these addressed the appropriate treatment of economies of scale within our NPV analysis, the likely extent of any loss of economies of scale and the period over which such a loss would be experienced. In the following paragraphs, we summarise the approach that we have taken with respect to economies of scale. The parties' views and our consideration of them are set out in more detail above and in Appendix J.
 - Treatment of economies of scale in our NPV analysis
- 12.143 As discussed in paragraph 12.137, we considered that any loss of economies of scale for HCA might be expected to limit the extent to which divestiture would reduce prices.
 - Quantifying HCA's loss of economies of scale
- 12.144 As discussed further in the paragraphs below, HCA has provided estimates of the economies of scale that it would lose as a result of divestiture, which we have then adjusted. Based on these adjusted figures, our best estimate is that, due to these economies of scale, the potential decrease in prices as a consequence of divestiture is reduced by at least 2% over 20 years.
- 12.145 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

¹⁰² We note that this approach does not make any assumption regarding whether HCA is able to earn economic profits on outpatient treatments.

economies of scale could be $\pounds[\&]$ million or $\pounds[\&]$ 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.

- 12.146 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 Appendix J. We concluded that HCA was likely to lose economies of scale of around £13 million per year. This figure is based on updated data provided by HCA, to which we have made some adjustments, and forms our 'central estimate' for the expected loss of economies of scale in our NPV analysis (see Tables 5, 6 and 7 in Appendix J). We have also considered scenarios in which HCA does not suffer any loss of economies of scale (in our 'low economies of scale case') and in which it loses economies of scale of £[%] million per year (in our 'high economies of scale case'). The high economies of scale 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 high economies of scale case as an additional sensitivity. As discussed in further detail in paragraphs 20 to 25 of Appendix J, the 'low economies of scale case' of zero loss of economies of scale illustrates the NPV of divestiture in the situations either where HCA does not suffer any loss of economies of scale or where, regardless of the loss of economies of scale, competitive dynamics following divestiture/entry result in prices falling to a level at which HCA would make returns in line with its cost of capital under its current cost structure (but will make losses equal to any lost economies of scale following divestiture).
- 12.147 Taking all these factors into account (loss of economies of scale, mixed evidence on spare capacity and the potential impact of the information remedies), we consider that there are a number of reasons why the price benefit of divestiture may be significantly lower than our estimate of economic profits (derived from the profitability analysis). We have only sought to reflect the first of these factors in our NPV analysis but have taken into account the other factors when coming to our overall view on proportionality. In particular, we note that these other factors give us reason to believe that figures towards the 'top' of the NPV results tables may be more likely outcomes than those towards the 'bottom' of those tables.

Costs of divestiture

- 12.148 We considered two main types of cost arising as a result of divestiture: the transaction costs associated with selling the divestiture package, and the internal reorganisation costs that HCA would be likely to incur following a divestiture. A full summary of the parties' views on these costs is set out in Appendix J. In the following paragraphs, we summarise our conclusions regarding the level of such costs.
- 12.149 First, we considered the potential transaction costs associated with a divestiture. HCA submitted revised estimates of the expected transaction costs associated with divestiture of between £[10–20] million and £[20–30] million.¹⁰³ We reviewed these costs carefully (see the Appendix J, paragraphs 34 to 44) and concluded that HCA was likely to incur total transaction costs of £9.4 million in the first year.
- 12.150 Secondly, we have assumed that HCA would incur reorganisation costs of £8.0 million split equally across the first two years following divestiture (50% in year 1 and 50% in year 2, which is unchanged from the Remittal PDR NPV analysis). This gives total one-off costs of divestiture of approximately £17.4 million for HCA.
- 12.151 We noted HCA's submissions that a divestiture remedy would result in a number of additional costs, including interference with incentives to invest and innovate by preventing a firm that is forced to divest from realising a fair market value for its assets, and the loss of relevant customer benefits in the form of (loss of) network benefits and synergies; reduction in the level of investment at the divested and HCA's remaining hospitals; reduction in quality both at the divested and HCA's remaining hospitals; and reduction in range of goods and services offered. We considered these submissions in detail in the Final Report¹⁰⁴ and concluded that no such costs were likely to arise as the result of a divestiture remedy. We do not consider that HCA has provided any new or additional argumentation or evidence that gives us reason to revise this conclusion.

Net present value of divestiture

12.152 Our NPV analysis is a tool for considering the costs and benefits of the proposed divestiture remedy. It brings together the various pieces of analysis, assumptions and judgements that we have made regarding the likely development of the central London healthcare market both with and

¹⁰³ HCA response to the Remittal PDR, p56, paragraph 7.47.

¹⁰⁴ Final Report, paragraphs 11.189–11.201.

without divestiture in order to come to a view on the likely net benefits/costs to customers.

- 12.153 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 Appendix J. These show a wide range of NPVs obtained, ranging from –£[200-300] million to £[700-800] million.
- 12.154 In the following three tables, we show our 'central estimate' scenarios, ie assuming a constant loss of economies of scale of £13 million a year, but varying the assumption regarding the effectiveness of new entry in reducing HCA's prices to the level where it makes normal returns.
- 12.155 Our central estimate Scenario 1 (which assumes that entry removes 75% of HCA's profits in excess of its cost of capital), set out in Table 12.1, gives a range of NPV estimates of between –£[100-200] million and £[500-600] million. Under this central estimate Scenario 1, there are both various scenarios based on plausible assumptions in which divestiture will result in a net benefit, and various scenarios based on plausible assumptions in which divestiture will result in a net cost (that is, negative NPV). For example, if entry were to happen within seven years of divestiture taking place (ie within nine years from the date of this report), HCA's prices would need to exceed the competitive level by just under 4.5% for divestiture to result in a net benefit.

Table 12.1: Central estimate Scenario 1 (75% effective entry)

| | | Year of entry / year when entry might become 75% effective | | | |
|--|--|---|--|--|--|
| | £m | 5 | 7 | 10 | 20 |
| Extent to which HCA's prices exceed the competitive level | 2.0% 2.5% 3.0% 3.5% 4.0% 5.0% 5.5% 6.0% 6.5% 7.0% 7.5% | ([%]) ([%]) ([%]) ([%]) ([%]) ([%]) ([%]) [%] [%] [%] [%] | ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) ([X]) | (()) ()) ()) ()) ()) ()) ()) ()) ()) () | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX |

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 £13 million loss of economies of scale in each year. Year 5 in the table above represents the NPV accumulated over 5 years after divestiture takes place ie in 7 years' time from today. We note that the information remedy (already in place) may have up to 1% effect on prices going forward, hence in the NPV tables we show a range of 2% to 7.5%, with the lower end of this range reflecting the situation in which prices decline due to the information remedy, as separate from the impact of divestiture.

12.156 The table below shows our central estimate Scenario 2. In this case, we assumed that new entry would be fully effective, ie that entry would reduce HCA's prices to the level where it made returns in line with its cost of capital. In this case, the NPV of divestiture would be negative if entry were to take place within 5 years of divestiture (ie 7 years from the date of this report) regardless of the extent to which HCA's prices currently exceed the level at which it would make normal returns. Under all price assumptions apart from the top of the range (7.5%), the NPV would be negative if entry were to take place within 7 years of divestiture (9 years from the date of this report).

Table 12.2: Central estimate Scenario 2 (100% effective entry)

| | | Year of entry / year when entry might become effective | | | | |
|-------------------|------|---|-------|-------|-------|--|
| | £m | 5 | 7 | 10 | 20 | |
| | 2.0% | ([≫]) | ([≫]) | ([≫]) | ([≫]) | |
| | 2.5% | ([≫]) | ([≫]) | ([≫]) | [≫] | |
| Extent to which | 3.0% | ([≫]) | ([%]) | ([%]) | [≫] | |
| HCA's prices | 3.5% | ([≫]) | ([≫]) | ([%]) | [≫] | |
| exceed the | 4.0% | ([≫]) | ([≫]) | ([%]) | [≫] | |
| competitive level | 4.5% | ([≫]) | ([≫]) | ([≫]) | [※] | |
| | 5.0% | ([≫]) | ([≫]) | [%] | [≫] | |
| | 5.5% | ([≫]) | ([≫]) | [≫] | [※] | |
| | 6.0% | ([≫]) | ([≫]) | [≫] | [≫] | |
| | 6.5% | ([≫]) | ([≫]) | [≫] | [≫] | |
| | 7.0% | ([≫]) | ([≫]) | [≫] | [≫] | |
| | 7.5% | ([≫]) | [%] | [≫] | [≫] | |

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 £13 million loss of economies of scale in each year. Year 5 in the table above represents the NPV accumulated over 5 years after divestiture takes place ie in 7 years' time from today. We note that the information remedy (already in place) may have up to 1% effect on prices going forward, hence in the NPV tables we show a range of 2% to 7.5%, with the lower end of this range reflecting the situation in which prices decline due to the information remedy, as separate from the impact of divestiture.

12.157 The table below shows our central estimate Scenario 3. In this case, we assumed that new entry would be only partially effective, such that it removes 50% of HCA's profits in excess of its cost of capital. In this case, the NPV of divestiture would be positive under most combinations of assumptions but would be negative if entry were to take place within 7 years of divestiture and the extent to which HCA's prices currently exceed the level at which it would make normal returns is at the bottom end of our range (ie 3%).

