

PRIVATE HEALTHCARE MARKET REMITTAL INVESTIGATION

Overview of HCA's submissions

Introduction

1. The CMA's Final Report, published in April 2014, determined that HCA faced "*weak competitive constraints*" that led to "*higher prices being charged by HCA across the range of treatments to insurers for insured patients in central London*". The Tribunal has quashed the insured AEC finding, together with the divestment remedy, and the CMA must now reconsider its conclusions as a whole. It would be wrong, and unlawful, for the CMA to carry out this analysis with any preconceptions as to the outcome, including because there is no suggestion that the CMA's findings on the structure of the market have been endorsed by the Tribunal.
2. HCA believes strongly that the conclusion reached in 2014 was incorrect and unsubstantiated and that a careful and objective review of the available evidence, including evidence showing material changes of circumstance that have taken place since the Final Report, will cause the CMA to reach an entirely different conclusion at the end of this new investigation, namely that competition is functioning effectively in central London, that HCA does not and is not able to impose high prices, and that there is no basis for any divestiture remedy.
3. HCA is submitting two papers to the CMA:
 - (i) a submission commenting on the CMA's findings in the Final Report that there are barriers to entry and expansion and weak competitive constraints in central London, explaining key flaws in the CMA's analysis and why, in the light of more recent developments, those findings can no longer be maintained;
 - (ii) a submission, prepared by HCA's team of economic advisers, addressing flaws in the IPA and explaining the principles that a new IPA would need to follow before the CMA could place any reliance on the model.
4. Taken together, these submissions demonstrate that HCA does not exercise market power, private healthcare in central London is highly competitive – central London has the highest number of competing fascias, and the strongest record of market growth, of any local healthcare market – and that it would be unfair and perverse for the CMA to single out HCA in central London for a divestment remedy.

Competitiveness of the London market

5. The accompanying submission provides compelling evidence of the competitiveness of private healthcare in central London. The following points bear specific mention.
6. First, it is striking that the CMA found that competition in London is in fact working well in delivering high quality and innovation for consumers. HCA agrees. One need only look at the new medical technologies and techniques (e.g. CyberKnife; da Vinci robotic surgery) that HCA (and others) have introduced in recent years, which have improved clinical outcomes and enhanced London's reputation as a leading centre for tertiary care. With these and other market facts in mind, HCA simply does not recognise the Final Report's characterization of the market in London as static or uncompetitive. Only last month, LaingBuisson published a new report

("Private acute medical care in central London: Market Report" March 2015) showing that private healthcare in central London is growing, and that there is a pipeline of new entry and expansion. The CMA's concern was solely with price – and as discussed below, that concern is entirely misplaced, since there is no evidence that HCA is charging higher prices.

7. Second, since the late 1990s, HCA has embarked on a strategy of creating high quality hospitals that focus on high acuity, tertiary services (cardiac, cancer, neurosurgery, intensive care, etc.) that were previously only provided within the NHS. It has invested heavily over this period to create the six market-leading hospitals in its central London portfolio. Based on its experiences in the US, HCA was the first private operator in the UK to recognise the opportunity to create a private offering in complex treatments as an alternative to the NHS. That HCA is the largest private operator in central London has come about following years of investment and risk-taking for the business in pursuit of this vision.
8. Third, the Final Report repeatedly criticised HCA's "high" shares of supply in central London. As HCA has explained, these are crude measures which are based on a thoroughly flawed definition of the market and artificially inflate HCA's market share. But, setting this aside, high shares of supply do not, in themselves, indicate that the market is uncompetitive or failing consumers. Moreover, the CMA's competitive assessment is based on 2011 figures. The latest LaingBuisson Report shows that competitors have grown, and that HCA's share of both capacity and revenue has fallen – illustrating the challenges on the business to remain competitive.
9. Fourth, other operators – including TLC, BUPA Cromwell, BMI and now the NHS PPUs (all located very close to HCA's hospitals) – are following HCA and investing in high acuity clinical services. There is fierce competition to attract and retain the consultants who will bring their patients to the hospital – what the CMA calls a "*contest for control of the patient pathway*". Many of HCA's consultants have practising privileges in several of these hospitals, and can easily switch their practices. There are 6 competing private providers and 10 NHS Trusts with PPUs in central London that constrain HCA's pricing and drive HCA's investment decisions.
10. Fifth, in 2011, HCA described PPUs as a "sleeping giant" of potential competition. Following the lifting of the private income cap in 2011/2012, the major NHS Trusts in London have indeed invested heavily in their PPUs, and the CMA need only look at their published strategic plans to see that there is a step change in PPU activity and ambition. They now account for 25% of bed capacity and 23% of revenue in central London, and they will be a growing competitive force in future. The CMA's PPU remedy will protect any new private partnering opportunities for new entrants.
11. Finally, there are a range of other competitive pressures on HCA's business that the CMA should carefully consider in its competitive assessment of London:
 - The presence of major hospitals outside central London cannot be ignored. These provide local alternatives for many of HCA's patients, and they too are growing and expanding their offering of high acuity treatments. Any quality "gap" that may have existed between central and Greater London providers has narrowed. PMIs are increasingly diverting suburban policyholders to local providers under "Open referral" policies.
 - Clinical care is continuing to shift away from inpatient to outpatient/day case settings. [X] of HCA's business is outpatient/day case, where it is competing with a wide range of clinics. Alongside the traditional hospital environment, new types of ambulatory care

centres are emerging. Recent new entrants, such as the London Claremont Clinic in Harley Street, show how competitive this market is becoming.

- Over the next few years, the Government has earmarked substantial investment in NHS cancer and cardiac facilities in London, to develop new and expensive technologies such as proton beam therapy. This creates added pressure on HCA to invest and ensure that there continues to be a good reason for patients to opt for private treatment as an alternative to the NHS.
- HCA is dependent for [X]% of its business on overseas patients. International medical tourism is increasingly being attracted to other markets such as the US, Middle East and South Korea, which have seen substantial investment in new hospitals. [X].

Barriers to entry

12. There is no sign that structural barriers are standing in the way of new entry or expansion, and market developments since the date of the Report have borne this out:
 - Notwithstanding the capital costs and lead times for new developments, investors see attractive investment opportunities in a market which is growing by 8%-9% annually. In this respect, London is very different from other healthcare markets in the UK, where there is low or static demand.
 - HCA, TLC, the London International and King Edward VII have all successfully acquired sites for new hospital developments. Over the next few years more NHS hospital and commercial sites will be coming onto the market and will be available to hospital operators. That hospital operators may need to compete with residential developers for these sites does not constitute a barrier to entry.
 - There is no evidence that the planning regime has deterred new entry. On the contrary, there are several examples of planning consent being granted since the Final Report, and the particular rules that apply to The Harley Street Special Policy Area in fact protect and favour medical use.
13. All of HCA's major competitors have expanded their facilities and launched new services since 2011. There is further expansion to come: in particular, Spire has announced that it will be entering central London market by 2018; and Barts Health NHS Trust has invited bids for a new PPU.

PMI bargaining power

14. The CMA has observed that the PMIs have bargaining power in some markets, and that the strength of this depends on their "outside options". As recent events have shown, PMIs are exploiting a range of strategies to maintain competitive pressure on HCA.
15. [X].
16. The PMIs claim that they are bound to include HCA hospitals in their policies, but there is considerable evidence to the contrary:
 - All the PMIs offer credible, marketable restrictive network products which exclude HCA hospitals.

- Open referral policies – where the PMIs choose the consultant and hospital – have gained ground since the date of the Report and 80% of BUPA's corporate policies are now Open referral.
 - Specialist services are increasingly being "carved-out" of contracts and put out to tender. BUPA has for example recently launched a chemotherapy network.
 - PMIs are increasingly interfering in the referral pathway, for example by requiring consultants to practise at non-HCA hospitals.
17. The CMA's divestment remedy was designed to create alternative, non-HCA capacity to allow PMIs to switch their subscribers away from HCA's hospitals. There is already sufficient capacity which will allow PMIs to do that – even more so now in 2015 than in 2011, because competitors have grown. BUPA and AXA-PPP have both acknowledged in their evidence to the CMA that they have the ability to switch [X] of their policyholders away from HCA; in other words, they concede that [X] of their customers do not require access to HCA hospitals. This represents [X] of business, the loss of which would be compounded because of the "consultant drag factor". It is precisely this ability to switch [X] of customers which gives the PMIs the upper hand in price negotiations.

The IPA

18. The cornerstone of the CMA's insured AEC finding was that barriers to entry and weak competitive constraints have combined to create higher prices for PMIs. The Final Report relied on the IPA to allege that HCA charges higher prices. The CMA made no AEC finding in relation to BMI, Spire, Ramsay or Nuffield, because the IPA outside central London did not show that there was any correlation between pricing and market concentration. The IPA is therefore pivotal to the CMA's AEC finding and divestment remedy against HCA.
19. The flaws in the IPA have been set out in the KPMG Data Room Report and in Professor Waterson's expert evidence. The corrected results do not support the CMA's allegation, either that HCA charges higher prices to PMIs, or that there is any causal relationship between HCA's local market concentration and its prices to insurers. Moreover, there are fundamental methodological problems in the CMA's approach to comparing prices in this way. HCA's team of economic advisers have identified several problems with the CMA's pricing analysis, which they explain in the accompanying submission. The following points bear specific mention.
20. First, the IPA did not compare prices on a "like-for-like" basis. It fails to take into account differences in the treatment mix and in patient clinical requirements. HCA provides a larger proportion of high complexity treatments than TLC, and there are likely to be differences in the package of clinical services which make up any given episode of care, based in part on the severity of the patient's conditions. The CMA controlled for age, gender and length of stay, but the KPMG Data Room Report has shown that this was not enough to take into account all differences in patient characteristics (or in the treatment provided) which affect the cost of services provided, and therefore the "price" paid by PMIs. The CMA cannot therefore be confident that it has accurately assessed any price difference.
21. Second, the IPA did not provide any evidence of causality between local market concentration and higher prices. The CMA merely compared HCA's average price index in 2011 with that of TLC and observed that one appeared to be higher than the other. The CMA cannot derive any conclusions concerning the relationship between concentration and price from these two observations, which (even if true) could be caused by any number of factors. The Final Report

simply states that “*the results of our empirical analysis [the IPA] all support our hypothesis that local substitutability plays a role in determining insured price outcomes and provide an indication of the magnitude of the relationship between local concentration and insured prices.*”¹

The CMA provides nothing more than a hypothesis and observes that two variables appear to conform to that hypothesis.

22. Third, the CMA's analysis is not grounded in the framework that the CMA actually uses to analyse how prices are formed for insured patients, namely the "bargaining framework". The CMA also fails to recognise how investment decisions get reflected in pricing.
23. Fourth, the IPA relied upon in the Final Report failed to take into account cost differences, based on the wider range of complex treatments and the depth of the clinical infrastructure offered by HCA. The CMA rightly recognised that HCA is a larger operator with a wider range of treatments/specialities than TLC with a focus on more complex procedures. These differences are clearly relevant to an assessment of HCA's prices and cost base, compared with those of other operators.
24. In sum, the flaws in the IPA undermine the CMA's conclusion that "*local substitutability plays a role in determining price outcomes*". The IPA provided no support whatsoever for the proposition, either that HCA's prices are higher, or that they are higher because of its share of supply, such that a divestment remedy would lead to price reductions. The CMA ultimately recognised that the pricing data outside central London did not show any causal relationship between the local share of supply of BMI, Spire, Nuffield or Ramsay and their prices – even in those local markets where BMI and/or Spire hold a monopoly or duopoly position (which of course is far from the case in central London). There is nothing in the CMA's analysis or in the data to suggest a different relationship between price and concentration would be expected to hold in central London. In fact, the IPA's results cannot be reconciled with concentration playing a significant role in driving price differences.

Conclusion

25. HCA reiterates that, as recent developments have amply demonstrated, central London is a dynamic and growing market. As the CMA acknowledges, there is *effective* competition over quality and innovation which has delivered real benefits to consumers in terms of improving quality and expanding the range of clinical services which are available in the private sector. The CMA's concern that there is *ineffective* competition over price has not been borne out by the evidence. There is no case for an AEC finding in relation to either insured or self-pay patients. There is similarly no case for a divestment remedy.

¹ The Final Report, paragraph 6.381.

CMA'S FINDINGS ON STRUCTURAL AECs IN LONDON

1. INTRODUCTION

1.1 In its Final Report on the private healthcare market of 2 April 2014 ("Report"), the CMA identified two structural features in the provision of privately-funded healthcare in London:

- (i) high barriers to entry and expansion; and
- (ii) weak competitive constraints.

1.2 The CMA concluded that these features:

- (i) give rise to adverse effects on competition ("AECs") in the provision of healthcare services to self-pay patients; and
- (ii) give rise to AECs in the provision of healthcare services to private medical insurers ("PMIs"), which lead to higher prices charged by HCA for insured patients.

1.3 The CMA's findings in relation to insured patients have been quashed and remitted for reconsideration. HCA refers to its comments on the scope of the CMA's remittal investigation in its Initial Submission of 9 March 2015. The CMA must consider whether its previous findings, as to high barriers to entry and weak competitive constraints, hold true, and whether the evidence continues to support a finding of AECs in London in relation to both insured and self-pay patients.

1.4 HCA is making separate representations with regard to the CMA's insured price analysis ("IPA"), on which the CMA relied to conclude that HCA charged higher prices for insured patients. In this submission, HCA comments specifically on the CMA's conclusions in the Report concerning:

- barriers to entry and expansion in London;
- the strength of competition which HCA faces in London;
- the bargaining power of PMIs.

1.5 HCA vigorously disputes the CMA's findings. The CMA has overlooked evidence which HCA has submitted during the original enquiry, and has unquestioningly accepted the claims made by PMIs, whose interests are not aligned with those of patients and who have a commercial interest in the outcome of the investigation. It is not correct or appropriate for the CMA to state that its *"starting point ... is the position set out in the final report"*.¹ The CMA should not commence the remittal process with any preconceptions, and HCA urges the CMA to carry out a full reconsideration of the issues and engage fully with the evidence which HCA, and others, have submitted.

¹ CMA, Invitation to comment and submit further evidence, page 1.

- 1.6 The CMA must also take account of market developments since its original competitive assessment. The market in London has continued to evolve, and recent developments over the last 12–18 months have confirmed the competitive trends which HCA has highlighted in its previous submissions and the developments it predicted. Since the date of the Report, there have been further announcements of new entry and expansion in Central London, including by Spire; NHS private patient units ("PPUs") have continued to grow; HCA's share of supply has declined as other providers have expanded; the Government has earmarked substantial further investment in NHS-funded healthcare, particularly in cancer and cardiac care; and PMI "directional" products have become even more widespread. The competitive landscape in London continues to change and all operators, including HCA, are subject to growing competitive pressures. In these circumstances, the CMA must recognise that the findings it made a year ago (based on an assessment of the market in 2011), of high barriers to entry and weak competitive constraints, can no longer be sustained in today's increasingly competitive environment.
- 1.7 It is not the purpose of this submission to repeat the arguments and extensive evidence which HCA has previously submitted during the CMA's inquiry. HCA confines itself to addressing key errors and omissions in the CMA's findings, referring where relevant to evidence in previous submissions, as well as any new evidence relating to developments since the date of the Report.

2. OVERVIEW

2.1 The following is a brief synopsis of HCA's submission on three key aspects of the CMA's AEC findings.

(1) Barriers to entry

2.2 The CMA's finding that there are significant barriers to entry and expansion in Central London cannot be sustained in the light of evidence of recent and on-going market expansion:

- The mere fact that new hospital developments are costly, and can take time to complete, does not in itself constitute a barrier to entry in a market which is growing and is increasingly attracting new investment.
- The CMA has pointed to a few instances in which potential entrants have encountered difficulties. In each of these cases, however, the firms concerned have had financial problems and have not encountered any structural barriers to entry. The economic downturn since 2008 is likely to have deterred new entry, but economic conditions are now improved and there is concrete evidence that new hospital developments are being planned.
- The CMA's assertion that there is a dearth of sites is contradicted by the fact that The London Clinic ("TLC"), the London International, BMI, King Edward VII, and indeed HCA, have all successfully found and developed significant sites for new hospital facilities.
- Over the next few years, the NHS will be disposing of a large proportion of its property portfolio in Central London as it consolidates clinical services. The CMA argued that hospital operators would need to compete with residential developers for these sites, however competition for sites available on the open market does not constitute a structural barrier to entry.
- The CMA's contention that planning regulations constitute a barrier to entry rests solely on its concern that hospital operators seeking to purchase residential land in or around the Harley Street area would need to arrange use swaps. However:
 - (i) this issue only applies to the Harley Street area, and not to other parts of Central London;
 - (ii) it only affects the purchase of *residential* and not *commercial* property;
 - (iii) it is not in any event a mandatory requirement, and there is no evidence that it is deterring operators from purchasing sites in Harley Street.
- All of HCA's private sector competitors have expanded and upgraded their hospitals over the last five years. In addition, NHS PPUs continue to grow rapidly.
- Since the publication of the Report, Spire has announced that it is opening a new hospital in Central London by 2018; and Barts Health NHS Trust has also announced plans to open a new PPU. A number of new specialised clinics are also in the process of being launched, including Optegra's new eye clinic, and Fortius Clinic's new orthopaedic facility. The competitive landscape in Central London is

therefore rapidly evolving and there is no evidence of any structural barriers which are deterring new entry or expansion.

(2) HCA's competitors

2.3 The CMA has not taken account of the strength and range of competition which HCA faces:

Business cases

- The CMA has relied heavily on HCA's internal business cases in order to inform its views about competitive constraints. The CMA cannot credibly place this much weight on internal business cases as a substitute for its own evaluation of the competitiveness of a market. In any event, the CMA has only reviewed a small selection of HCA's business cases, and in fact the vast majority of HCA's [X] business cases in the period 2004-2014 refer to the competitive pressures which HCA faces, including from the NHS, PUs, private providers and overseas operators.

NHS-funded healthcare

- The CMA has ignored evidence of the extent to which NHS-funded healthcare constrains private operators. In Central London, there are major NHS teaching and research hospitals with a world class reputation, operating directly alongside HCA's hospitals. The presence of these hospitals creates a powerful incentive for HCA to maintain and improve quality in order to make a compelling case for patients to opt for private, as an alternative to NHS, treatment.
- Over the next few years, NHS-funded healthcare will represent an even greater constraint for private operators. The Government has earmarked substantial investment in both cancer and cardiac care in London, which will set the bar even higher for private operators such as HCA.
- Given HCA's focus on tertiary services, large-scale NHS investment in new services and facilities poses an important challenge for HCA to keep pace with what the NHS can offer.

PPUs

- There are 10 NHS Trusts operating PPUs in Central London.
- Over the last few years, NHS PPUs have become strong competitors and now account for 25% of bed capacity in Central London.
- The growth of PPUs continues, and income diversification remains a key driver within the NHS.
- The evidence from the latest Annual Reports of NHS Trusts in London indicates that many of the large NHS Trusts – including Royal Marsden, Great Ormond Street, Royal Brompton and Chelsea and Westminster – have set clear strategic goals to increase private patient revenues substantially over the next few years.
- Barts is the latest NHS Trust to announce the development of a new PPU, and has recently gone out to tender to appoint a private provider.

Independent providers

- The CMA's competitive assessment in the Report was based purely on HCA's shares of supply in Central London. The CMA has not carried out a *qualitative* assessment of HCA's private sector competitors. Central London has the highest number of competing fascias of any local healthcare market in the UK. There are six other independent providers in Central London. Three of these are charities which enjoy charitable status and have significant cost advantages. BUPA Cromwell benefits from vertical integration in BUPA's PMI network. BMI, which operates three hospitals in Central London, is the UK's largest hospital group. All of these operators have expanded in recent years, and TLC, the BUPA Cromwell, and King Edward VII are all in the process of redeveloping their facilities.

Greater London

- The CMA ignored the competitive constraints from Greater London. HCA draws [X]% of its patients from outside Central London and competes with credible, well-established providers in these areas.
- The CMA found that there was a quality differential between Greater London and Central London providers. The CMA conceded that it has not carried out an assessment of quality, and therefore is not in a position to draw any conclusions. In any event, there are a number of major, tertiary facilities (some with level 3 ITUs) outside Central London, including the BMI Clementine Churchill, St. Anthony's Hospital in Cheam, Spire Bushey and Aspen's Parkside Hospital in Wimbledon. Any alleged "quality gap" is becoming increasingly less significant.
- The PMIs continue to show that they regard Greater London hospitals as effective substitutes, by using "directional" policies which are increasingly moving patients away from Central London to Greater London Hospitals.
- The CMA argued that there was a "core" of Central London patients who would only attend Central London Hospitals. Even if this is correct – it has not been tested by a SSNIP analysis – it still remains the case that the *majority* of HCA's patients are from outside Central London and HCA therefore remains subject to broader competitive pressures for all its patients, even those resident in Central London.

Outpatient/day case

- There is also increasing competition from "stand alone" outpatient and day case providers. The trend in private healthcare is increasingly moving away from inpatient treatment towards outpatient/day case treatment, and the CMA's competitive assessment should therefore have included outpatient/day case providers as these constitute a growing proportion of the private healthcare market in London.
- The CMA argued that there were some outpatient/day case treatments which require inpatient back-up. But a large, and growing, proportion do not require inpatient back-up, and therefore the CMA cannot wholly ignore competition from outpatient/day case providers across the whole spectrum of HCA's treatments.

- Since the date of the Report, there continues to be new entry and expansion of outpatient and day case providers, and in particular a growth in ambulatory care centres which can perform common procedures at lower cost.

Overseas operators

- HCA draws [X]% of its patients from overseas, and competes vigorously with a wide range of overseas providers for these patients. HCA's complex, tertiary care-based business model is based on successfully competing for overseas patients. Overseas competition is therefore a further competitive driver for HCA's business as a whole.
- The CMA disregarded international competitors on the grounds that they do not compete for UK patients. However, overseas competitors clearly compete for HCA's overseas patients and therefore represent a competitive threat for [X] of HCA's business. This competitive threat provides further incentives for HCA to continue innovating and investing in the quality of its hospitals for the benefit of all its patients, domestic and overseas.
- HCA is facing growing competition for overseas patients and there is increasing investment in healthcare facilities in the Middle East, which is making it tougher for HCA to attract overseas patients to the UK.

Share of supply

- The CMA's central concern was with HCA's share of supply, which it regarded as "too high". However, the CMA placed too much reliance on crude shares of supply and there are serious flaws in the CMA's approach to calculating shares of supply. The CMA estimates did not include all relevant providers and artificially inflated HCA's market shares.
- When estimating share of supply, share of capacity in Central London is more meaningful than share of admissions or revenue. Revenue share is misleading because it is distorted by the fact that HCA focusses on higher acuity, more complex and more costly procedures than other London providers.
- There has been significant market growth since the CMA's original competitive assessment (based on 2011 data) and HCA's share of supply has reduced in terms of both capacity and revenue.
- There is, in any event, significant spare capacity in other Central London providers to enable PMIs to redirect patients to non-HCA hospitals. The CMA has acknowledged that there is excess capacity in the market, and it has not cited any evidence to suggest that the position is any different in Central London.

(3) PMI bargaining power

2.4 The CMA has not properly evaluated the bargaining power of PMIs, including the value of their outside options in their negotiations with HCA:

- The CMA acknowledged that PMIs and hospital operators bilaterally negotiate insured prices and other terms. However, the CMA did not set out a formal economic model of bilateral negotiations.