Table 12.3: Central estimate Scenario 3 (50% effective entry)

| | Year of entry / year when entry might become effective | | | | |
|-------------------|---|-------|-------|-------|-----|
| | £m | 5 | 7 | 10 | 20 |
| | 2.0% | ([≫]) | ([≫]) | ([≫]) | [≫] |
| | 2.5% | ([≫]) | ([≫]) | ([≫]) | [≫] |
| Extent to which | 3.0% | ([≫]) | ([≫]) | [≫] | [≫] |
| HCA's prices | 3.5% | [≫] | [≫] | [≫] | [≫] |
| exceed the | 4.0% | [%] | [%] | [≫] | [≫] |
| competitive level | 4.5% | [≫] | [≫] | [≫] | [≫] |
| · | 5.0% | [≫] | [≫] | [≫] | [≫] |
| | 5.5% | [≫] | [≫] | [≫] | [≫] |
| | 6.0% | [%] | [%] | [≫] | [≫] |
| | 6.5% | [≫] | [≫] | [≫] | [≫] |
| | 7.0% | [≫] | [≫] | [≫] | [≫] |
| | 7.5% | [≫] | [≫] | [≫] | [≫] |

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 £13 million loss of economies of scale in each year. Year 5 in the table above represents the NPV accumulated over 5 years after divestiture takes place ie in 7 years' time from today. We note that the information remedy (already in place) may have up to 1% effect on prices going forward, hence in the NPV tables we show a range of 2% to 7.5%, with the lower end of this range reflecting the situation in which prices decline due to the information remedy, as separate from the impact of divestiture.

- 12.158 If the extent to which HCA's prices exceed the level at which it would make normal returns is at the bottom end of our range (3%) and the information remedy results in a fall in prices of 1%, the NPV of divestiture is net negative or only marginally positive in all three central estimate scenarios, regardless of whether there is new entry within the 20 years following divestiture.
- 12.159 The results demonstrate that the analysis is particularly sensitive to the assumptions used, in particular in relation to: *(a)* the level of loss of economies of scale; *(b)* the impact of divestiture and new entry on prices; and *(c)* the assumed timing and effectiveness of entry (that is, the duration of the AECs to be remedied). Relatively small changes in these assumptions have a significant effect on the NPV estimates.
- 12.160 Furthermore, the overarching assumption throughout our NPV analysis is that divestiture results in prices falling to the level at which HCA earns its WACC. As set out above, there are various reasons why we may expect this not to be the case. In addition, the estimated price reductions are based in material part on our profitability assessment. In that context, our analysis of returns by patient type (UK and overseas) required a number of judgements

and assumptions. There is accordingly significant uncertainty over the likely level of price benefits that would result from a divestiture.

- 12.161 In light of the range of potential outcomes in the NPV analysis, and giving due consideration to the uncertainties as to the price impact of divestiture and the prospect of new entry in the market within the next 20 years, we cannot form an expectation that the benefits of the remedy would outweigh the costs.
- 12.162 Finally, we considered whether a divestiture remedy could be expected to give rise to any non-price benefits that we should take into account. While we have not identified detriment in the form of a lack of quality and/or innovation in the market, in the Final Report we concluded that an increase in rivalry resulting from a divestiture remedy could be expected to result in an increase in competition on quality and range (not just on price) and an improvement in the quality of hospital services over time.¹⁰⁵ However, while such potential non-price benefits increase the probability that there will be a net benefit (as opposed to net cost) as the result of divestiture, we have placed limited weight on such benefits as we have not been able to form a view as to the likely materiality of such benefits.

Our conclusions on the proportionality of divestiture

- 12.163 In coming to a view on the proportionality of divestiture as a remedy, we have considered whether such a remedy:
 - (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.¹⁰⁶
 - Effective in achieving its legitimate aim
- 12.164 We considered which hospitals HCA would need to divest in order to remedy the AECs. Our assessment took account of broadly the same factors that we had considered in the original market investigation. However, we recognised

¹⁰⁵ Final Report, paragraph 11.225. Remittal PFs, paragraph 7.3.

¹⁰⁶ CC3, paragraphs 335–337.

the likelihood of new entry in the central London market, which has changed significantly since the Final Report.

- 12.165 We concluded that a divestiture of either the Wellington Hospital together with the Platinum Medical Centre, or the London Bridge Hospital together with the Princess Grace Hospital, was likely to be of a sufficient scale and provide a sufficiently broad range of specialisms to remedy or at least mitigate both the insured and self-pay AECs and thereby reduce prices. However, given the mixed evidence about spare capacity and the lack of a reliable model of price setting in this market, we are unable to predict the extent to which prices would decline following a divestiture remedy.
 - No more onerous than needed to achieve its aim
- 12.166 Next, we considered whether the divestiture package we had identified was no more onerous than needed to achieve its aim.
- 12.167 As set out in Section 4: Competitive Constraints, analysis provided to us by HCA suggests there is spare capacity in some areas (such as overall bed numbers and 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.¹⁰⁷ 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.
- 12.168 While there is uncertainty over the precise elements of capacity constraint in central London, we have not been able to identify with confidence a smaller divestiture package that we consider would be as effective as that of the Wellington Hospital and the Platinum Medical Centre, or the London Bridge and Princess Grace Hospitals. Therefore, we consider that neither of these packages would be more onerous than needed to achieve its aim.

¹⁰⁷ Section 4: Competitive Constraints, paragraph 4.20.

- Least onerous effective remedy
- 12.169 In paragraphs 12.178 to 12.310, we discuss the other remedies that we have considered. We concluded that none of these remedies was likely to be effective in addressing the AEC we have identified in central London. On this basis, we find that divestiture is the least onerous effective remedy.
 - Does not produce disadvantages which are disproportionate to the aim
- 12.170 In order to conclude that a divestiture is proportionate, we would need to be satisfied that the benefits of such a remedy outweigh the costs.
- 12.171 In making this assessment, we have been mindful of the following comments by the CAT:
 - (a) in HCA's previous appeal:¹⁰⁸ 'The greater the interference with [ECHR] rights, the most robust and reliable the evidential basis relied upon to justify that interference may be required to be.'
 - (b) in the BAA case:¹⁰⁹ '... where the CC has taken such a seriously intrusive step as to order a company to divest itself of a major business asset ..., the Tribunal will naturally expect the CC to have exercised particular caution in its analysis of the problem ... and of the remedy it assesses is required.'
- 12.172 In light of the uncertainty about both the scale of the customer detriment and the impact that a divestiture would have on prices, together with the prospect of new entry within the medium term which will have a significant impact on prices independently of any divestiture, we are unable to form an expectation that the benefits of divestiture will outweigh the costs.
- 12.173 This is supported by our NPV analysis, which we have used as a tool to assess the costs and benefits of divestiture under a range of different scenarios. On a number of plausible combinations of assumptions, including our central estimate scenarios 1 to 3, the NPV of the divestiture remedy may be either positive or negative depending on the extent to which HCA's prices currently exceed the level at which it would make normal returns and the timing and effectiveness of entry.
- 12.174 For these reasons, while we have found that the remedy is likely to be effective in increasing the competitive constraint on HCA in the markets for

¹⁰⁸ HCA International Limited v CMA [2014] CAT 11, paragraph 36.

¹⁰⁹ BAA Limited v. Competition Commission [2012] CAT 3, paragraph 20(7).

privately-funded healthcare services in central London, we conclude that our proposed divestiture package for HCA is not a proportionate remedy.

12.175 The Group is not unanimous in this decision. Two of the five Group members (Anthony Morris and Jeremy Peat) consider that significant new entry which acts as an effective constraint on HCA such as to address the AECs is unlikely in the ten years following divestment. They believe that in the majority of the most plausible scenarios, the price benefits of divestiture would outweigh the costs of divestitures significantly and therefore, divestiture would be both fully effective and proportionate.

A narrower divestiture package

- 12.176 Having concluded that our proposed divestiture package was not a proportionate remedy to the AECs identified, we considered Bupa's submission (see paragraph 12.32) regarding a narrower divestiture package.
- 12.177 Our view is that a divestiture of either LOC or Harley Street, and LRC, would not provide a sufficiently broad range of specialisms to remedy the AECs since these facilities are largely focused on oncology. As a result, we would expect them to increase the competitive constraint on HCA to a limited extent. Moreover, while a purchaser of these facilities could seek to develop a broader range of specialisms over time, we reasoned that this would take an extended period given the number of specialties that would need to be developed. On this basis, we concluded that an oncology-focused divestiture package was likely to be ineffective in addressing the AECs identified.
- 12.178 In the original Final Report (paragraph 11.131), we considered whether the divestiture of London Bridge hospital on a stand-alone basis, would be sufficient to provide an effective constraint on HCA (in combination with other non-HCA operators in central London). We concluded that this divestiture package would result in insufficient incremental non-HCA capacity to be effective. As set out above, while the new evidence that has been submitted to us during the remittal on the existence and type of spare capacity in the market, increases the uncertainty over the precise elements of capacity constraint in central London, we consider that a divestiture package comprising a substantial number of overnight and ICU beds, theatres, consulting rooms and other facilities was likely to provide an effective constraint. The London Bridge hospital (on its own) would be significantly smaller than either of the original proposed divestiture packages and Cleveland Clinic's planned facility. We reasoned that this was likely to limit the extent to which it would increase the competitive constraint on HCA and, therefore, the likely impact on prices. Moreover, we note that the costs of divesting the London Bridge hospital, without the Princess Grace, are

likely to be similar to those of divesting the Wellington hospital. On this basis, we cannot form an expectation that the benefits of the remedy would outweigh the costs. Therefore, we conclude that a narrower divestiture package for HCA is not a proportionate remedy.

Other potential remedies

- 12.179 Having concluded that divestiture was disproportionate, we considered whether there were any alternative remedies (either identified by us or proposed by the parties) that might be both effective and proportionate in addressing the AECs identified. As outlined earlier, the remedies we considered were:
 - (a) Remedy 2 requiring HCA to lease one or more of its hospitals to a competitor ('access' remedy);
 - (b) Remedy 3 restrictions on further expansion by HCA in central London;
 - (c) Remedy 4 a price control on HCA;
 - (d) Remedy 5 preventing tying and bundling, including the removal of restrictive contract clauses with insurers (as proposed by Bupa and Spire);
 - *(e)* Remedy 6 measures to enhance the availability of sites for private hospitals in central London; and
 - (f) Remedy 7 imposing further constraints on HCA's relationships with consultants, proposed by Bupa.
- 12.180 As we explain in more detail below, we do not believe that any of these remedies are likely to be effective in addressing the AECs by constraining the market power of HCA in central London, either with respect to self-pay patients or in its negotiations with the insurers.

Remedy 2: access

Aim of remedy

12.181 Similarly to divestiture, this remedy would seek either to create a new source of competition, or to strengthen an existing source of competition, by increasing the quantity of private hospital capacity in central London outside HCA's control. Under this remedy, HCA would be required to allow another hospital operator to rent one or more of its hospitals (including all the relevant plant and equipment) for a given period of time. This might be a

fixed period or until new entry into central London had, in combination with existing non-HCA hospitals, created an effective competitive constraint on HCA.¹¹⁰ In effect, this remedy would serve as a time-limited 'divestiture' of certain HCA facilities, and we have considered it in the context of a real prospect of large scale new entry within the medium term.

Views of parties

- PMIs
- AXA PPP
- 12.182 AXA PPP told us that a new entrant via this remedy would not represent a new 'outside option' in lieu of HCA. AXA PPP would not credibly be able to offer PMI packages to corporate clients that included the new provider (on an HCA-leased site) but excluded HCA. AXA PPP told us that this remedy would fail to alleviate HCA's 'must have' status and would fail to counteract our AEC.¹¹¹
- 12.183 AXA PPP also said that, in its view, HCA would be less inclined to invest and seek to expand its business elsewhere in central London in competition with the rented facility, as this would undermine the value of the leased asset that may revert in time. In addition, AXA PPP believed that the 'tenant' of the selected facility would have no incentive to invest in or expand the facility given that it would only be occupying it for a relatively short period.
- 12.184 AXA PPP told us that it did not consider that this remedy would be an effective alternative to divestiture, and was not aware of such a remedy having been considered an effective solution in any comparable case involving a market of this nature in the UK.¹¹²
 - ∘ Bupa
- 12.185 Bupa told us that this remedy would not achieve its objectives, and was not sufficient to address either the insured AEC or the self-pay AEC.¹¹³ Bupa said that third party entry within any time frame was uncertain and it was not clear on what basis a time-limited remedy was appropriate.

¹¹⁰ We note that this additional competitive constraint from entry would have to have an effect separate from the constraint arising from the operator of HCA's leased assets.

¹¹¹ AXA PPP response to Remedies Notice, p20, section 6.2.

¹¹² AXA PPP response to Remedies Notice, p20, section 6.2.

¹¹³ Bupa response to Remedies Notice, p34, paragraph 3.3.

- 12.186 Bupa considered that the proposed rental model was wholly unproven as a business model between competing private healthcare operators in the industry and would by its nature undermine incentives to compete. Bupa told us that in its view, HCA would be able to influence the commercial viability of the service, for example through ground rents and service charges. There were also concerns that the landlord-tenant relationship would create a new point of contact and therefore increase the risk of information exchange between horizontal competitors.¹¹⁴
- 12.187 Bupa believed that the ability and incentives of a competitor to compete with HCA would be reduced further under a short-term (and potentially uncertain duration) lease arrangement, even if the rental package covered all necessary assets, equipment and personnel in addition to the facility itself. Similarly, it was likely that HCA's incentives to compete with the leased facility would be undermined in circumstances where the facility reverted into HCA's full operational control after a short-term period (since it would not be in HCA's interest to retake possession of a facility which had been suffering significant competition from a significantly larger rival). Moreover, Bupa said that it was not clear that high-quality staff (nurses) or consultants would themselves consider it attractive to work at a facility only for the short term, with no guarantee that the tenant operator would remain in the central London market once the lease terminated.¹¹⁵
- 12.188 Bupa also said that the remedy as a whole would require significant monitoring and enforcement by an appropriate body.
- 12.189 Bupa said that it was extremely doubtful that any credible operator would find the lease arrangement attractive or that such an arrangement would create a real, stand-alone competitor able to compete actively and creatively with HCA.¹¹⁶
 - Hospital operators
 - HCA
- 12.190 HCA told us that any remedy which required HCA to cease its existing business activities and dispose of assets to third parties was a form of divestiture and, as such, was subject to similar considerations regarding effectiveness and proportionality which it had discussed in relation to divestiture. However,

¹¹⁴ Bupa response to Remedies Notice, p34, paragraph 3.3.

¹¹⁵ Bupa response to Remedies Notice, p34, paragraph 3.3.

¹¹⁶ Bupa response to Remedies Notice, p43, paragraph 3.28.

HCA also said that a remedy which required HCA to lease space to new entrants for a short period of time, as opposed to an outright disposal of a business in perpetuity, would potentially be a less intrusive measure than a permanent divestiture of the business.¹¹⁷

- 12.191 HCA said that this remedy would need to be limited in time and that a period of three years would be sufficient. However, HCA also said that this remedy would give rise to a number of practical considerations.¹¹⁸
 - TLC
- 12.192 TLC told us that the access remedy would not be practicable or effective in remedying the insured and self-pay AECs. TLC said that the success of any central London hospital depended on developing long-term relationships with consultants and it would simply not be credible to enter the market or expand on a time-limited basis.
- 12.193 TLC also said that the minimum period that would be required in order to make the access remedy in any way practical would be 25 years. Any shortor medium-term rental would not correspond with hospital investment cycles and the operator would have weak incentives to re-invest in the rented hospital facilities and complex clinical equipment so as to keep them updated and attractive. In that context, TLC considered the divestment remedy to be a significantly more practical, effective and comprehensive remedy to change the competitive conditions in the central London market.
- 12.194 Furthermore, TLC submitted that it did not consider that a rental agreement would somehow act as a stepping stone to entry by a competitor seeking to develop a new hospital on a different site, as it might not be attractive to enter on a leased site, for a limited period of time, invest in that site and in growing goodwill associated with that site, and then re-locate.¹¹⁹
 - o Spire
- 12.195 Spire told us that an access remedy was not a practicable or effective remedy and was not a viable alternative to divestiture. Spire said that it would not be attractive to a hospital operator to rent an HCA facility on any basis other than a long-term lease given the required investment of time and money in making the facility work. It would not be viable for a hospital

¹¹⁷ HCA response to Remedies Notice, p52, paragraphs 4.32–4.34.

¹¹⁸ HCA response to Remedies Notice, p52, paragraphs 4.32–4.34.

¹¹⁹ TLC response to Remedies Notice, p3.

operator to invest in a facility which would be handed back to its main competitor at the end of a short- to medium-term lease.

12.196 Spire said that there would be no guarantee that any business built up over the lease period could be transferred to a new site once the lease expired. The new operator would need to build its own brand at the site, and would just be handing that goodwill back to HCA at the end of term. Spire said that in its view the tenant would be unlikely to make any significant investment in improving and growing the facility when the business was time-limited.¹²⁰

Our assessment of the access remedy

- 12.197 This remedy would require a hospital operator to lease, rather than buy outright, a hospital site for a limited (and potentially relatively short) period of time in order to address both the insured and self-pay AECs for the period over which it is expected to persist.
- 12.198 We reasoned that this remedy might provide a short-term constraint on HCA for as long as it was in place, provided that the package of assets that was leased to a competitor was of a sufficient scale and scope. In this respect, we considered that the package would need to be the same as that identified as an effective divestiture package (ie either the Wellington Hospital, or the London Bridge and Princess Grace Hospitals), so that it would offer a broad range of specialisms and contain substantial capacity (in terms of beds, theatres, consulting rooms and ICU facilities) with which to compete. However, we thought that the effectiveness of this remedy was likely to be substantially compromised by its relatively short-term nature. For example, it would be difficult for a new operator to retain existing highly trained staff and consultants at a facility given the likely disruption resulting from two changes of control in a relatively short period.¹²¹ Without such staff, an operator could not compete effectively with HCA over the relevant period. Similarly, we thought that these disruptions may make the leased facilities less attractive to patients, further reducing the effectiveness of the remedy in terms of addressing HCA's market power.
- 12.199 We considered the concerns expressed by a number of parties, that new entrants would not be interested in taking on a facility for a short-term period. We thought that, at a sufficiently low rent, entrants might be interested in operating such facilities. However, we agree that a new operator would be unlikely to make any significant investments in improving and growing a

¹²⁰ Spire response to Remedies Notice, p3, first paragraph.

¹²¹ These changes would occur as the new entrant took over the facilities from HCA and then, at the end of the period, transferred them back to HCA control.

facility which would revert to its original owner (HCA) at the end of the shortterm lease. Therefore, this would limit the effectiveness of the constraint even over the period that the remedy was in place.

- 12.200 Finally, we observed that this remedy would also suffer from the same issues and uncertainties as identified above in relation to the divestiture remedy in terms of the impact that it would have on prices.
- 12.201 Overall, our conclusion is that while this remedy might increase the competitive constraint on HCA to some degree, its short-term nature and the associated disruption mean that it would be unlikely to be effective.
- 12.202 In addition to our concerns over the effectiveness of this remedy, we observed that it was likely to create significant costs for both HCA and patients. For example, the transaction costs associated with agreeing leases on HCA's assets are likely to be similar to those associated with divestiture, as are any loss of economies of scale (which could be expected to reduce the price benefits of the remedy). In addition, we were concerned that the disruption of transferring facilities back and forth in a limited time period would cause inconvenience for patients and could affect the quality of care provided. We noted that such costs would be significantly higher under this type of relatively short-term leasing agreement than for a divestiture remedy (due to the two changes of control and the temporary nature of the remedy, which we thought would be more likely to encourage staff and consultants to seek alternative arrangements). On this basis, while this remedy might be preferred by HCA (to divestiture), we considered that the remedy was not in fact less onerous than divestiture and the benefits were likely to be lower. Given our assessment of the proportionality of divestiture, it follows that we could not form an expectation that the benefits of this remedy are likely to exceed the costs.
- 12.203 In summary, we conclude that this remedy would be unlikely to be effective in addressing the features giving rise to the AECs in central London and that it was also not proportionate to its aim.