- As a result, the CMA missed important aspects of the determinants of bargaining outcomes. The CMA's decision to focus on the PMI's alternatives is not supported by the theoretical and empirical literature on bargaining.
- A correct application of economic theory requires 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.
- In addition to errors in applying the appropriate economic framework to the assessment, the CMA also erred in considering the factual evidence of the drivers of PMIs' bargaining strength. Specifically, the PMIs have a number of alternative strategies which enable them to easily redirect patients from HCA to other Central London providers. This enables the PMIs to negotiate favourable prices.
- PMIs have the ability to delist one or more HCA hospitals either temporarily or permanently. This would create unsustainable losses for HCA, even in the short term, which far outweigh any potential, temporary reputational damage which the PMI might suffer. The BUPA/BMI delisting has demonstrated BUPA's ability to achieve significant price reductions, without incurring any significant damage to its sales or profits – on the contrary, BUPA profitability has increased since this incident.
- There is a growing use of restricted network products in Central London, and AXA-PPP, Aviva and Pru Health have all successfully launched restricted network policies which exclude HCA hospitals.
- There has been strong growth in PMI Open Referral policies. BUPA has led the way with its Open Referral product, but both AXA-PPP and Aviva have followed suit and are increasingly steering patients towards non-HCA consultants. The CMA's own survey indicated that many major London corporates are switching to these products in order to contain costs. These policies have continued to gain ground since the publication of the CMA's Report.
- The CMA has also failed to take account of the ability of PMIs to withhold the recognition of new HCA hospital facilities in order to negotiate substantial discounts. Both BUPA and AXA-PPP have used this power to achieve significant price reductions for new HCA facilities. [X].
- The CMA's analysis largely rested on its assumption that PMIs cannot redirect significant numbers of patients away from HCA hospitals. However, analysis previously submitted by HCA revealed that the level of spare capacity in Central London required to absorb any PMI's demand is small compared to what is likely to exist in the market. [X]. As noted above, there is sufficient capacity available in rival operators to absorb these patients. This presents the PMIs with a strong bargaining position, which they are able to exploit in price negotiations.

3. BARRIERS TO ENTRY

- Unlike other parts of the UK, Central London is an expanding market, showing robust growth of around 8%-9% annually. The capital costs and lead times associated with new entry or expansion are not in fact deterring investment in new facilities and services.
- There is no evidence that hospital operators are prevented from acquiring new sites. The NHS is disposing of a large proportion of its property portfolio, which will ensure that more sites suitable for hospital development are becoming available on the open market.
- Many hospital operators have successfully achieved planning consent for new developments, even in and around Harley Street.
- Since the date of the Report, there have been several announcements of new entry and expansion including Spire's intention to launch a new Central London hospital by 2018.

(1) The CMA's findings

- 3.1 The CMA found that there were significant barriers to entry and expansion in Central London, in the form of a combination of:
- high sunk costs and long lead times;
 - a lack of availability of suitable sites;
 - difficulties in obtaining planning permission for a private hospital.
- 3.2 In HCA's view, the CMA's findings require reconsideration and do not reflect either the record of entry and expansion in Central London in the past, or the prospect of continued growth and development over the next few years. In the last few months alone, since the publication of the Report, there have been further examples of new developments, planning applications and sites. These opportunities provide further evidence of the dynamic nature of the market and its attractiveness to investors.
- 3.3 LaingBuisson has published in March 2015 its updated report on Central London, "*Private acute medical care in Central London: Market Report*" (the "LaingBuisson Report"), and HCA refers where relevant to LaingBuisson's updated market statistics.
- 3.4 HCA sets out below: (i) its comments on the CMA's findings; and (ii) a summary of further developments since the date of the Final Report.

(2) High sunk costs and long lead times

- 3.5 With regard to the CMA's finding that high sunk costs and lead times created barriers to entry, there is a basic contradiction in the CMA's findings in relation to Central London.
- 3.6 In paragraph 6.56 of the Report, the CMA 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. Similarly, in paragraph 6.143 the CMA notes that high sunk costs and the long lead time for new developments are a "*particularly evident*" barrier to entry where "*there was over-capacity in the local area or if demand was small, flat or contracting*".

- 3.7 However, at the same time, the CMA accepted in paragraph 6.55 of the Report that *"expenditure on acute private medical care services in London was large (see Appendix 6.10, central London) and had been growing"*. The market in London is not therefore characterised by limited demand or lack of growth which would deter operators from investing in new facilities and services.

Market growth in London

- 3.8 The CMA acknowledged that London providers in particular were investing in high-value, high-acuity medical specialisms and that (paragraph 2.15, Report) the CMA's *"Case study on TLC's Cancer Centre (see Appendix 6.2) illustrates the willingness of some providers, particularly TLC and HCA, to make very significant investments in equipment and facilities to try and secure an increased share of certain segments of the healthcare market, particularly oncology."*
- 3.9 The CMA further observed (at paragraph 11.193, Report) that *"in central London HCA and its competitors have generally sought to pursue a high-acuity, high-quality strategy because of the commercial attractiveness of these lines of business, and it seems likely to us that any acquirer would have the incentives to do the same. An acquirer would be equally aware of the high growth rate and profitability of more complex specialisms and would be likely to continue to invest in them."*
- 3.10 The CMA's assessment of competition in Central London (Appendix 6.10 of the Report) noted the specific demand characteristics of Central London, which included: a much wider catchment area from which Central London hospitals draw their patients; the perception that *"quality of care is very high in the capital"* (paragraph 6); the higher proportion of PMI penetration and in particular corporate PMI customers; and the daily commuting patterns of consumers. All of these factors are driving growth in private healthcare in the capital. In particular, there has been an expansion in the provision of tertiary, higher-acuity treatments which has driven growth in the average revenue per patient. This increase in demand creates attractive investment opportunities.
- 3.11 The CMA's case study of TLC's recent cancer centre lists the distinguishing characteristics of London compared with other parts of the country (paragraph 26, Appendix 6.2, Report). The CMA correctly observed that both HCA and TLC (paragraph 59, Appendix 6.2, Report) *"had identified the attractiveness and importance of cancer treatment to its business strategy given the likely growth in demand and the value and profitability of cancer treatment services"*. The case study highlights the profitability of the cancer centre and the substantial increase in TLC's turnover in the period 2006-2011 (from £74 million to £124 million, an average annual growth rate of 10.8%).
- 3.12 The BUPA Cromwell, likewise, is taking advantage of new market opportunities. In the Report (Appendix 6.2, Annex A, paragraphs 1-6), the CMA noted that after *"years of underinvestment"*, the BUPA Cromwell has *"identified oncology as one key area to develop following much the same analysis as both TLC and HCA: the likely continued growth in the incidence of cancer; the importance of cancer treatment as a revenue stream; the high margins it attracted."*

- 3.13 There is a similar story for BMI, which recently reported² that it was *"focusing on promoting the high acuity services available in our hospitals"* and that *"the focus on complexity, in supporting patients in need of specialist care and highly focused treatment, has driven a 20% increase in revenue"* from international patients.
- 3.14 The CMA's other findings were all consistent with this account of substantial and sustained growth in the London private hospital sector across specialties, underlining the scale of the opportunities for those considering investment in entry or expansion: overall, the CMA found that private hospital revenue has been increasing in London at around 8% a year in the period 2009-2011 (paragraph 27, Appendix 6.3, Report), while the top 10 PPU's in the UK, all of which are in London, saw average growth of 12.1% (paragraph 2.27, Report). The LaingBuisson Report indicates continued revenue growth of 9.4% in 2012 and 9% in 2013,³ confirming that strong growth has continued since the date of the CMA's original assessment.
- 3.15 The CMA has also identified a number of recent development projects in London, including: the BUPA Cromwell's redevelopment programme; the planned expansion of the King Edward VII Hospital; and HCA's own projects which include a number of new clinical services and facilities as well as new outpatient and diagnostic clinics.
- 3.16 In its assessment of the NPV of the divestiture remedy which the CMA proposed in its Report, the CMA acknowledged the potential future growth in Central London and the likelihood of new entry and expansion which could reduce the NPV of the remedy (paragraph 11.228, Report).
- 3.17 The CMA has recognised the contradiction in its findings. In the CMA's Amended Defence to HCA's Notice of Application in the recent judicial review proceedings ("Amended Defence"), the CMA accepted (paragraph 216, Amended Defence) that *"demand is neither flat nor small in the London market"* but that nevertheless *"the costs of setting up a private hospital remain high and sunk, and lead times are long"*. The CMA therefore asserts that high capital costs and long lead times in and of themselves constitute a barrier to entry in London, even where there is growing consumer demand which is generating opportunities for increased investment. That is plainly wrong.
- 3.18 There is no dispute that a new hospital requires substantial investment and takes time to develop. However, neither high capital costs nor long lead times are, taken in isolation, significant deterrents to new entry or expansion.
- 3.19 With regard to sunk costs, Professor Bruce Lyons commented as follows in his Expert Review submitted to the CMA during the course of the inquiry (paragraph 59)⁴: *"In itself, this is not a barrier to entry. It is only important in the small market (relative to the efficient scale of a new hospital or one which is stagnant or declining and where the entrant cannot secure demand by contracting with a PMI before entry). With private hospitals, the existence of concentrated and powerful PMI buyers means that it is open to a credible entrant to secure demand before entry. Even if this was not possible, sunk costs are much less relevant in a large or growing market. The larger the market, the smaller the proportion of that market is*

² "BMI sees spike in international patients", HealthInvestor, 20 December 2013; refer to: <http://www.healthinvestor.co.uk/ShowArticle.aspx?ID=3117> for details, accessed 1 May 2015.

³ LaingBuisson Report, page 12.

⁴ "Major weaknesses and mistakes in the economic evidence used to justify the proposed break-up of the HCA private hospital network in central London", Professor Bruce Lyons, 13 February 2014.

needed to achieve economies of scale. In a growing market, demand can be found more easily. Thus, market growth limits any barrier due to economies of scale."

- 3.20 The CMA's Guidelines for market investigations (CC3, April 2013, paragraph 212) also indicate that it is economies of scale in combination with sunk investment costs which can create barriers, where there is a risk that entry may not be profitable and where the size of the sunk costs is high relative to the size of the market.
- 3.21 In the case of London, the cost of entry and any economies of scale do not give rise to a barrier to entry:
- (i) First, the vast majority of fixed costs required to set up a new hospital are not sunk. Unlike expenditure in advertising, for example, these costs can be recovered by selling the assets created or acquired through the investment. The analysis of HCA's accounts does not support the view that there are large sunk fixed costs.
 - (ii) Second, the CMA has not established that any fixed costs are large relative to the market.
 - (iii) Third, the size of the market is only relevant as an indicator of the credibility of an expansion strategy and the risk involved in entering or expanding. As noted above, there are two important market features that demonstrate that this risk is minimal. The first one is that the market is expanding rapidly. The second, and critical one, is that large PMIs can effectively manage the entry process. They can grant recognition to new competitors, thereby minimising risk in the investment, and they can deny it to existing providers who they feel are "too strong".
- 3.22 Similarly, the existence of long lead times in itself does not impede new entry or expansion. The CMA remarked (paragraph 11.236, Report) that new entry and expansion "*tended to be a slow process*". In the case of TLC, the CMA found (paragraph 6.69, Report) that "*it took TLC three and a half years*" to undertake its development including finding a suitable site and obtaining planning permission; in the case of King Edward VII, the lead time is four to five years. However, in estimating the NPV of its divestiture remedy, the CMA was seeking to project costs and benefits over a longer time frame of up to 20 years, because of the expected changes in the market, including market growth and the potential for entry and expansion (paragraph 11.228(e), Report). Consequently, even if it is the case that new entry or expansion has a long lead time, it would be irrational for the CMA to ignore competitive developments which are underway and which will come to fruition over the next few years. All the evidence of existing initiatives and development opportunities points to a very significant potential for new entry and expansion over the next few years which will further increase the competitive constraints on HCA.

Improvement in economic conditions

- 3.23 The CMA argued before the Tribunal that the facts speak for themselves, and that (paragraph 216, Amended Defence) "*the practical effect of the high and sunk costs of setting up a private hospital in central London, and long lead times, has been to prevent any new hospital from opening in the last five years, despite efforts to do so.*" For the reasons explained below, this assumption is misplaced, and is in any event undermined by recent developments.