Remedy 3: preventing further expansion

Aim of remedy

12.204 We have found that there are barriers to entry and expansion in the private hospital markets in central London. These arise from the limited availability of suitable sites for private hospitals, as well as long lead times to build new facilities, high sunk costs and the existence of planning constraints.

- 12.205 This remedy would seek to facilitate entry by competitors in the central London markets by preventing HCA from expanding its private hospital portfolio within central London via the acquisition of new sites for use as hospitals and/or clinics.¹²²
- 12.206 This remedy would seek to lower the barriers to entry and expansion arising as a result of limited site availability for operators other than HCA by preventing HCA from acquiring further suitable hospital sites in central London. The logic underpinning this approach is that HCA may be able to pay more for new sites than its potential competitors as, by preventing new entry, it protects its existing sites from greater competition and maintains its position of strength in central London. In contrast, the price that a competitor would be able to pay for a site would be limited by the level of profits that it could expect to earn from operating that site in competition with HCA's portfolio of hospitals.

Views of parties

- PMIs
- AXA PPP
- 12.207 AXA PPP told us that it did not consider that this proposal would be practicable or offer any prospect of effectively remedying the current AECs. AXA PPP also said that the remedy could be challenging to implement given the potential for circumvention (ie HCA could engage in joint ventures or expand via agents or nominee companies) and costly to monitor and enforce, in particular with respect to the expansion of existing facilities.¹²³
 - 。 Bupa
- 12.208 Bupa said that this remedy would be entirely ineffective on a stand-alone basis in addressing the existing AECs caused by HCA's large market share and the customer detriment that existed currently. Bupa also said that if the CMA were to consider this remedy further, it should only do so as an adjunct to the package of divestments.¹²⁴

¹²² We have already implemented a remedy following the Final Report that addresses barriers to entry by restricting a private hospital operator facing weak competitive constraints in a local area from acquiring the right to manage a local PPU in the same local area. Final Report, paragraphs 11.245–11.337 ('Remedy measures that we are taking forward').

¹²³ AXA PPP response to Remedies Notice, p22, section 6.3.

¹²⁴ Bupa response to Remedies Notice, p47, paragraph 4.2.

- 12.209 Bupa considered that this remedy may assist in preventing the existing AECs from getting worse over time, since it may partially restrict HCA's further growth (although there was a high risk it could be circumvented) and it could potentially offer some more opportunity for rivals to grow in the market if appropriate new sites emerged. However, on its own, Bupa told us that it would be ineffective in materially changing the existing competitive dynamics in central London.¹²⁵
 - Hospital operators
 - HCA
- 12.210 In its submission, HCA contested the suggestion that it 'pays more' for new sites to exclude new entrants. HCA said that in every case in which it had acquired new sites, it had used the site to create new facilities or expand services, as in the case of Argosy House. HCA had not bid for or acquired sites for the purposes of excluding new entrants and stated that, at any given point in time, there were numerous sites available for private hospital development.¹²⁶
- 12.211 HCA stressed that this remedy would be a significant and highly intrusive interference with HCA's rights to acquire and develop future sites to allow for the expansion of its business. However, HCA said that it would be less intrusive than either divestiture or an access remedy.¹²⁷
- 12.212 HCA also told us that, if it were implemented, the remedy should be limited in time, and submitted that a period of three years would be sufficient on the basis that this would safeguard the availability of sites to investors seeking to enter the market within this time frame and there would be further new capacity brought onto the market by the end of this period which would have further increased the competitive constraints on HCA. HCA said that the remedy, if it were implemented, should only be in relation to inpatient and day-case facilities. HCA also said that the remedy should allow HCA to acquire and develop sites which competitors did not wish to acquire.¹²⁸

¹²⁵ Bupa response to Remedies Notice, p47, paragraph 4.3.

¹²⁶ HCA response to Remedies Notice, p48, paragraph 4.6. Argosy House is a building adjacent to HCA's Portland Hospital that HCA has converted for use as a private healthcare facility.

¹²⁷ HCA response to Remedies Notice, p48, paragraphs 4.7 & 4.8.

¹²⁸ HCA response to Remedies Notice, p49, paragraphs 4.11 & 4.12.

- TLC
- 12.213 TLC told us that it was supportive of this remedy and considered that it would in principle be effective in facilitating new entry and/or expansion by non-HCA operators in central London. TLC said that acquisition should not be limited to the purchase of sites or hospital facilities but also to the acquisition of parts of the referral process.¹²⁹
 - o Spire
- 12.214 Spire told us that this remedy would be very effective in addition to divestment, in order to prevent HCA's continued expansion while other operators established new facilities and slowly increased market share until, eventually, the market would become well-functioning.¹³⁰

Our assessment of expansion control remedy

- 12.215 This remedy would potentially be effective in strengthening the competitive constraints on HCA if we considered that HCA would otherwise deter, delay or prevent entry by its competitors by out-bidding them to acquire the limited number of suitable sites in central London for use as private hospitals. HCA has expanded its operations in recent years, for example acquiring and developing the Platinum Medical Centre, (additional floors in) Argosy House and the Shard, among other sites. However, the evidence indicates that each of these expansions has taken place in response to a clear business need for the additional space to develop HCA's healthcare offering. We have not received any evidence of HCA acquiring (or seeking to acquire) sites that its competitors were also looking to buy. Nor have we seen any evidence that HCA has sought to obtain significant spare capacity, which it might use to deter entry. Consequently, the premise on which such a remedy would be grounded does not appear to apply.
- 12.216 We also reviewed the potential entry plans of Cleveland Clinic, Schön Klinik, VPS and Spire. Cleveland Clinic has acquired an office building, which it proposes to convert to hospital use. Schön Klinik has signed a long-term lease for the site on Wigmore Street and applied for planning permission in April 2016. VPS was looking to purchase the Ravenscourt Park hospital site from CCAG, although we understand that it has now abandoned its plan.¹³¹ [≫]. As far as we are aware, HCA did not seek to acquire any of these sites. Evidence provided to us by Cleveland Clinic suggested that the difficulties

¹²⁹ TLC response to Remedies Notice, p3.

¹³⁰ Spire response to Remedies Notice, p4, first paragraph.

¹³¹ [※].

that it faced in identifying and securing a suitable site were largely the result of a combination of the specific requirements of a private hospital (in terms of location and building configuration) and significant competition from alternative uses, which were generally better understood by developers (eg office or residential use). The evidence did not suggest that competition from HCA was a relevant factor.

- 12.217 On this basis, we concluded that a remedy preventing HCA from expanding further in central London was unlikely to be effective in facilitating or accelerating entry/expansion in the central London market by other private hospital operators and thereby addressing either the insured or self-pay AECs. In addition, we noted that by preventing the expansion of HCA, without being effective in accelerating the entry of new operators, this remedy could create costs for patients, in terms of reduced availability of facilities and services.
- 12.218 Therefore, we decided not to implement a remedy preventing HCA from expanding further in central London.
- Remedy 4: a price control on HCA
- 12.219 We considered the option of imposing a price control in the Final Report¹³² but came to the view that:
 - (a) it would be very difficult and costly to set it up in this market (whether in the form of a reference tariff or by comparison to charges levied by similar hospitals);
 - (b) it may be vulnerable to circumvention;
 - (c) hospitals subject to such a cap may be incentivised to reduce the quality of the service they provide;
 - (d) it may generate distortion risks over time by discouraging innovation and the introduction of new and better treatments and procedures; and
 - *(e)* it would also discourage new entry into sectors subject to a capping regime, unless the potential new entrant could be certain that its entry would result in the removal of price caps.

¹³² Final Report, paragraphs 12.63–12.68.

12.220 In this remittal, we have considered whether a 'light-touch' price control could be effective and/or less onerous than a standard price control in addressing the AECs.

Aim of remedy

- 12.221 The aim of a price control remedy would be to mitigate the customer detriment arising from the features that we have identified. It would do this by setting the maximum prices that could be charged by HCA to insurers for its central London hospitals for the period of time over which the insured and self-pay AECs were expected to persist.
- 12.222 A 'light-touch' price control might, for example, take the form of a requirement for HCA to reduce its prices by a set percentage from existing contract levels for a period of time. This compares with a 'standard' price control, which typically would entail the setting of prices based on a bottom-up assessment of the costs of providing various medical treatments. The former would be significantly less complex to implement.
- 12.223 In the Remittal Remedies Notice, we asked parties for their views on the effectiveness of this remedy assuming that it took the form of a requirement for HCA to reduce its prices by a set percentage from existing contract levels for a period of time, ie a one-off reduction in prices rather than a redetermination of the price of each service offered. Their views are summarised below.