3.24 However, the mere fact that a new hospital has not opened in London in the last five years does not demonstrate that high capital costs or long lead times are *responsible* for deterring new entry within this period:

- (i) There has been a severe economic downturn in recent years, which is likely to have affected investors' access to capital and risk appetite. Indeed, where the CMA has cited specific examples of individual operators facing difficulties in launching or expanding facilities (e.g. BMI and the London International, both of which are discussed below), there were difficulties in obtaining financing (which were specific to those companies) rather than difficulties with site acquisition or planning. In any event, with the improvement in the economy, access to capital is easing (TLC, by contrast was able to find the £90 million for its new cancer centre).
- (ii) Even though there has been no new build hospital in London in the last five years, there have been, as the CMA has recognised in the Report, numerous examples of expansion by existing competitors including TLC, the BUPA Cromwell, and King Edward VII, demonstrating that even in times when access to capital has been more difficult, high sunk costs and long lead times have not in fact been a deterrent to new investment.
- (iii) As further discussed below, there is more planned entry into London by new hospital operators in the short to medium term, notwithstanding the high capital costs and long lead times.

3.25 In the light of the above, the CMA cannot sustain its original finding that high sunk costs and long lead times constitute a barrier to entry or expansion specifically in Central London.

(3) Site availability

3.26 There is no evidence that there is a lack of available sites and new hospital developments in Central London, and that this is deterring new entry and expansion. Moreover, the CMA has not properly considered the evidence which HCA has submitted showing that suitable property is available, and will become increasingly available as the NHS disposes of surplus hospital sites.

Evidence of new site acquisitions

3.27 The Report itself provides numerous examples of new sites which have been utilised by hospital operators, in particular:

- (i) TLC's cancer centre, the subject of the CMA's case study, was successfully launched with TLC (paragraph 6.69, Report) "*assembling and appropriately configuring the properties that enabled it to build the centre*". The CMA accepts (paragraph 74, Appendix 6.2, Report) that "*[a]ny restrictions on expansion encountered by TLC in developing its Cancer Centre have not prevented it from operating profitability*". The case study does not provide any evidence that there was a lack of available property which hampered TLC's plans.
- (ii) The CMA also refers to the planned extension of the King Edward VII Hospital, with the creation of up to 40,000 square feet of additional space. As HCA has

previously submitted⁵, this will reportedly increase the hospital's capacity by a third. The development involves the acquisition of a site in Beaumont Street, and again there is no suggestion that the King Edward VII Hospital has encountered problems in securing a suitable site.

- 3.28 The CMA's views on site availability appear to be based largely on the third party views of competitors and PMIs rather than on concrete evidence. The CMA stated (paragraph 6.89, Report) that it was told that "*finding an appropriate site for a hospital in central London was very difficult*". However, the CMA does not appear to have taken evidence from land developers or agents which would have been a more objective source of information. HCA contacted and provided the CMA with evidence from the Howard de Walden Estate, which owns and manages significant property holdings in and around the Harley Street area. Howard de Walden's evidence provided numerous examples of sites which are suitable for redevelopment as hospitals.⁶ The Report makes no reference to this evidence and similarly makes no reference to evidence from any other property owners, developers or agents.
- 3.29 The CMA argued that even if sites are available, new buildings or extensions can have (paragraph 6.70, Report) "*lead times of several years*". This merely repeats the CMA's general finding that long lead times are a barrier to entry, which has been discussed above. This adds nothing to the CMA's case concerning the lack of availability of suitable sites in London. The CMA asserted that site availability is a barrier only in London, whereas long lead times are a barrier across the UK. To support such a finding, it would need to demonstrate that there is a specific issue in Central London which prevents hospital developers from assessing sites. No such specific impediment has been identified.
- 3.30 The CMA referred in paragraph 6.71 of the Report to the difficulties facing BMI. The relevant section is redacted, but there is nothing in the paragraph which specifically evidences that the lack of property is hampering BMI's plans. The CMA stated that "*under its current financing structures, it was unlikely that BMI could deploy the capital to move significantly into central London in the next three to four years*". However, all this shows is that BMI is suffering financial difficulties. It provides no support for the CMA's findings of barriers to entry. The CMA has noted (paragraph 3.8, Report) that "*[f]ollowing its leveraged buy-out in 2006, BMI is highly geared with significant annual interest expenses*", and BMI's financial problems have been well publicised.
- 3.31 BMI in fact has expanded its activities in Central London in recent years, and therefore cannot argue that a lack of property has prevented its expansion. In 2011, BMI opened a new gynaecological wing of the Fitzroy Square Hospital, offering a comprehensive range of services for women's health.⁷ Furthermore, BMI has an interest in the Weymouth Hospital in W1, comprising a 17,000 square feet facility at 42-46 Weymouth Street and 8,000 square feet at No. 9 Harley Street, both of which were redeveloped in 2010 from office space. This contradicts BMI's assertion regarding any alleged difficulties in expanding in London.
- 3.32 The CMA's comments concerning the London International Hospital also provide no evidence of a lack of sites. The CMA noted only that the new hospital was unlikely to open in 2014, and it pointed to the delays in the financing package negotiated by the developers, C&C Alpha Group. However, the site was clearly available and has been secured. C&C

⁵ HCA's Supplemental Submission following HCA's remedies hearing, December 2013, paragraphs 3.8-3.10.

⁶ "*Site availability in and around Harley Street*", Nabarro submission, 18 November 2013.

⁷ HCA supplemental submission following its second remedies hearing, February 2014, paragraph 2.2. The Fitzroy Square Hospital has been subsequently taken over by MYA, a healthcare provider focused on cosmetic surgery.

Alpha Group submitted (paragraph 6.73, Report) that *"it was hard to find a hospital site in London"* but it has obviously managed to do so. Again, all the example points to is the financial difficulty of the developer, not the lack of suitable sites.

- 3.33 In the case of the London International, the CMA referred to the size of the Ravenscourt Park site, 190,000 square feet which would be *"sufficient to provide the necessary 150 beds for a viable hospital"* (paragraph 6.73, Report). However, even if it was *"hard to find"* a site of this large size, it would be perfectly possible for a new entrant to establish a viable hospital on a considerably smaller site. The Ravenscourt Park site is substantially larger than some of HCA's hospitals – the gross internal area of the Lister is 98,951 square feet and the Portland is 74,645 square feet.⁸ Harcourt House, which HCA was planning to acquire to develop a new cancer facility, has a net internal area of 80,000 square feet, which would have provided 91 inpatient beds. A new entrant may well find it harder to find a larger 190,000 square feet site, but it does not follow that this is necessary to establish a new hospital.

NHS sites

- 3.34 HCA has provided the CMA with evidence of a significant number of NHS-owned sites which are to be disposed of over the next few years, as the NHS restructures its services, consolidates its facilities and closes some hospitals.⁹ The CMA referred to the Western Eye Hospital, and stated (paragraph 6.75, Report): *"As with other NHS former hospital sites, it is not certain that the site will remain as a hospital as other uses, for example housing, may be considered more attractive."* There is no question that hospital operators would bid for these sites in an open market and that residential and commercial developers may also compete for these properties. These sites are nevertheless available on the open market and hospital operators are able to bid for them. It is irrational for the CMA to disregard these properties merely on the grounds that they could be used for other purposes.
- 3.35 One of the NHS sites which will shortly become available is the Heart Hospital on 16-18 Westmoreland Street. The CMA stated (paragraph 6.74, Report) that it had contacted UCLH and was told that the Trust *"had no immediate plans to commence disposal of the site."* However, the position has changed since the date of the Report. The Trust has now announced its intention to transfer NHS cardiac services from the Heart Hospital to a new, integrated cardiac centre at Barts in 2015. [X]. The Heart Hospital is a five-storey building with four operating theatres and 95 inpatient beds. The site will provide 129,000 square feet of space in the Harley Street area for a new entrant.
- 3.36 HCA has commissioned McKinsey & Co to update its report on the availability of NHS sites (referred to in paragraph 6.65, Report), and McKinsey's revised report is attached in **Annex 1**. The report notes as follows:
- at least four NHS sites will become available for sale in 2015
 - at least eight additional NHS sites are highly likely to be available by 2017
 - the 2015 Budget has introduced market level rents for public sector freehold property, which will incentivise NHS authorities to dispose of surplus property.

⁸ HCA hospital GIA sizes from HCA Response to the Competition Commission's Profitability Analysis Working Paper, Appendix 4 (London Hospital Portfolio).

⁹ See *"Site Availability in Central London"*, McKinsey report, 27 November 2013, Annex 1 of HCA supplemental submission following HCA's remedies hearing.

Spire

- 3.37 The CMA referred to Spire's evidence concerning site availability. However, Spire has publicly stated in its half-year financial results in 2014 (see **Annex 2**) that it has "*additional sites in central London in early stages of planning*" which are "*potentially opening in 2018*".¹⁰ This is discussed further below. This announcement flatly contradicts the CMA's findings in the Report. Spire's entry into Central London is both concrete and imminent.

Other hospital operators

- 3.38 Furthermore, there is no evidence that any alleged lack of available properties has prevented existing operators from expanding. HCA has provided the CMA with several instances of expansion in Central London within the last five years. These are nowhere mentioned in the Report:¹¹

- BMI is currently undergoing a £3.8 million development to upgrade its theatres and critical care provision at its Blackheath Hospital. This will involve the addition of a new level 3 ITU, a theatre department with a 6-bed recovery unit, and a new interventional radiology department. It demonstrates the relative ease with which hospital operators can upgrade their facilities to provide the highest level of critical care.
- The BUPA Cromwell is undergoing a major redevelopment programme, with tenders for the construction work issued in 2012. (The CMA notes the redevelopment in Appendix 6.2, Annex A of the Report, but not in its assessment of barriers to entry.)
- BMI opened a new gynaecological wing of the Fitzroy Hospital in 2011, offering a comprehensive range of services for women's health.
- The BMI Weymouth Hospital has also undergone a successful redevelopment in 2010.
- The BMI London Independent has nearly doubled the number of its consulting rooms from 10 to 19 and has launched a physiotherapy department and gym.
- The Hospital of St. John and St. Elizabeth has developed a new urgent care centre in 2011 (which the LaingBuisson Report states "*continues to do well*")¹² and has also expanded its imaging department.
- Aspen has expanded its Highgate Hospital in 2013, constructing a new diagnostic centre to upgrade the services available at its hospital. This has involved a £13 million investment which is providing 43 new patient rooms, a high-dependency unit, 4 operating theatres, an endoscopy suite, and 15 new outpatient rooms.

- 3.39 The above list (which does not include PPU, NHS hospital or independent outpatient developments) demonstrates that there is strong evidence of entry and expansion in London and that this has principally occurred through new site development.

¹⁰ See Annex 2, slide 19.

¹¹ See, for example, HCA supplemental submission following its second remedies hearing, February 2014, paragraphs 2.2, 3.1; and HCA Response to Provisional Findings, paragraphs 5.110 and 6.4.

¹² LaingBuisson Report, page 107.

Availability of property

- 3.40 HCA has also provided the CMA with an abundance of evidence of sites which were (at the time the CMA took the decisions in its Report) available for hospital development.¹³ This list provided a snap-shot of the properties which typically are available for development. The CMA stated (paragraph 6.82, Report) that it has considered "*some*" of the sites, and refers to just two of them: Harcourt House; and Africa House. In both cases, the CMA noted that the sites were suitable for residential development. This raises the same point discussed above in relation to NHS sites. These types of properties are on the open market, and a hospital operator would need to compete for them alongside other developers, including residential and commercial developers. However, it is irrational for the CMA to conclude that there is a barrier to entry merely by reason of the fact that a hospital operator would need to bid for those sites in the open market, in competition with other developers. The mere fact that there is competition for these sites does not constitute a structural barrier to entry.
- 3.41 The CMA pointed out (paragraphs 6.83-6.86, Report) that HCA had itself found it difficult to find a suitable site prior to leasing space at the Shard. Since the site was designed to allow for the expansion and reconfiguration of the London Bridge Hospital, the search was confined to the immediate vicinity of the hospital (and the CMA correctly noted that HCA's preference was for an adjacent site), which of course narrowed the range of opportunities. However, there were other sites available – paragraph 6.85 of the report acknowledged that there were other sites, and although these were less suitable for HCA's specific requirements, they may have suited other new entrants. Critically, HCA did eventually find a site – the Shard – and therefore this cannot be used as evidence of a barrier to entry.
- 3.42 As to the future, the updated McKinsey report (see **Annex 1**) points out that there is a significant stream of large commercial buildings which will come to market each year in Central London:
- **18 new buildings** under construction similar to or bigger than the Shard will be available by 2016.
 - A further **36 commercial properties** with more than 50,000 square feet will be available in 2015 and 2016.
- 3.43 Finally, the CMA's finding that a lack of site availability acts as a barrier to entry patently does not apply in the case of PPUs. NHS Trusts have significant land holdings in Central London and therefore do not need to acquire properties to build or expand PPUs adjacent to the NHS hospital. The CMA has acknowledged that PPUs in Central London have grown and that this may indicate "*the beginnings of an upward growth trend*" (paragraph 24, Appendix 3.1, Report), and the significant increases in PPU capacity are discussed below. The alleged lack of property available to private developers does not therefore present any barriers to the growth and expansion of PPUs.