Views of parties

- PMIs
- AXA PPP
- 12.224 AXA PPP told us that it did not consider that a price control mechanism would be effective because of the ability to circumvent any controls.
 - 。 Bupa
- 12.225 Bupa initially stated that there would be a high risk of circumvention by HCA. For example, it may be encouraged to distort patient referral pathways or to over-treat to grow revenues in the face of fixed unit prices. In addition, Bupa

noted that this remedy option would not address the underlying causes of the AECs.¹³³

- 12.226 However, after the Remittal PDR was published, Bupa told us that in circumstances where a divestment was rejected as disproportionate, we should undertake more detailed consideration of a price control on HCA, before we could reasonably conclude that no such remedy was feasible.¹³⁴
- 12.227 Bupa said that it accepted that there may be challenges to overcome in managing a light-touch control, but given the detriment to customers that would result if no action were taken, it was necessary to consider this price control option as a safeguard for customers (even if such a safeguard only partially addressed the AECs that the CMA had identified). Bupa noted that the fact that the remedy may be only partially effective did not mean that it should not be pursued if no better alternative was available. Furthermore, Bupa considered that a price control remedy could be designed such that it would be at least partially effective.¹³⁵
- 12.228 Bupa suggested that the control should remain in place until we found that entry had in fact addressed the AECs in the central London market. In Bupa's view, this would be at least five years on the CMA's analysis at the time of the Remittal PDR, although, given the significant uncertainty as to the timing and effectiveness of the Cleveland Clinic's entry, this could be significantly longer. Bupa said that it accepted that a price control was an imperfect solution compared to divestments. In Bupa's view, a price control may only partially address the customer detriment, would have monitoring costs, and may have higher risks of circumvention. However, Bupa suggested that a light-touch control would certainly be better than 'no action' by the CMA, and would be proportionate given the size of the annual customer detriment that would otherwise arise.¹³⁶
 - Hospital operators
 - HCA
- 12.229 HCA told us that it did not accept that there was any reasonable basis in the CMA's findings for imposing price controls. However, it believed that this

¹³³ Bupa response to Remedies Notice, p9, paragraphs 1.34 (i).

¹³⁴ Bupa response to Remittal PDR, p44, paragraphs 4.20.

¹³⁵ Bupa response to Remittal PDR, p44, paragraphs 4.26.

¹³⁶ Bupa response to Remittal PDR, p44, paragraphs 4.30–4.31.

remedy would be a less intrusive measure than either divestiture or an access remedy.¹³⁷

- 12.230 HCA also said that, if the CMA were to impose this remedy, it would be practicable to impose controls on the percentage increase in HCA's PMI contract prices for a given period of time. HCA thought that this could be done, for example, by reference to various indices based on medical inflation.
- 12.231 HCA also told us that a short-term price cap would be more likely to limit any potential risks to quality and innovation for the duration of the cap, whereas a divestiture remedy would produce adverse effects for quality, range and innovation over the longer term and disrupt HCA's network of hospitals and clinical pathways.
- 12.232 HCA stated that based on the strong prospects for new entry and the creation of new capacity over the next few years, any price cap should be strictly limited in time, and HCA submitted that a period of three years would be sufficient.¹³⁸
 - TLC
- 12.233 TLC submitted that it would not support a price control and was of the view that the CMA should not take this remedy forward.¹³⁹

Our assessment of a price control remedy

- Price control options and considerations
- 12.234 We examined the feasibility and proportionality of a price control remedy to mitigate the detriment to customers arising from higher prices. Such a price control might be put in place either for a specific period of time or until new entry exerts an effective competitive constraint on HCA. While our main focus was on a 'light-touch' price control, we considered three potential approaches:
 - (a) Option 1: a cost-plus or 'bottom-up' approach, ie a price control based on an analysis of costs, plus a margin to allow HCA a reasonable return on capital;

¹³⁷ HCA response to Remedies Notice, p51, paragraphs 4.21.

¹³⁸ HCA response to Remedies Notice, p51 & 52, paragraphs 4.24 & 4.28–4.30.

¹³⁹ TLC response to Remedies Notice, p3.

- (b) Option 2: using the NHS tariff schedules, as set by NHS Improvement as a benchmark (potentially with some adjustments); and
- (c) Option 3: using the existing tariff schedules negotiated between HCA and the PMIs and then making adjustments for inflation and other factors.
- Option 1: Cost-plus/bottom-up
- 12.235 This approach is, in principle, the least distortionary means of controlling outcomes. This is because prices would take into account all the relevant costs of production, as well as the need for HCA to earn a reasonable return on the capital it employed in providing private healthcare services.
- 12.236 However, setting such a price cap would be highly complex due to the large number of different treatments offered by HCA and the shared cost base used to provide them:¹⁴⁰
 - *(a)* There are thousands of different treatments provided by private hospitals, each of which would need to be priced.¹⁴¹
 - (b) A large proportion of the costs incurred in providing private healthcare services are 'joint' or shared across treatments. For example, in 2015 around [40–50]% of HCA's cost base was made up by direct cost of sales, which may (broadly) be apportioned to specific treatments, while the remaining [60–70]% (approximately) was made up of overhead and capital costs, which were shared across all treatments.¹⁴²
- 12.237 A consequence of this is that decisions made by the CMA (or regulator) about the allocation of costs between numerous treatments – which by their nature, rely on making sometimes arbitrary assumptions – would be a major factor driving the prices allowed under the cap. Given this, there are significant risks to customer welfare associated with making inappropriate allocations. These include discouraging HCA from offering those healthcare services which it judged to be under-remunerated. This could result in reduced choices for patients and/or less competition in the market for certain

¹⁴⁰ We also note that evidence of the approach to negotiations between the private hospital operators and the insurers shows that the industry (itself) does not take this approach to setting prices.

¹⁴¹ According to Healthcode, there are 2,070 separate treatment codes within the CCSD schedule, covering the majority of procedures typically performed in private practice. Source: Healthcode White Paper.

¹⁴² These percentages are based on direct costs of $\mathfrak{E}[\mathbb{X}]$ million (as of 2015) and total costs of between $\mathfrak{E}[\mathbb{X}]$ million, comprising approximately $\mathfrak{E}[\mathbb{X}]$ million of P&L costs and a capital charge of between $\mathfrak{E}[\mathbb{X}]$ million and $\mathfrak{E}[\mathbb{X}]$ million. The capital charge is based on a WACC of 10% and the range of capital employed estimates contained in the 'base case' and 'KPMG 2' scenarios (see Appendix I). We note that even among direct costs, there may be certain categories – such as the costs of employing nursing staff – that can be difficult to attribute to a specific treatment.

healthcare services. It is by no means clear that these risks can be adequately managed, even with a heavily resourced regulator.

- 12.238 In addition, given this complexity, setting a price control for all treatments would be both time-consuming and costly. Given the scale and scope of the work involved, the CMA would not have the resources available to do this work and would need to set up an independent body to do so. This would take at least a year to set up (and possibly longer) given the need to attract suitably qualified staff. Once such a body had been set up, we thought that it would take at least a year to undertake the analysis required to set (and to consult on) the level of prices by treatment type. Given the contentious nature of these decisions, further time may be required to resolve disputes over the levels chosen. This could significantly increase the time that would be required to bring this remedy into effect. In addition, we observed that there would be significant ongoing costs associated with operating such an independent body, which would need to be covered by the industry and which would, as a result, reduce the price benefits to customers. While it is difficult to identify the likely costs of operating such a body precisely, we observe that even relatively small regulatory bodies are associated with significant on-going costs. For example, the Single Source Regulations Office (SSRO) which regulates the UK government's procurement of 'single source', or non-competitive, military goods, works and services has 31 staff and incurs running costs of around £5 million per year.¹⁴³
- 12.239 Given the significant risks of distortions associated with this approach, combined with the time and resources that would be required to establish a body capable of setting a price control and arbitrating disputes, we concluded that this would not be an effective or proportionate way of mitigating the customer detriment we have identified.
 - Option 2: using NHS tariffs
- 12.240 We have also considered using NHS tariff schedules as the basis of a price control for HCA. This approach might allow us to 'piggy-back' on the detailed work done by NHS Improvement in this area, ie approximating a cost-plus price control without the resource requirements and associated costs. However, we have found a number of significant differences between the NHS and private healthcare sector which creates a risk that the NHS tariffs are an inappropriate benchmark to use for these purposes. We identify some of these differences below:

¹⁴³ SSRO Annual Report 2016.

- (a) The NHS provides a different mix of treatments, including a range of services, such as A&E, that private hospitals do not offer.
- (b) The NHS operates a different 'business model', for example it can operate at higher capacity since patients are not given the same level of discretion over when to be treated and are not accommodated in individual rooms.
- (c) The NHS tariffs reflect a variety of factors that may not be relevant to the private sector, for example encouraging certain types of treatments or treatment modalities, and/or reflecting the budgetary constraints of the NHS.¹⁴⁴
- *(d)* National NHS tariffs set by NHS Improvement are indicative, each trust negotiates its annual budget with its respective Clinical Commissioning Group (CCG), therefore actual tariffs charged vary across the country (ie national versus local tariffs).¹⁴⁵
- (e) NHS Improvement may allow CCGs and hospital providers to agree prices below the NHS tariffs once volume goes above a pre-agreed level, incentivising NHS trusts to manage activity within pre-agreed levels.¹⁴⁶
- 12.241 These differences mean that the tariff schedules set by NHS Improvement are likely to be inappropriate benchmarks for a price control for HCA along at least two dimensions:
 - (a) First, the level of the tariffs is likely to be too low, since as set out in (b), the NHS could make more intensive use of its asset base and offer a more 'basic' service to patients.
 - (b) Second, the relative level of treatment prices may not reflect pure cost differences but other factors, which are not relevant to the private sector.
- 12.242 In light of these considerations, we conclude that using NHS Improvement's tariffs risks introducing material distortions into the pricing schedules. As with Option 1, these distortions may result in unintended consequences for customers, including discouraging the provision of certain services. As a

¹⁴⁴ For example, we understand that the NHS tariffs may seek to encourage NHS hospitals to treat patients on a day-case rather than inpatient basis, rather than purely reflecting the cost differentials associated with each modality of treatment.

¹⁴⁵ Under the terms of the Health & Social Care Act 2012, NHS England has a duty to specify those healthcare services for which it thinks a national price should be used, and NHS Improvement has the duty to set that price. There is also provision for setting rules governing not only how nationally set pricing will work, but also how local price-setting must operate.

¹⁴⁶ NHS payment system.

result, we concluded that this would not be an effective or proportionate way of mitigating the customer detriment we have identified.

- Option 3: using existing tariffs
- 12.243 Our proposal under Option 3 is for a 'light-touch' price control where we use existing pricing schedules as negotiated between PMIs and HCA and apply a percentage decrease to these tariffs. We would then allow these tariffs to increase with inflation each year. The price control would be 'sunsetted' after a specified period of time or following substantial entry.
- 12.244 Relative to the other two approaches, this approach has the advantage of using price schedules that have previously been negotiated in the private sector by HCA and therefore reflect the range and mix of treatments that are currently provided. It would not, however, be resilient to changes in the product mix or the introduction of new treatments.
 - Design issues
- 12.245 We noted that this option would be significantly less resource intensive to set up than a cost-plus approach and, therefore, was more likely to be feasible. In order to put this remedy into effect, it would be necessary to:
 - (a) identify the price decrease that would mitigate the customer detriment as fully as possible, while allowing HCA to cover its costs and to earn a rate of return consistent with its cost of capital;
 - *(b)* identify the level of cost inflation faced by HCA over the period of the price control to ensure that prices tracked costs over the period; and
 - (c) design a mechanism to monitor and enforce the remedy over its lifetime to prevent circumvention and arbitrate inevitable disputes between HCA and the insurers.
 - Setting an initial price decrease
- 12.246 As set out in Section 9, we used our updated profitability analysis to help us assess the extent to which HCA's prices may be above the competitive level.
- 12.247 This analysis indicates that for HCA to make a ROCE in line with its WACC, its prices to UK patients would need to be between 3 and 7.5% lower than they have been in recent years. Even though this is a broad range, we have been able to use this analysis to help us draw conclusions, in combination with other evidence, about the effectiveness of competitive constraints on HCA. However, if we were to implement a price control, we would need to

choose a point within this range, in order to calibrate any initial price decrease. This would place much greater strain on the analysis and the assumptions contained within it. As set out in Section 9, choosing a 'best estimate' within this range depends on a number of assumptions, including for example the value of HCA's capital assets (particularly buildings) and the allocation of (common and joint) costs between UK and overseas patients.

- 12.248 While our best estimate of the extent of 'excess' pricing is somewhere between 3 and 7.5%, we note that there is a material level of uncertainty about the appropriate level of adjustment to tariffs to mitigate the customer detriment. As a result, there is a significant risk of getting the percentage decrease in tariffs wrong, which could have substantial adverse consequences.
 - (a) If the price decrease imposed were too 'small', then the remedy would not address the customer detriment in full, although such a remedy would still reduce the (price) detriment suffered by customers.
 - (b) In contrast, if the price decrease were too high this would force HCA into an economic loss, making the remedy disproportionate to its aim and potentially involving distortions to customers including reduced choice and access to services.
- 12.249 Given the lack of precision inherent in our estimates of the extent to which HCA's prices have exceeded the competitive level and the significant risks of unintended consequences of setting the price too low (ie the potential withdrawal of HCA from providing some or all private medical treatments and/or potential reductions in the quality of services provided) we considered that any initial price reduction would need to be towards the lower end of the 3 to 7.5% range we identified. The need to set a relatively low initial reduction will itself reduce the scope for this remedy to benefit customers.
 - Allowing for cost inflation
- 12.250 The costs of the services offered by HCA will vary over time. This means that even with a 'light-touch' price control, some form of updating would need to be built into the mechanism.
- 12.251 We considered which measure of inflation might best capture likely changes in HCA's cost base over the period of a price cap. We noted HCA's suggestion of using medical inflation. The only such measure of inflation we

found was NHS Improvement's inflation estimates.¹⁴⁷ We considered, however, that these may not be fully reflective of private operators' costs because of the different negotiating power of the NHS and the different mix of inputs required and treatments offered by the NHS, among other considerations.

- 12.252 An alternative would be to use a hybrid measure, for example, to use the higher of NHS Improvement's inflation estimates and CPI as a measure of inflation to up-rate HCA's prices in the years following the imposition of the initial price decrease. However, to the extent that this approach provided an inaccurate measure of actual inflation in the provision of private medical services and there is no reason to suspect that it would be especially accurate it could result in a cap that either became less effective over time, or which became tighter, potentially forcing HCA's prices below the competitive level.
- 12.253 We concluded that there was no reliable 'off-the-shelf' or 'light-touch' means of updating a price control on HCA to keep it in line with changes in costs. As such this is likely to either render the remedy ineffective and/or introduce significant distortions within a relatively short period. The longer the time period that such measures are kept in place, the more of an issue this becomes.
 - Monitoring and enforcement
- 12.254 Even with a 'light-touch' price control, we would need a process for arbitrating disputes between the insurers and HCA and mechanisms for monitoring compliance and preventing circumvention of any price cap.
- 12.255 For example, the introduction of new and/or revised treatments would necessitate the setting of new prices. As this remedy does not address HCA's underlying market power, an independent arbitrator would need to determine any such 'new' prices; otherwise HCA may be able to set them above the competitive level and or circumvent the remedy by combining existing treatments in new combinations.
- 12.256 Therefore, an adjudicator body would be required. The adjudicator would need to be an independent body and would require staff of a number and level of expertise to allow it to carry out its arbitration function effectively. This would create significant additional costs for the industry. The CMA would not be in a position to undertake such a role, given the large number

¹⁴⁷ NHS Improvement inflation assumptions.

of potential disputes that might arise. As with a cost-plus price cap, it would take time to set up a suitable body to oversee the remedies, though it may take less time to determine the level of the cap, due to the simplicity of the structure.

- 12.257 Even with an arbitrator in place, there would remain a significant risk that HCA would be able to circumvent the remedy and to continue exercising its market power. We noted that capping the 'line item' prices charged by HCA to its customers would not necessarily be effective in capping the total bill. For example, HCA could alter its billing practices to recover any revenue 'lost' as the result of a price control. We thought that it would be difficult for an arbitrator to manage disputes over invoices, given the potential volume of such disagreements (between insurers and HCA) and the complexity of adjudicating individual cases. We also noted that HCA might circumvent the remedy through the introduction of new services or the adaptation of existing ones. This would create a need to set 'new prices' for which there would be no reference tariff. In this context, we thought HCA could continue to exercise its market power.
 - Conclusion on the effectiveness of a 'light-touch' price control remedy
- 12.258 We have concluded that a light-touch price control is unlikely to be an effective means of mitigating the detriment to customers. This is for the following reasons:
 - (a) We do not have a precise estimate of the extent to which HCA's prices currently exceed the level which we would expect in a well-functioning market. This creates a risk of unintended consequences in setting any initial price reduction. While this risk could be mitigated by only requiring a small initial reduction, this in turn would reduce the benefit of the remedy to customers.
 - (b) There is no reliable light-touch way of updating the price cap from year to year for inflation, or for the introduction of genuinely new products and services. This will lead to distortions in pricing and incentives that we would expect to grow the longer that the price control remains in force.
 - (c) Even with the creation of a well-resourced body to arbitrate disputes between HCA and insurers, there would remain a number of ways in which HCA would be able to circumvent a crude price control measure. Attempting to make the measure more sophisticated would increase the complexity and cost of the remedy.

- 12.259 Given the above factors, we did not have confidence that a light-touch price cap would meaningfully reduce the detriment, other than perhaps in the very short term and we had concerns about distortions particularly if such a cap were kept in place for any significant period of time.
- 12.260 We therefore concluded that this would not be an effective remedy.

Remedy 5: constraints on private medical insurer/private healthcare provider contract terms (preventing 'tying and bundling')

Aim of remedy

- 12.261 In our Final Report,¹⁴⁸ we considered whether a remedy that imposed restrictions on the behaviour of private hospital operators in their negotiations with insurers could be effective in preventing them from exercising market power. In our previous Remedies Notice dated 28 August 2013 we consulted on two potential versions of this remedy:
 - (a) The first version sought to prevent private hospital operators with market power from raising their prices across their whole hospital portfolio if a PMI changed its network policy such that patient volumes to the hospital operator concerned were likely to fall.
 - *(b)* A second version sought to require private hospital operators with market power to offer and price their hospitals separately.¹⁴⁹
- 12.262 In our Final Report,¹⁵⁰ we concluded that neither of these versions of the remedy was likely to be effective in remedying the insured AEC.
- 12.263 As part of the remittal process, we have reconsidered these potential remedies and whether they might be effective. We note that this type of remedy would not address the source of HCA's market power but rather would only mitigate the firm's ability to use this power to achieve prices above the competitive level.
- 12.264 A variant of this remedy was proposed by Bupa and Spire as part of their response to the Remittal Supplemental PDR. The aim of the remedy (called 'Removal of all restrictive contractual clauses with insurers' by Spire and Bupa) would be to create conditions for more intense competition in the market for insured patients in central London, by removing contractual

¹⁴⁸ Final Report, paragraphs 12.22–12.62.

¹⁴⁹ CC Notice of possible remedies (28 August 2013).

¹⁵⁰ Final Report, paragraphs 12.22–12.62.

barriers contained in the insurers' contracts with HCA which restrict the ability of insurers to refer patients to non-HCA hospitals.

Views of parties

- PMIs
- 。 Bupa
- 12.265 In relation to our wider 'tying and bundling' remedy, Bupa told us that this remedy would not be effective as it was too open to circumvention. This remedy option would not address the underlying causes of the AECs.¹⁵¹
- 12.266 However, in relation to the narrower 'restrictive clauses' remedy, Bupa told us that HCA was in a position to impose contractual clauses on insurers that limited the insurer's ability to deliver value for money in the market. These clauses had an anti-competitive effect as they foreclosed opportunities for other providers. Insurers did not have the bargaining power to remove these clauses on their own (or without conceding further significant price rises).¹⁵²
- 12.267 Bupa told us that these restrictive clauses included the following:¹⁵³
 - *(a)* [≫];
 - (b) [X]; and
 - (C) [≫].
- 12.268 Bupa told us that HCA also had clauses that [\gg].¹⁵⁴
 - Hospital operators
 - TLC
- 12.269 In its submission, TLC told us that it agreed that we should not take this remedy forward.¹⁵⁵

¹⁵¹ Bupa response to Remedies Notice, p9, paragraphs 1.34 (ii).