(4) Planning

- 3.44 HCA does not accept that planning regulations constitute a barrier to entry or expansion for hospital operators.

¹³ See, for example, HCA Response to Provisional Findings, paragraph 6.71 and Exhibit 3 (Altus Edwin Hill, statement on property availability); "*Site availability in and around Harley Street*", 18 November 2013; and HCA remedies hearing presentation, 18 February 2014, slide 7.

- 3.45 The CMA has not provided any explanation why it changed its findings with regard to planning regulations during the course of the inquiry:
- (i) The CMA conducted a case study of TLCs new cancer centre, to assess any barriers to entry and expansion in Central London.
 - (ii) In the Annotated Issues Statement ("AIS") (Appendix E, paragraph 34, AIS) the CMA concluded from this case study that TLC *"faced no significant problems in obtaining planning permission for its major development in the centre of London"*, and that *"the planning regime does not impose significant restrictions on new entrants"*. The CMA referred to the fact that TLC had encountered *"some minor planning issues"* but observed that *"none of these caused significant delays"* (Appendix E, paragraph 33, AIS). Those planning issues arose from *"objections raised by English Heritage over the height of the atrium and by Transport for London over the removal of a tree."*
 - (iii) The CMA inexplicably changed its conclusions from this case study in the Final Report. The CMA decided that *"TLC did encounter quite significant problems in acquiring the necessary land and planning permissions for its Cancer Centre"* (Appendix 6.2, paragraph 81, Report). The only explanation provided relates to the need to undertake the use swaps necessary to assemble the site.

Use swaps

- 3.46 It would appear that the only planning issue identified in relation to TLC concerns the need for hospital operators to arrange use swaps, and this issue is considered further below. The CMA has not identified any other aspect of the planning rules which impeded TLC, and also did not explain why it radically changed its views concerning the extent to which this case study identified any planning restrictions for TLC.
- 3.47 The CMA stated in paragraph 6.105: *"The evidence from the small number of instances of expansion that are taking place indicated that difficulties in obtaining planning permission tended to centre around applications for change of use."*
- 3.48 The potential need for hospital operators to arrange use swaps arises specifically in relation to the area in and around Harley Street because of its status as a Special Policy Area, which seeks a balance of medical and residential use.¹⁴ It does not arise in other parts of Central London, and HCA and its competitors have established and expanded successful hospitals in other parts of Central London without the need for use swaps. It therefore follows that, even on the CMA's own analysis, the specific planning barrier it identifies only affects one small part of Central London.
- 3.49 However, even in the case of Harley Street, it would be wrong to conclude that *"it would be difficult for an entrant to execute"* (paragraph 6.105, Report) use swaps in order to expand medical facilities.
- 3.50 The evidence from the Howard de Walden Estate ("HdW")¹⁵ directly addresses this point in stating that new entrants could either convert part of the development to retain a proportion for residential use, or alternatively buy additional space and convert this for residential use. As HdW submitted, it has worked with new entrants as well as existing operators to acquire

¹⁴ See e.g. Westminster City Council Policy Soc 5.

¹⁵ *"Site availability in and around Harley Street"*, 18 November 2013.

the necessary sites in the Harley Street area. The CMA wholly mischaracterised HdW's evidence in stating (paragraph 6.104, Report) that "*only landlords with a number of properties could realistically employ use swaps.*" This is simply not the case.

- 3.51 TLC's case study indeed illustrates how a hospital operator can acquire the relevant sites in the Harley Street vicinity. The case study contradicts the CMA's finding.
- 3.52 Moreover, as HdW has highlighted to the CMA, HdW has provided TLC over the last 10 years with a significant number of properties in Harley Street and Devonshire Place.¹⁶ TLC has acquired 133,000 square feet in this period, more than double the amount of space which HCA has acquired. It is therefore incorrect to suggest that HCA benefits from any incumbent relationships.
- 3.53 HCA would add that a use swap is not a mandatory requirement, and that planning authorities would consider other compensation provisions to allow new entrants to gain planning consent, e.g. a fee to compensate for the reduction in residential property space. In any event, the issue would only arise in the context of a change of use from residential to medical use, and not a change from office/commercial to medical use, since this would not affect the balance between medical and residential properties. The updated McKinsey report (**Annex 1**) indicates that there are numerous large commercial sites which are available to hospital operators.

Planning consents

- 3.54 HCA has provided a significant body of evidence in the form of a list of planning consents which have previously been granted to hospital operators for both inpatient and outpatient facilities in Central London: see Exhibit 4 of HCA's Response to the Provisional Findings. The CMA referred to this list (paragraph 6.102, Report) but ignores this evidence in its assessment of the availability of planning consent. The list demonstrates that new and existing hospital operators are successfully navigating their way through the planning regime to achieve consents for new developments.
- 3.55 The ease with which HCA successfully obtained C2 planning consent (which covers both inpatient and outpatient use) for its new Central London-based facility, the Platinum Medical Centre, demonstrates that the planning regime does not create any barriers. HCA obtained planning consent in 2013, within a period of just nine weeks.¹⁷
- 3.56 HCA has also shown that it successfully obtained C2 planning consent (inpatient and outpatient use) for the Shard medical facility.¹⁸ The CMA dismissed this example (see paragraphs 6.87, 6.89 and 6.105, Report) and cited two reasons which are incorrect:
 - (i) First, the CMA argued that HCA's application for planning permission was made on a "personal" basis and that this demonstrates that another hospital operator would not have been able to obtain planning consent. This reflects the CMA's misunderstanding of the planning process. The local planning authority has certain conditions which need to be fulfilled, inter alia to do with local employment, and the planning authority was prepared to grant planning consent to HCA because it met those conditions. Another hospital operator capable of fulfilling the relevant criteria would also have secured planning permission. The CMA cannot therefore conclude

¹⁶ *Ibid.*, paragraph 11.

¹⁷ HCA supplemental submission – planning regime, 18 March 2014, paragraph 1.10.

¹⁸ *Ibid.*, paragraph 1.4.

that the same opportunity was not available to another hospital operator. It clearly was – any other operator would have been able to apply for planning consent and demonstrate that its plans promoted local needs.

- (ii) Second, the CMA noted that the planning consent was in respect of an outpatient, rather than an inpatient, facility. This is incorrect. HCA has successfully obtained C2 planning consent which covers inpatient, day case and outpatient services. The planning authority has not confined the planning consent to a specific type of service. It is therefore irrelevant that HCA in fact proposes to use the facility for day case and outpatient services only. The material point is that, in relation to planning permission, the local planning authority granted C2 planning consent which allows for an inpatient hospital.

3.57 The speed and ease with which HCA has obtained planning permission for the new Shard facility undermines the CMA's finding that the planning regime creates barriers to entry or expansion. The CMA has no basis for dismissing this as an exceptional case which turns on its own facts.

3.58 HCA has also submitted evidence (which, again, is ignored in the Report) that the planning regime in fact encourages private healthcare development:

- The London Mayor's "London plan" sets out the Mayor's development strategy for London and specifically notes that *"Boroughs should promote a continued role in enhancement of London as a national and international centre of medical excellence and specialised facilities."*¹⁹
- The planning regime in London is positively geared towards promoting and encouraging investment and bolstering London's reputation as an international centre of medical excellence.
- HdW pointed out in its evidence that the Harley Street Special Policy Area is a planning policy framework which encourages and protects the dual medical and residential character of the area and therefore, if anything, *favours* healthcare providers.²⁰ In other words, the planning regime in and around Harley Street promotes rather than hinders private healthcare developments.

(5) Recent developments

3.59 The provision of private healthcare services in London continues to develop and grow. Since the date of the CMA's findings in the Report, there have been further instances of entry, expansion and development opportunities. These further illustrate the dynamism within the market and undermine the CMA's case for barriers to entry and expansion.

3.60 The CMA's competitive assessment of Central London was based on 2011 shares of supply, but there has been significant market growth since that time:

- In 2011, the CMA estimated total revenue in Central London at £1 billion. LaingBuisson has estimated total revenue in 2013 at £1.27 billion.²¹

¹⁹ See recital 'F' of Policy 3.17 (Health and Social Care Facilities) cited in *"The London Plan"*, March 2015, page 141.

²⁰ *"Site availability in and around Harley Street"*, 18 November 2013.

²¹ LaingBuisson Report, page 8.

- In 2011, the CMA estimated that there was total overnight bed capacity of 1,592. LaingBuisson has estimated total beds currently at 1,735.²²

3.61 Spire has publicly announced in its half-year financial results in 2014 that it is acquiring two "additional sites in central London in the early stages of planning" which are "potentially opening in 2018" (see **Annex 2**). Spire is a major national competitor, and its entry into Central London will increase the range of competitive choices for insurers and patients. In the light of Spire's announcement, the CMA cannot maintain its conclusion in paragraph 11.236 of the Report that potential new entrants "were not likely to enter the market in the foreseeable future".

3.62 A number of HCA's Central London competitors have also expanded their services and facilities since the date of the Report and a number of entities have announced plans for entry:

- The BMI London Independent Hospital unveiled its new intensive therapy unit on 22 December 2014. The new ITU has 6 level 3 critical care beds with 5 isolation rooms and capacity for 3 patients requiring high-dependency level 2 care. BMI stated: "This investment into the ITU will allow us to continue to expand the critical care services we are able to provide to the UK and internationally."²³
- Phase II of BMI Blackheath's refurbishment works, involving the upgrading of its critical care provision to level 3 ITU, began in autumn 2014, and a new theatre opened in September 2014.²⁴
- The BUPA Cromwell opened in April 2014 a new paediatric walk-in centre. It is continuing to upgrade its facilities, and recently added an angiography suite, a CT scanner and two MRI scanners. The LaingBuisson Report notes that "the hospital also plans to increase the number of specialties it offers, as well as invest in its International Patient Centre service".²⁵
- The LaingBuisson Report notes that TLC is continuing "a major programme of refurbishment and improvements, with the first steps taken to renovate the main hospital building".²⁶
- A new entrant, Advanced Oncotherapy Plc, has announced the development of a proton therapy centre utilising proton beam radiotherapy for the treatment of cancer. Advanced Oncotherapy acquired a lease for 141 Harley Street and part of 143 Harley Street, comprising 8,000 square feet of space. Work is starting in July 2015, and will be completed by the end of 2016. The press release announcing this new facility indicated that HdW "have been working collaboratively with Advanced Oncotherapy to find a suitable location within the Harley Street area." It provides a

²² *Ibid.*, page 20.

²³ Building Better Healthcare, "BMI London Hospital invests in critical care provision"; refer to http://www.buildingbetterhealthcare.co.uk/news/article_page/BMI_London_hospital_invests_in_critical_care_provision/104298 for details, accessed 1 May 2015.

²⁴ Building Better Healthcare, "BMI The Blackheath Hospital unveils new theatre department"; refer to http://www.buildingbetterhealthcare.co.uk/news/article_page/BMI_The_Blackheath_Hospital_unveils_new_theatre_department/101341 for details, accessed 1 May 2015.