¹⁵² Bupa response to Remittal PDR, p47, paragraphs 4.36 to 4.38.

¹⁵³ Bupa response to Remittal PDR, p47, paragraphs 4.40.

¹⁵⁴ Bupa response to Remittal PDR, p47, paragraphs 4.41.

¹⁵⁵ TLC response to Remedies Notice, p3.

- o Spire
- 12.270 In its response to the Remittal Supplemental PDR, Spire said that we should impose a remedy that would order HCA and insurers to remove all restrictive clauses from their contracts immediately.
- 12.271 Spire told us that it did not consider that new entry would remove the negative effects of the restrictive clauses and, as a result, the proposed remedy should not be time limited.
- 12.272 Spire also said that the remedy would not require any monitoring resources to ensure compliance. In its view, it would be in the insurers' interests to ensure the ban was strictly complied with, as they would have the chance to obtain better terms from competing hospitals and also from HCA.
 - Others
- 12.273 HCA and AXA PPP have not commented on Remedy 5 in their submissions.¹⁵⁶

Our assessment of 'tying and bundling' remedies

- 12.274 In the Final Report, we concluded that, if this remedy were to cover comprehensively all forms of conduct that would indicate the exercise of market power, it would need to be accompanied by a process for dispute resolution that would be expensive, complex and intrusive. We recognised that there may be (many) other forms of conduct than the ones specified in our remedy that were designed to achieve the same end which may be difficult to identify. We concluded that, as a consequence, monitoring and enforcing this remedy would be complex and expensive, that the risk of circumvention was high. On this basis, we concluded that the remedy as specified in paragraph 12.261 would not address the AEC comprehensively and that it could only do so if significantly expanded in scope and accompanied by an oversight regime which would be complex and expensive to create and operate.¹⁵⁷
- 12.275 In response to our Remittal Remedies Notice and Remittal PDR, parties did not suggest that our reasoning or conclusions from the Final Report were incorrect, or provide any evidence that would lead us to review the position taken in the Final Report.

¹⁵⁶ AXA PPP commented on a similar remedy proposal during the market investigation. See the Final Report, paragraphs 12.22.

¹⁵⁷ Final Report, paragraphs 12.44 to 12.62.

- 12.276 We next considered Bupa's and Spire's variant of this remedy.
- 12.277 First, we observed that removing or preventing restrictive clauses in contracts between HCA and insurers would not address HCA's market power at source but that it might serve to mitigate or prevent HCA from exercising its market power.
- 12.278 Next, we considered how widespread restrictive clauses are in HCA's existing contracts with PMIs. As far as we are aware, [≫].
- 12.279 We understand that, under its existing contract with HCA, $[\aleph]$.
- 12.280 [%]
- 12.281 [\gg], we considered that it was unlikely that these clauses would result in the material foreclosure of the central London market to other operators.¹⁵⁸
- 12.282 In addition, we were concerned that intervening into freely negotiated contracts may cause distortions in the market for private healthcare services in central London. In this context, we note that [≫]. There is a risk therefore that if we prohibit these types of clauses, prices might rise above the current levels.
- 12.283 In order for a restrictive clauses remedy to be effective it would be necessary to identify a comprehensive and specific list of forms of conduct or contract terms to be prohibited [≫]. However, we considered it likely that HCA would be able to circumvent the remedy by adopting additional forms of conduct that would fall outside the scope of the remedy and which we had not foreseen or specified. In this way, HCA would still be able to exert market power. In order to prevent such circumvention, we thought that it would be necessary to regulate the terms on which private hospitals and insurers contracted, including the prices. (We have considered price regulation as a separate remedy).
- 12.284 Furthermore, we considered that distinguishing between an inappropriate exercise of market power and legitimate price-volume discounts in this market was likely to be complex and that monitoring and adjudication would be costly.

¹⁵⁸ Bupa has a share of around 40% of the PMI market. Once we take into account the proportion of central London private healthcare spend that comes from self-pay, overseas and NHS patients (around 40% in total), this means that Bupa's expenditure is likely to comprise less than 25% of overall central London private healthcare spending. Source: LaingBuisson (2016), *Private Acute Medical Care in Central London: Market Report*, p21.

12.285 On the basis of the evidence available to us, we conclude that the abolition of 'restrictive clauses' [≫] was unlikely to be an effective remedy without a complex and intrusive system of regulation covering the full range of terms on which HCA contracted with insurers. In the latter case, we considered that this remedy would be similar in effect and complexity to price regulation, which we have concluded would not be effective or proportionate. We therefore decided not to pursue any version of this remedy.

Remedy 6: recommendations to NHS trusts/Department of Health and the government to facilitate site availability in central London for medical uses to private hospitals

Aim of remedy

- 12.286 We have considered whether a remedy that would help make more sites available in central London for private hospital use could be effective in addressing both the insured and self-pay AECs we have identified. In our Remittal Remedies Notice, we consulted on two potential versions of this remedy:
 - (a) recommendation to NHS trusts and/or the Department of Health to sell surplus buildings for medical use to private hospital operators; or
 - *(b)* recommendation to the government to change planning regulations to facilitate entry/expansion by non-HCA hospital operators into central London.
- 12.287 The aim of the first version of this remedy would be to ensure that NHS sites that are being sold by NHS trusts are made available to private hospital operators who wish to enter (or expand in) the central London market rather than used for other purposes, eg converted for residential use. In effect, the remedy would recommend that the NHS marketed such sites to private hospital operators first and, only if there was no interest at a reasonable price, would the NHS then seek to market the sites more broadly, including for conversion to residential use.
- 12.288 The aim of the second version of this remedy would be to ensure that planning restrictions in central London are relaxed/changed in order to give priority to non-HCA hospitals being built. In order to be effective, we would have to recommend to the government that private hospital use was given preference over other uses in planning decisions.

Views of parties

- PMIs
- 。 Bupa
- 12.289 Bupa told us that it was highly speculative to assume that recommendations to NHS trusts to sell more assets in London (or to constrain to whom these sites could be sold) or to the government to change the planning regime would deliver positive improvements within a reasonable period of time. Bupa said that it expected NHS trusts to be very uneasy to have the value of their sites reduced by obligations to market them first or only to private hospital operators (rather than a wider set of commercial developers), particularly in the current environment of financial stress on the NHS.¹⁵⁹
- 12.290 Bupa also told us that a change to the planning regime would require significant public consultation and take several years. Therefore, credible and constraining entry on HCA would be speculative and, were it to appear at all, could take many years.¹⁶⁰
 - Hospital operators
 - HCA
- 12.291 HCA pointed out that there were current and anticipated changes to the planning regime which promoted commercial over residential usage of sites which would make it more difficult for residential developers to outbid private hospital operators for future sites.¹⁶¹
- 12.292 HCA believed that a remedy which encouraged NHS trusts to dispose of sites specifically to private hospital operators was likely to be highly effective because of the volume of property that had been earmarked for sale, the fact that such sites already had C2 planning use consent, and as former hospital premises were capable of refurbishment into private hospitals within an even shorter time frame.¹⁶²
- 12.293 HCA also told us that either version of this remedy would potentially be an effective and proportionate measure to deal with the CMA's concern about

¹⁵⁹ Bupa response to Remedies Notice, p9, paragraphs 1.34(iii).

¹⁶⁰ Bupa response to Remedies Notice, p9, paragraphs 1.34(iii).

¹⁶¹ HCA's response to the CC's Notice of possible remedies, (21 October 2013), p34.

¹⁶² HCA response to Remedies Notice, p50, paragraphs 4.15–4.19.

availability of new sites in central London, and merited further consideration as an alternative to divestment.¹⁶³

- TLC
- 12.294 TLC told us that it agreed that the CMA should not take this remedy forward.¹⁶⁴

Our assessment of recommendation/site availability remedy

- 12.295 The first version of this remedy could only be implemented via a recommendation to NHS trusts, rather than by means of an order or undertakings. Given that the latter need to prioritise their own financial viability, we believe that they would seek to sell unwanted sites for the greatest potential value and would be unlikely, therefore, to give priority to private hospitals when marketing their surplus land and buildings.
- 12.296 The HM Treasury guidance on 'managing public money', which NHS trusts are required to follow, states that 'public sector organisations should take professional advice when disposing of land and property assets. [They have to] sell by public auction as seen; or by open tender'.¹⁶⁵ Furthermore, NHS Property Services (which manages all NHS trusts' properties) has a fiduciary duty to ensure 'that best value is achieved from any disposal, for reinvestment in the NHS'.¹⁶⁶
- 12.297 NHS trusts are under financial pressures at present, as evidenced in the Five Year Forward View report,¹⁶⁷ and their aim is to gain the highest possible value when disposing of their assets, whether for medical or other use. On this basis, we concluded that this version of the remedy was unlikely to be effective.
- 12.298 With regard to the second version of the remedy, it is unclear whether the government would be prepared to change planning laws to facilitate entry of private hospital operators. In its 'Planning and Building' policy, it states that 'the government has simplified the planning system so councils have the freedom to make decisions in the best interests of their area.' Therefore,

¹⁶³ HCA response to Remedies Notice, p50, paragraphs 4.15–4.19.

¹⁶⁴ TLC response to Remedies Notice, p3.

¹⁶⁵ HM Treasury (July 2013), *Managing public money*.

¹⁶⁶ NHS Property Services – Property Disposals.