²⁵ LaingBuisson Report, page 104.

²⁶ *Ibid.*, page 114.

further case study which demonstrates that new entrants are able to acquire sites within the Harley Street area without undue difficulty.²⁷

- Nuada Medical Group ("Nuada") is an outpatient and diagnostic provider based near Harley Street, founded in 2009. Originally specialising in the diagnosis and treatment of cancer, it is growing and is aggressively marketing itself to consultants in a variety of specialisms, and for example has recently launched a new urology unit. Nuada has targeted a number of HCA consultants over the last 12 months. It is understood that Nuada has entered into an arrangement with the BMI Weymouth Hospital to lease hospital space, and is therefore able to offer inpatient treatment at this hospital. HCA does not have details of the nature of these arrangements, but it provides a further illustration of how an outpatient provider can readily compete by partnering with established hospitals to use spare capacity.
- The LaingBuisson Report states that the ophthalmology provider Optegra will be opening a new eye clinic next year at 25-27 Queen Anne Street, near Harley Street.²⁸ Optegra has reportedly invested over £8 million in the new facility. This is a further example of new, small-scale entry in Central London.
- Fortius Clinic is in the process of establishing a new orthopaedic outpatient clinic at 75 King William Street in the City, comprising 9,700 square feet of space.²⁹

3.63 As discussed further below, NHS Trusts have continued to grow their private patient revenue. The 12 largest NHS Trusts in Central London reported revenue growth from £267.8 million in 2012/13 to £290.1 million in 2013/14. New investments included the following:

- Chelsea and Westminster NHS Foundation Trust augmented its private patient maternity wing (the Kensington wing) in August 2014 with a luxury post-natal maternity suite to complement its dedicated obstetric operating theatres, 14 bedrooms and on-site ITU facilities.³⁰
- The Royal Brompton and Harefield NHS Foundation Trust has announced that it is in the process of opening a new outpatient facility in Wimpole Street to expand private patient activities and is also seeking other off-site opportunities to add more private inpatient bed capacity. The Trust has stated as follows: "*The Trust considered that a presence in the Harley Street area of London would increase both brand awareness and market share within central and North London as well as from international patients. With this in mind, the Trust intends to open a private outpatient facility in that area in the coming year.*" Again, there has been no suggestion that a lack of site opportunities or planning regulations have deterred the Trust from opening this new facility.³¹

²⁷ RNS announcement for Advanced Oncotherpay plc, "London Harley Street Proton Therapy Centre"; refer to http://hsprod.investis.com/servlet/HsPublic?context=ir.access&ir_option=RNS_NEWS&item=1961395599966208&ir_client_id=5743&transform=news_regulatory_story for details, accessed 1 May 2015.

²⁸ LaingBuisson Report, page 37.

²⁹ Fortius Clinic news, "Fortius Clinic in the City", 9 April 2015; refer to <http://www.fortiusclinic.com/news-events/fortius-clinic-in-the-city> for details, accessed 1 May 2015.

³⁰ See The Kensington Wing "about" page; refer to <http://www.chelwest.nhs.uk/private-care/private-maternity-unit/about-the-kensington-wing> for details, accessed 1 May 2015.

³¹ Royal Brompton and Harefield NHS Foundation Trust, Annual Report, 2013-14; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/339494/ROYALBROMPTON_Annual_Report_and_Accounts_2013-14_1_.pdf for details, accessed 1 May 2015.

- 3.64 In August 2014, Barts Health NHS Trust published a contract notice inviting proposals from private healthcare providers for the development and operation of a new private patient facility (see **Annex 3**). The contract notice states as follows:

"Barts Health NHS Trust is seeking a provider to design, build, finance and operate a private patient facility on one or potentially more of its site(s), the main sites being:- The Royal London Hospital, St. Bartholomew's Hospital, Newham University Hospital, Whipps Cross University Hospital, and Mile End Hospital. The selected provider will be required to demonstrate considerable expertise and experience of operating a private patient facility offering services that support specialist clinics and consulting rooms, diagnostic and therapeutic scanning, specialist theatres and inpatient care."

- 3.65 HCA is not bidding for this opportunity, and it is understood that the Trust has shortlisted Spire, Ramsay, and a consortium consisting of Phillips Medical, Genolier Swiss Medical Network and Iconic Healthcare, who are in advanced discussions with the Trust to create a PPU on the 15th floor of the Royal London Hospital. This is a significant opportunity for a new entrant, and is likely to be completed within the next two-three years. Even if the CMA incorrectly regarded site acquisition and planning as barriers to entry, neither of these concerns would apply to this new development since the Trust has the relevant land and the appropriate planning consents.
- 3.66 As HCA has previously indicated, King's College NHS Foundation Trust has also announced its intentions to seek a strategic partner for new private hospital facilities to provide a range of tertiary services, including liver surgery, bone marrow transplants and neurosciences.³² According to the LaingBuisson Report, the Trust is also planning *"to move the existing private patients unit to a new wing and increase the capacity from 21 to 38 beds in the summer of 2015."*³³
- 3.67 Further to the list of planning consents which have previously been provided to the CMA, HCA notes that there have been more cases of planning permission being granted for NHS and private healthcare developments in the last 18 months:

- **Earls Court³⁴ – private hospital development – granted 14 November 2013**

Planning permission has 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 C2 permission has also been granted for the development of a new private hospital located in the West Kensington village. In addition to this, there is permission in place for a GP-led health hub to be located along the High Street that could include an array of primary care and complementary medicine facilities that are potentially linked to the private hospital. A total of 11,687 square metres (125,798 square feet) GEA is proposed to be allocated for the development of a private hospital (C2 use) alongside a total 18,221 square metres (196,221 square feet) of D1 use.

³² HCA Response to working paper "Private Healthcare in central London: Horizontal competitive constraints", paragraph 4.12 (iii).

³³ LaingBuisson Report, page 122.

³⁴ See Hammersmith and Fulham Planning Division, "Decision Notice" for outline planning application (ref: 2011/02001/OUT); refer to http://www.lbhf.gov.uk/Images/Decision_notice_EC_tcm21-184699.pdf for details, accessed 30 April 2015.

- **St Bartholomew's Hospital – new cancer centre³⁵ – granted 17 July 2014**

Bart's Hospital was granted planning permission for the construction of a new three-storey cancer care facility (544 square metres or 5,856 square feet of D1 use) alongside an ancillary roof development.

- **Camden – UCLH expansion³⁶ – granted 22 September 2014**

Planning permission was granted to UCLH NHS Foundation Trust for the redevelopment of a former Odeon site and demolition of the Rosenheim Building in order to make way for new Proton Beam Therapy (PBT) cancer treatment facility, above-ground inpatient haematology medical facilities (C2 use), and day surgery facilities in a 4 storey converted basement. The total development spans 7 storeys (34,596 square metres or 372,388 square feet GIA in total) and will significantly bolster the hospital's cancer facilities.

- **Chelsea and Westminster – Roof level construction – granted 15 August 2013³⁷**

Extension of roof level accommodation to create a 20-bed intensive care unit with additional ancillary accommodation.

3.68 The CMA cannot therefore sustain its previous finding (paragraph 11.236, Report) that as a result of barriers to entry it is *"unlikely that there would be substantial new entry into the central London market in the next two to three years and that entry after that period was uncertain."*

3.69 Far from being "uncertain", there is concrete evidence of the provision of significant new capacity in Central London over the next three years or so:

- The new London International Hospital is highly likely to be launched within this time frame – the CMA notes that it was unlikely to open during 2014, but the project remains in progress and when completed will deliver a further 150 beds.
- Spire has announced its intention to enter Central London by 2018, and is talking of two separate Central London sites.
- The Heart Hospital will become available to private hospital operators in 2017, providing a new entrant with a 95-bed, 129,000 square feet hospital site.
- Barts Health NHS Trust will be launching a new PPU on the site of the Royal London Hospital.

³⁵ See City of London, Planning and Transportation Committee, "For Decision", for planning application (ref: 14/00319/FULL); refer to <http://democracy.cityoflondon.gov.uk/documents/s38542/North%20Wing%20St%20Bartholomews%20Hospital%20West%20Smithfield%20London%20-%20Full.pdf> for details, accessed 30 April 2015.

³⁶ See Camden, Planning and built environment, "Planning Applications" for planning application (ref: 2013/8192/P) summary; refer to <http://planningrecords.camden.gov.uk/Northgate/PlanningExplorer17/Generic/StdDetails.aspx?PT=Planning%20Applications%20On-Line&TYPE=PL/PlanningPK.xml&PARAM0=375434&XSLT=/Northgate/PlanningExplorer17/SiteFiles/Skins/camden/xslt/PL/PLDetails.xslt&FT=Planning%20Application%20Details&PUBLIC=Y&XMLSIDE=/Northgate/PlanningExplorer17/SiteFiles/Skins/camden/Menu/PL.xml&DAURI=PLANNING> accessed 1 May 2015.

³⁷ See Kensington and Chelsea, Planning and Building Control, "Decision" for planning application (ref: PP/13/03150); refer to <http://www.rbkc.gov.uk/planning/searches/details.aspx?adv=0&simple=PP/13/03150&simpleBatch=20&simSubmit=Search&id=PP/13/03150&cn=154360+BMJ+Architects+72-82+Rosebery+Avenue+London+0044020+7833+9974&type=decision&tab=tab-planning-2> for details, accessed 1 May 2015.

- King's College NHS Foundation Trust is also looking to develop a new PPU and increase capacity in its existing PPU by a further 17 beds in 2015.
- King Edward VII is undergoing significant expansion which will increase its capacity by one-third.
- A number of other NHS Trusts are looking to expand and develop private patient business. In particular, both the Royal Marsden and the Royal Brompton have aggressive growth plans which are targeting a significant increase in private patient income over the next few years.
- BMI has launched new level 3 critical care facilities at both its Blackheath and London Independent hospitals.
- There is a myriad of other developments by private providers, including the launch of new services and expansion of facilities which have been discussed above and all of these will also contribute to the growth in the capacity available to PMIs and self-pay patients.

4. COMPETITIVE CONSTRAINTS - HCA'S COMPETITORS

- The CMA has relied heavily on HCA's business cases. However, it has reviewed only a small selection of these, and the vast majority refer to the competitive pressures which HCA is under.
- The performance of NHS hospitals has always been a significant factor in influencing demand for private healthcare. Over the next few years, the Government is investing heavily in NHS tertiary services, which will increase the competitive pressures on HCA to match what the NHS can offer.
- NHS PPUs have continued to grow since the date of the CMA's original assessment, and now account for 25% of private capacity in central London. Many NHS Trusts have announced aggressive growth plans over the next few years which are likely to increase this proportion even further.
- HCA's private sector competitors have also grown significantly year-on-year.
- Given the size of the catchment areas of HCA's hospitals – [X]% of its UK patients come from the Greater London area outside of Central London – the CMA cannot ignore the competitive constraints of Greater London hospitals. There are a number of major, well-established facilities outside Central London which successfully compete for HCA's patients, and these hospitals are also growing and expanding their service offering.
- There is a continuing trend away from inpatient to outpatient/day case care. Around [X]% of HCA's revenue is from outpatient/day case procedures, and HCA competes directly with a wide range of outpatient/day case providers, which should have been included in the CMA's competitive assessment.
- Overseas competitors are also expanding, and there is an increasingly competitive market for international patients which is impacting HCA's business.
- The new LaingBuisson Report published in 2015 shows that HCA's share of supply has reduced since the CMA carried out its original competitive assessment, reflecting the growth of private providers and PPUs. Crucially, there is significant alternative capacity available for PMIs to re-direct their subscribers to non-HCA hospitals.

(1) The CMA's findings

4.1 The CMA concluded in its Report that HCA is subject to weak competitive constraints in Central London:

- The CMA 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...*" (paragraph 6.211, Report).
- The CMA considered that other Central London private hospitals, PPUs, Greater London hospitals, and the NHS provided only limited competitive constraints on HCA in respect of price.
- The CMA also concluded that in view of HCA's share of supply, there were only limited alternatives to HCA for both PMIs and self-pay patients.

4.2 HCA submits that the CMA's conclusions are incorrect and that the CMA has not properly assessed the strength and range of competition which HCA faces, both within and outside Central London. The CMA has failed to examine the evidence that private and NHS competitors provide effective choices for consumers and that there are strong competitive pressures on all operators, including HCA, which both constrain prices and drive investment in quality and innovation. Furthermore, the CMA's analysis of HCA's share of supply is

flawed and does not reflect the alternative capacity available within the market, which has grown even further since the CMA's original assessment.

4.3 HCA's hospitals in Central London face competitive constraints from a variety of sources which are either ignored or under-estimated in the CMA's analysis:

- NHS hospitals (NHS-funded healthcare)
- NHS PPUs
- Six other private providers – TLC, BMI, St. John and St. Elizabeth, King Edward VII, Aspen and BUPA Cromwell
- Private providers and PPUs in Greater London
- Outpatient and day case providers
- Overseas competitors.

4.4 The CMA's concerns about weak competitive constraints apparently apply only in respect of price, and not non-price outcomes (quality and range). The CMA has noted (paragraph 6.407, Report) that hospital operators in Central London *"have expanded the range of treatments provided (including complex treatments) and have incurred investments to expand and/or improve the product offer at their hospitals (for example, through the adoption of new equipment or hospital expansions and refurbishments)."* In paragraph 6.411, the CMA observed a lively competitive dynamic as competitors respond to the introduction of new treatments and diagnostic techniques. It makes no AEC finding, and expresses no concern over, competition on quality and range. It argues merely that its divestment remedy will introduce greater rivalry which would improve both price and non-price outcomes.

4.5 In this section, HCA comments on the CMA's assessment of HCA's competitors, the strength of competition in London, and developments since the date of the CMA's Report.

(2) CMA's competitive assessment

4.6 HCA makes two general criticisms of the CMA's approach to its assessment of competition, before turning in later sections to a more detailed description of the various competitive constraints faced by HCA.

Quality

4.7 As noted above, the CMA considered competition on price and non-price factors separately. In relation to competition on non-price factors such as quality, the CMA found that *"there is a degree of competition over both quality and range, including in central London"* (paragraph 36, Report). In contrast, the CMA found that HCA faces limited competitive constraints in respect of price. It is this finding on price competition that led the CMA to conclude that HCA faces weak competitive constraints in Central London (paragraph 6(b), Report).

4.8 A static analysis of competition on price, which takes quality as fixed and assumes investment is exogenous, overlooks the important relationship between price and non-price factors and, as a result, is flawed. The CMA erred in finding that in Central London there is sufficient competition over non-price outcomes (quality and range), as to which it expresses no concern, but there is insufficient competition on price. If, as the CMA accepted, competition works effectively to improve quality and incentivise providers to innovate and

improve health outcomes, HCA fails to see how the CMA can conclude there is a lack of effective competition with respect to price. If HCA was substantially insulated from competitive pressures on price due to its level of concentration in Central London, and therefore was able to enjoy a high market share despite its offer being less competitive than it should be, by the same reasoning it would have little incentive to invest to improve its offering. In fact, HCA is a leading investor in the market precisely because it needs to improve the value of its offer in order to remain competitive with both providers within and outside Central London.

- 4.9 Investments made by firms have an uncertain effect at the time they are made. In the case of hospital operators, for example, some investments are successful and cause operators to be able to differentiate themselves from other competitors because the hospital operator is first to market with a new technology or treatment, and other operators are slower to market with the same technology or treatment. This may enable the hospital operator to charge a higher price to cover the costs of investment (including the costs of risk associated with the investment) and reflect the higher quality, and/or to increase volumes by capturing market share from other competitors. Rivals may also invest to improve the competitiveness of their offer, which will reduce this effect. For example, when rivals are able to invest in order to offer a similar technology or reach a similar level of quality, hospital operators may be less differentiated, with competition between providers focusing more heavily on price. Successful firms will then continuously invest to improve quality and increase innovation, such that they continue to differentiate themselves.
- 4.10 Competition pushes firms to invest in innovation and better services in order to improve their competitive position relative to their rivals. The absence of competition reduces this incentive, which in turn means that, all else being equal, a monopolist would invest less than firms operating in a competitive marketplace. This view is also shared by Professor Motta, Chief Competition Economist at the European Commission, who notes that “[I]n a nutshell, [...] [C]ompetition pushes firms to invest, in order to improve their competitive position relative to their rivals. The absence of competition (whether because there is only one firm, or because there are several firms but they collude) reduces this incentive to innovate, and this in turn means that a monopolist will be less efficient (less innovative) than firms which operate under competition.”³⁸ As a result, 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.
- 4.11 Dynamic incentives to invest in quality and innovation lead precisely to the competitive outcome that the CMA identified (i.e. a large degree of competition on quality and range as well as firms responding to each other’s investments). For example, the CMA noted that “when HCA had been ‘first to market’ with new treatments/diagnostic technologies, competitors had been relatively quick to follow suit and that, similarly, HCA had responded to other competitors’ investments. HCA added that the need to ‘keep up’ with the competition was by no means isolated to just TLC and HCA” (paragraph 6.411, Report). Further, in the Report the CMA also stated that “we acknowledge that HCA has a relatively strong focus on high-acuity care and that it has been the leader in introducing a range of treatments/diagnostic techniques” (paragraph 6.411, Report). The fact that firms compete on quality and innovation, and that hospitals respond to each other’s investments, demonstrates that hospital operators are actively competing.

³⁸ Motta (2004), “Competition Policy: Theory and Practice”, Cambridge University Press.

Consultants

- 4.12 The CMA also largely ignored one of the most significant features of competition between hospital operators – competition to attract and maintain consultants. The main patient referral pathway to hospitals involves a referral to a designated consultant. The CMA's own patient survey found that 60% of respondents had been referred to consultants rather than specific hospitals by GPs, and in most other cases referrals were made by other consultants or PMIs.³⁹ The consultant is therefore the key link in the referral chain into the hospital. Although consultants typically "multi-home" (i.e. have practising privileges) in two or more hospitals, the CMA noted (paragraph 2.50, Report) that in practice consultants tend to base most of their practice in one hospital. It is therefore critical that hospital operators attract and retain the consultants who will bring their patients: the CMA correctly stated (paragraph 2.39, Report) that competition involves "*a contest for control of the patient pathway*" but proceeds to ignore the importance of the consultant in the competitive process.
- 4.13 Consultants have a free choice as to where they practise and bring their patients. They typically have practising privileges at more than one hospital, and there are no significant switching costs in moving patients from one facility to another.
- 4.14 In Central London, there are a relatively large number of private hospitals and PPUs concentrated in a small area which all offer platforms for a consultant to run a private practice. They all compete vigorously for the consultant's practice, and this is a further source of competitive constraint which drives HCA's investments in quality and innovation, and creates an additional competitive dynamic in London. HCA's business cases (discussed below) frequently refer to the importance of investing in new services and facilities in order to compete for consultants, who would otherwise practise at rival hospitals.

(3) NHS-funded healthcare

- 4.15 The CMA concluded (paragraph 5.16, Report) that while NHS-funded healthcare constitutes a separate product market from private healthcare, it would take into account the competitive constraints from NHS hospitals on a case-by-case basis. As far as Central London is concerned, the CMA considered (paragraph 6.223, Report) that "*the competitive constraints exerted by the NHS on HCA are, if any, very limited.*" However, the CMA has not carried out a detailed assessment of the impact of NHS public healthcare on the private sector in London, and its conclusions appear to be drawn almost entirely from a cursory review of a small number of HCA's business cases for new investment. This needs to be reconsidered in the CMA's remittal investigation.

NHS v private healthcare

- 4.16 HCA has submitted considerable evidence of the extent to which NHS services constrain its own activities. This evidence has been summarised in HCA's Response to the CMA's Provisional Findings (paragraphs 5.102-5.108) and include the following:
- HCA's internal documents and strategy papers indicate that HCA monitors the launch of new NHS services that improve care to patients and that this acts as an additional incentive on HCA to invest in new technologies and services.
 - It also regularly compares patient outcomes with the NHS across a number of key performance indicators.

³⁹ CC's survey of patients, November/December 2012, page 27.

- HCA has submitted evidence about the correlation between NHS performance and demand for HCA services, and how improvements in waiting times for cardiac treatment in the NHS had led to a reduction in HCA's patient volumes. The CMA acknowledged in paragraph 7.98 of the Report that decreased NHS waiting times have impacted on consultant fee income; hospital admissions are equally sensitive to changes in NHS waiting times.
- It has also provided evidence of the way in which PMIs use directional policies such as the "six week rule" and cash-back incentives to encourage policyholders to opt for the NHS rather than private hospitals. BUPA for example offers significant cash payments of £[redacted] for patients for cardiac treatment, and up to £[redacted] for bone marrow transplants in the NHS. These practices demonstrate that the PMIs recognise NHS hospitals as viable alternatives for their policyholders, particularly with regard to high-acuity treatments such as cardiac and cancer care. There is little discussion of this in the Report.

4.17 The CMA failed to analyse the inter-relationship between public and private healthcare and the extent to which the demand for HCA's services are impacted by the NHS, for example by changes in waiting times, and new products and services within NHS hospitals. The CMA has the opportunity to carry out this analysis in the remittal investigation.

4.18 The presence of the NHS as the dominant healthcare provider which is free at the point of delivery acts as a constraint on all private healthcare operators. The NHS is capable of constraining not only HCA's quality, but also its prices. HCA is incentivised to invest in quality and introduce innovative services in order to attract patients who might otherwise elect for NHS treatment. But the NHS also provides a price constraint in that self-pay and PMI patients may switch to the NHS if they do not consider that private treatment offers value for money.

Effects in London

4.19 The competitive constraints from the NHS are particularly strong on HCA's businesses in Central London for two reasons:

- As the CMA acknowledged, one of the distinguishing characteristics of London is the presence of the UK's major research and teaching hospitals, many of which have an international reputation for quality and medical innovation. These hospitals are located close to HCA's six Central London facilities. The NHS provides a free, high-quality alternative in which the clinical service is provided in the main by the same consultants who work at HCA's hospitals. HCA must compete hard to encourage consumers to opt for private treatment as an alternative to the NHS, by continually investing in innovation and new clinical services and technologies. The CMA's survey found that one-fifth of insured patients, and 68% of self-pay patients, considered having their treatment on the NHS.⁴⁰ HCA's own survey⁴¹ shows that [redacted]% of NHS patients in Greater London were insured but nevertheless elected for NHS rather than private treatment.⁴² There therefore needs to be a compelling proposition from private hospitals to attract these patients.

⁴⁰ CC, Patient Questionnaire, Question B2 (Did you consider having your treatment done on the NHS?).

⁴¹ HCA Response to working paper "*Private Healthcare in central London: Horizontal competitive constraints*", paragraph 5.6.

⁴² The LaingBuisson Report (page 15) notes as follows: "*Interestingly, some private studies have suggested that 20%-30% of patients using central London NHS hospitals for acute care have PMI, excluding those patients already in a PPU.*"

- The CMA also acknowledged that HCA has a strong focus on high-acuity, tertiary care. The NHS is still seen by patients as the *preferred* option for complex elective procedures, for example in cancer and cardiac care. This means that there is a particularly strong pressure on HCA to introduce cutting-edge treatments and to invest in critical care facilities to make it sufficiently attractive for patients to go to its hospitals as an alternative to the NHS.