¹⁶⁷ Five Year Forward View (October 2014).

each local authority will prioritise the types of developments that would benefit their area.¹⁶⁸

- 12.299 In addition, we thought that this remedy would take a long time to have an effect on the market as it would require new planning legislation and/or guidance to come into effect. Entry would then need to take place before the AECs identified would be remedied. Therefore, this remedy is unlikely to offer a timely solution and is unlikely to take effect prior to the new entry that is already in prospect to remedy the AECs.
- 12.300 Furthermore, prioritising healthcare uses over other land uses in central London would create distortions in land use and may have a detrimental effect on other sectors of the economy.
- 12.301 In summary, our conclusion is that neither version of this remedy would be effective.
- Remedy 7: stronger constraints on HCA's relationships with consultants

Aim of remedy

- 12.302 Bupa suggested that the CMA amend and expand the scope of the existing clinicians incentives remedy¹⁶⁹ as it applied to HCA to make sure that all HCA's relationships with consultants and GPs were published and could be scrutinised publicly. The aim of such a remedy would be to facilitate entry into the market by operators such as Cleveland Clinic.
- 12.303 Bupa proposed that the CMA should consider amending and expanding the scope of the clinicians incentives remedy as it applied to HCA such that:
 - (a) all HCA's financial relationships with consultants and GPs were published in detail and could be scrutinised publicly. Total payments to individual clinicians should be published each quarter. This would allow the cumulative effect of these relationships to be understood and monitored; and
 - *(b)* HCA should be banned from forming equity-holding relationships with clinicians. All existing equity-holding relationships should be unwound.

¹⁶⁸ Planning and building policy areas.

¹⁶⁹ Final Order, Part 3, pages 9 to 15.

Views of parties

- PMIs
- 。 Bupa
- 12.304 Bupa told us that HCA had a number of avenues to increase the 'stickiness' of consultants, many of which were not covered by our existing Final Order on the clinician incentives remedy. For example, HCA could 'employ' doctors with salaries/payments for consultancy/administrative services offered. These may act as a form of 'retainer' that smaller entrants could not match. Bupa said that, in its view, a significant risk to the successful entry of Cleveland Clinic and others into the central London market was the significant control that HCA could exert over consultants (and private GPs).
- 12.305 Bupa also said that HCA should be required to publish all financial arrangements it had in place with, or payments it had made to, practising doctors (both consultants and GPs). In Bupa's view, this should be published at an individual doctor level on, at least, a quarterly basis.¹⁷⁰

Our assessment of stronger constraints on HCA's relationships with consultants remedy

- 12.306 In the Final Report, we found that the existence of certain benefits and incentive schemes operated by private hospital operators which reward referring clinicians (directly or indirectly) for treating patients at, or commissioning tests from, their facilities are a feature giving rise to AECs in the markets for the provision of hospital services by private hospital operators across the UK due to the distortion of referral decisions to their private healthcare facilities and distorting patient choice of diagnosis and treatment options.¹⁷¹ We have a remedy in place that addresses this issue.
- 12.307 Furthermore, in the Final Report, we found that there was no shortage of consultants, in aggregate, from our case studies and other evidence. Moreover, while we found that attracting and retaining consultants to practise at their hospital was a key risk factor for new entrants, taking all factors into account, we concluded that incentive schemes and

¹⁷⁰ Bupa response to Remittal PDR, p46, paragraphs 4.32–4.35.

¹⁷¹ Final Report, paragraph 8.

arrangements which create consultant referral obligations did not constitute a barrier to entry (notwithstanding our clinician incentive remedy).¹⁷²

- 12.308 We are doubtful as to whether this proposed remedy would be effective in addressing the AECs that we have identified in this remittal, in particular given that we have not found that difficulties in attracting consultants constitutes a barrier to entry or expansion in central London. We note that the existing clinician incentives remedy was introduced to address a different AEC identified in the Final Report.¹⁷³
- 12.309 We also note that we cannot prohibit HCA from employing consultants or interfere in the terms of their employment.¹⁷⁴
- 12.310 We have therefore concluded that such a remedy would not be effective in addressing the AECs identified in this remittal.

Our conclusion on remedies

- 12.311 As set out in paragraphs 12.1 to 12.9, we have identified two structural features in the markets for the provision of privately-funded healthcare services to insured patients in central London, which are in combination leading to an AEC:
 - (a) high concentration, with HCA having a large market share; and
 - *(b)* high barriers to entry and expansion, arising primarily from high sunk costs and long lead times, the latter being exacerbated by limited site availability and planning constraints.
- 12.312 The CMA has already imposed three remedies in order to address the AEC set out above, as well as further AECs identified in our Final Report. These include measures to:
 - (a) allow the CMA to undertake a competition review of new PPU arrangements;

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<sup>173</sup> Final Report, Section 8.
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¹⁷² Final Report, paragraph 6.141. We noted that incentive schemes and similar arrangements have the capacity to reinforce incumbency advantages. On the other hand, the new entrant (in various case studies that we analysed) has sought binding commitments from consultants to practise at the hospital in exchange for a consideration, usually an equity stake or equivalent interest in the new hospital business. This indicated that new entrants too were able to devise and operate such schemes and that they could be an important factor in facilitating new entry and overcoming any incumbency advantages that the existing hospital enjoyed. Final Report, paragraphs 6.125–6.127.

¹⁷⁴ Schedule 8, paragraph 2(2) of the Act prevents the CMA from prohibiting agreements relating to the terms and conditions of employment of any workers.

- (b) prohibit certain types of incentive schemes operated by private hospitals which reward referring clinicians for treating patients at particular facilities; and
- *(c)* require the publication of performance information on private healthcare facilities and consultants, and the provision of information on the fees charged by consultants.
- 12.313 While we expect that these existing remedies will improve competition within the private healthcare market in central London, we do not consider that they would fully address the insured AEC or self-pay AEC or the resulting customer detriment. Therefore, in this section we have considered seven further potential remedies (and variants thereof) that might address the AEC identified in paragraph 12.1.
- 12.314 First, we considered a divestiture remedy. In the Final Report, in order to address the AECs we identified, we decided to implement a remedies package comprising the divestiture by HCA of either the Wellington Hospital together with the Platinum Medical Centre, or the London Bridge Hospital together with the Princess Grace Hospital. We decided at the time that no other, less intrusive, remedy was available which would be effective in addressing the AEC and that the benefits of such a divestiture remedy would significantly exceed the costs.
- 12.315 During this remittal, we have received further evidence on a number of aspects of our original analysis, including in relation to our IPA, as well as regarding the existence and extent of capacity constraints, and the costs and benefits of divestiture. This evidence, together with the subsequent analysis that we have carried out and various developments in the central London market, has caused us both to reduce significantly our assessment of the potential (price) benefits of divestiture, and recognise that there are material uncertainties over these estimates. In particular, we note that at the time of the Final Report, our IPA indicated that HCA charged prices which were $[\gg]$ % higher than those charged by TLC to insurers. We considered that prices may be expected to fall by this amount in response to a divestiture remedy. The analysis that we have set out in Section 9 indicates that HCA's prices to UK self-pay and insured patients exceed the level at which it would make normal returns by between 3 and 7.5%. However, once we take into account the impact of any potential loss of economies of scale, the potential impact of our other remedies, such as the information remedy, and the increased likelihood of (large-scale) entry into central London in the medium term, we came to the view that there were a number of plausible combinations of assumptions under which a divestiture remedy could have a net cost, and other plausible combinations of assumptions under which it

could have a net benefit. We do not have a good basis for preferring the scenarios resulting in positive outcomes to those resulting in negative outcomes.

- 12.316 Therefore, while we concluded that a divestiture of either the Wellington Hospital together with the Platinum Medical Centre, or the London Bridge Hospital together with the Princess Grace Hospital, would be of a sufficient scale and provide a sufficiently broad range of specialisms to remedy or mitigate the AECs and the customer detriment arising from them, and that no other, less intrusive, remedy was available which would be effective in addressing the AEC, we were unable to form an expectation that the benefits of a divestiture remedy in addressing the AECs would outweigh its costs. We therefore conclude that the proposed divestiture package for HCA does not meet our criteria for a proportionate remedy.
- 12.317 In coming to our conclusion on proportionality, we were mindful of the intrusive nature of a divestiture remedy and the uncertainties over the likely impacts.¹⁷⁵
- 12.318 Next, we considered whether there were any other remedies (either identified by us or proposed by the parties) that would be both effective and proportionate in addressing the AEC identified. As we explain in more detail above, we do not believe that there are any other remedies that would be effective in addressing the AEC identified in central London, either with respect to self-pay patients or in its negotiations with the insurers.
- 12.319 As a result of the particular circumstances of this case, we have therefore decided not to impose any additional remedies to address the AEC.
- 12.320 The inquiry remittal group is not unanimous in this decision, with two of the five group members (Anthony Morris and Jeremy Peat) dissenting.
- 12.321 The dissenting members consider that significant new entry is unlikely in the ten years following divestiture, 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). They believe that in the majority of the most plausible scenarios, the price benefits of divestiture would outweigh the costs significantly, and divestiture would therefore be both fully effective and proportionate.

¹⁷⁵ In carrying out our proportionality assessment, we are mindful of the following comment by the Competition Appeal Tribunal in the BAA case:

^{&#}x27;... where the CC has taken such a seriously intrusive step as to order a company to divest itself of a major business asset ..., the Tribunal will naturally expect the CC to have exercised particular caution in its analysis of the problem ... and of the remedy it assesses is required.'

Endnote: Subsequent to the publication of the summary of remittal final report, the CMA has learned that Cleveland Clinic submitted a planning application to Westminster City Council on 26 August for (i) a change of use from office (Class B1) to a private hospital (Class C2) and (ii) refurbishment in relation to 33 Grosvenor Place. The application was published on the Westminster City Council planning website on 1 September.