Business cases

4.20 The CMA's conclusion that the NHS exerts only "very limited" competitive constraints was almost entirely based on its review of HCA's business cases (paragraph 6.222, Report). The CMA similarly placed very heavy reliance on HCA's business cases when considering other competitive constraints, as discussed below. The CMA's comments with regard to these business cases are unfounded for a number of reasons:

- (i) The CMA should not have relied almost entirely on HCA's internal business cases for its competitive assessment. The CC's own Guidelines on market investigations indicate that a firm's internal papers form only one part of the evidence in a market inquiry. It is simply not credible for a competition authority, particularly in a phase-II market investigation in which it is seeking a divestment remedy, to base its assessment of competitive constraints so heavily on business cases.
- (ii) In any event, the CMA has in fact reviewed only a very limited number of HCA's business cases (the [REDACTED] business cases for major CAPEX provided in response to question 7 of the Financial Questionnaire), and only brief high-level summaries of certain other business cases, and therefore it is not in a position to draw general conclusions. The CMA never asked HCA to disclose a full set of its business cases, and never provided HCA with an opportunity to comment on the content of these business cases. It is basing its conclusions on a very limited sub-set of internal papers.
- (iii) The CMA was wrong to state (paragraph 6.222, Report) that "*the NHS did not figure prominently*" in HCA's rationale for new investments. [REDACTED].
- (iv) [REDACTED].
- (v) [REDACTED].
- (vi) The CMA's observation that the business cases "*do not show any instances of HCA investing in order to prevent its private patients from switching to the NHS*" was misconceived. The backdrop to HCA's strategy is the creation of a high-quality, innovative clinical infrastructure which can provide complex treatments. The CMA acknowledges that the business cases illustrate that "*HCA considers the NHS to some degree as a benchmark for its product range and to assess its business opportunities.*" This in itself demonstrates the competitive pressure which HCA is under to build and maintain a high-quality clinical environment to encourage patients to opt for private healthcare as an alternative to the NHS. The CMA drew an entirely false distinction between HCA's "*interest in the NHS as a public-funder of healthcare services ... in the context of seeking to create new demand for private hospital services*" and HCA's interest in the NHS "*as a competitor to HCA*". The very fact that HCA feels incentivised to

innovate and create "new demand" as an alternative to the NHS, demonstrates the competitive impact which NHS hospitals have on HCA.

- 4.21 The CMA's mischaracterisation of HCA's business cases also applied to its assessment of other competitive constraints discussed below. HCA has reviewed all [X] of its business cases in the period February 2004-March 2014. The vast majority of these make reference to one or more competitors, including NHS hospitals, PUs, and other independent providers. [X] of these business cases reference competitors other than [X]. HCA has summarised these on the attached spreadsheet (**Annex 4**). A chronological reading of the business cases reveals how HCA has been incentivised to invest to develop a differentiated offering which would keep it ahead of its competitors – and how those competitive pressures have been increasing in the last few years. The CMA never asked HCA to provide, and has at no stage reviewed, a full set of HCA's business cases, and it is irrational for the CMA to make such sweeping generalisations about the nature of the competitive threats which HCA faces on the basis of a few selected documents. The CMA now has the opportunity to examine all of these materials.

New NHS investment

- 4.22 Over the next few years, there will be substantial NHS investment in both cancer and cardiovascular care, particularly in London which will make it even tougher for HCA to compete with NHS healthcare. This will require HCA to continue to invest heavily in new clinical treatments and technologies in order to keep pace with what the NHS will be able to offer.
- 4.23 As part of its UK industrial strategy, the Department for Business, Innovation and Skills (BIS) has prioritized and allocated funds for its *Strategy for UK Life Sciences*.⁴³
- 4.24 To this end, important developments are underway in the NHS, especially in London, to deliver the clinical goals set out in *Building on our Inheritance: Genomics Technology in Healthcare*.⁴⁴ For example, Genomic England Limited, (GEL), has been set up as an ambitious government company with the objective of sequencing 100,000 whole genomes by the end of 2017.⁴⁵
- 4.25 Investments in three complementary technologies confirm London's NHS to be at the heart of the government's clinical and industrial strategy. These are in genomics, proton beam therapy, and molecular cytology.
- 4.26 The designated Genomic Centres are:
- South London NHS Genomic Medicine Centre, led by Guy's and St. Thomas' NHS Foundation Trust.
 - University College London Partners NHS Genomic Medicine Centre, led by Great Ormond Street NHS Foundation Trust.

⁴³ Department for business, Innovation and Skills (BIS) and Office for Life Sciences *Strategy for UK Life Sciences*, published in December 2011, seeks to build a life sciences ecosystem; attract, develop and reward the best talent; and overcome barriers and create incentives for the promotion of health care innovation; it draws on the earlier Office of Life Sciences publication *Life Sciences Blueprint – Building Britain's Future*, published in July 2009; and it has been included in BIS's Science and Research budget allocations for 15/16, accessed on 19 March 2015 at www.gov.uk/bis, reference BIS/14/P200.

⁴⁴ Department of Health (DH) *Building on our inheritance – Genomic Technology in Healthcare: A report of the Human Genomics Strategy Group*, published in January 2012, seeks to develop, in partnership with other stakeholders, a vision for genomics in the NHS under Professor Sir John Bell, Chair, Human Genomics Strategy Group.

⁴⁵ Genomics England is a company wholly owned by DH and was set up to deliver the 100,000 Genome Project – refer to www.genomicsengland.co.uk for details, accessed 1 May 2015.

- Imperial College Health Partners NHS Genomic Medicine Centre, led by Imperial College Healthcare NHS Trust.
- 4.27 They will create the innovative force to improve cancer care and foetal medicine in the first instance, and stimulate the development of a new expert workforce, for example, clinical bioinformaticians who will support predictive analytics in cancer and foetal medicine.
- 4.28 NHS England has commissioned two proton beam therapy centres at a total cost of £250 million, one in London based at University College Hospital,⁴⁶ to improve the survival rate of patients with hard to reach tumours. Proton beam therapy is a new and highly costly form of radiotherapy, providing a much more precise way of targeting tumours. This investment will stimulate the rapid expansion and development of the medical physics workforce and the clinical engineers who support the use of such complex technologies which can potentially improve cancer survival rates.
- 4.29 NHS Trusts in London are rapidly developing centres of national expertise in molecular cytology and epigenetics, for example, at the Royal Marsden Hospital NHS Foundation Trust⁴⁷ and Imperial College Healthcare NHS Trust.⁴⁸ These innovations will improve the diagnosis and care of patients, particularly in the development of personalized (stratified) medicine in cancer and cardiac disease. This will stimulate the rapid development of new specialist workforces such as molecular diagnostic healthcare scientists and pharmacogenomicists.
- 4.30 The NHS in London is a major world-class provider of cancer and cardiac care. It forms a considerable competitive force to any non-NHS provider and, with the investments outlined above, will continue to set a high bar for clinical practice, innovation and patient care in these clinical domains. The scale and pace of NHS investment in these areas poses a major challenge for HCA to remain competitive over the next few years and demonstrate the value of private healthcare in its hospitals.

(4) PPUs

- 4.31 Although the CMA accepts that NHS PPUs compete with HCA in Central London and had included them in its competitive analysis, it has underestimated the scale of the competitive threat which they pose to HCA. The CMA incorrectly stated (paragraph 6.201, Report) that there are six NHS Trusts in Central London which own and operate a number of PPUs. There are in fact 10 NHS Trusts with PPUs in Central London: Chelsea & Westminster; Great Ormond Street; Guy's and St. Thomas'; Imperial; King's; Moorfields; Royal Brompton and Harefield; Royal Free; Royal Marsden; and UCLH.

Business cases

- 4.32 The CMA again referred to HCA's business cases and noted (paragraph 6.215, Report) that these "*do not suggest that PPUs represent a significant constraint on HCA across the full*

⁴⁶ From 2018, Proton Beam Therapy will be offered to patients in the South of England by University College Hospital; refer to www.uclh.nhs.uk/aboutus/NewDev/NCF/PBT/Pages/Home.aspx for details, accessed 20 March 2015.

⁴⁷ Scientists in the Centre for Molecular Pathology at the Royal Marsden Hospital offer a leading-edge molecular diagnostics service; opened in November 2012, the Centre brings together clinicians, geneticists, pathologists and scientists from the NHS's Royal Marsden and the Institute of Cancer Research; refer to www.royalmarsden.org/centre-molecular-pathology, accessed 20 March 2015.

⁴⁸ The Directorate of Pathology at Imperial College Healthcare NHS Trust is one of the largest and most comprehensive in the UK, offering a wide range of diagnostic and clinical support services; its Molecular Diagnostics are focused at Hammersmith Hospital where a new facility was opened in January 2011; refer to <http://www.imperial.nhs.uk/services/pathology/index.htm>, accessed 20 March 2015.

range of treatments/specialities HCA provides (the only exception potentially being ITU services)". HCA's objections to the CMA's reliance on its business cases have been set out in paragraphs 4.20 to 4.21 above. The CMA has reviewed only a small proportion of HCA's business cases for new investment. [§].

- 4.33 The CMA only looked at a selection of business cases prior to the lifting of the private patient income cap under the Health and Social Care Act 2012. PPUs feature even more prominently in business cases after 2011/2012. As **Annex 4** shows, there are numerous references in this period to the competitive threat from PPUs.
- 4.34 Further, although the CMA refers to HCA's business cases, there have been a number of other internal documents, including Board presentations and strategy papers, which have fully acknowledged the threat which HCA faces from PPUs: see paragraph 5.72 of HCA's Response to the Provisional Findings. It is wrong to say that HCA's own internal papers do not indicate that HCA considers PPUs to be a competitive threat.

Patient survey

- 4.35 The CMA also argued (paragraph 6.215, Report) that "*Our patient survey showed that patients typically do not view PPUs as a close substitute for private hospitals*". The survey evidence is, in fact, based on responses to a single question. HCA has criticised the way in which the relevant survey question was framed: see paragraph 5.65, Response to Provisional Findings. Few patients would recognise the term "PPU" or view PPUs as anything other than private hospitals. The response from this single question does not support the CMA's sweeping conclusion that "*patients typically do not view PPUs as a close substitute for private hospitals*".

Consultants

- 4.36 The CMA also ignored the perspective of consultants. Many consultants choose to combine their NHS practice within the NHS hospital's PPU. Since the PPU is located with the NHS hospital, this is often more convenient for the consultant rather than splitting his/her time between different locations. Since the referral from GP to individual consultant is still the primary treatment pathway for most patients, it is more relevant to ask whether *consultants* rather than *patients* view PPUs as close substitutes. Many clearly do, and HCA faces increasing competition from PPUs such as the Royal Marsden to attract consultants.

PMIs

- 4.37 The CMA referred to the views of PMIs (paragraph 6.216, Report) that "*PPUs did not represent close substitutes to private hospitals in central London*." However, the PMIs have in fact developed directional policies which fully demonstrate that they view PPUs as effective substitutes for their policyholders:
- All the major PPUs in London are typically recognised by the PMIs and are invariably included across all network products that offer coverage in London.
 - Aviva has developed a network product (its Trust Care network) which is specifically tailored to PPUs. Aviva refers to the PPUs in its Trust Care network as comprising "*excellent private patient units of NHS Trust and Partnership hospitals*".
 - AXA-PPP describes the Royal Marsden PPU as an "elite" hospital. In its submissions to the CMA, AXA-PPP recognised the potential for expansion of

London PPUs and argued that many of these will *"become significant competitors in the inner London "elite" market in the future ..."* (paragraph 10, Annex A, Appendix 6.10, Report).

- With regard to PruHealth and Simply Health hospital networks, a number of London-based PPUs are only available to patients on its top end network products, the "premier" network and "metropolitan" network respectively.
- PPUs have been credible and successful bidders in service line tenders. In the case of BUPA's TAVI network tender, the winning bidders in London solely comprised PPUs.

4.38 There is no reason for PMIs to differentiate between private hospitals and PPUs (and they do not in fact do so):

- Many of HCA's consultants hold multiple practising privileges at private hospitals and PPUs.
- PPUs provide dedicated, stand-alone private facilities and therefore the patient experience is in line with that provided by private hospitals.
- They offer the same (if not a better) clinical infrastructure as private hospitals. In many cases, theatres and critical care beds are not dedicated to private patients, but the Trusts are able to provide the full range of NHS services at the disposal of the PPU. This provides the PPU with a distinct advantage over many private hospitals, particularly for high-quality, tertiary treatments.

Speciality - PPUs

4.39 Another reason which the CMA cited for down-playing the role of PPUs (paragraph 11.60, Report) is that *"many central London PPUs focus on one or a small number of specialities"* and are therefore less effective competitors. This however is not the case:

- (i) Although there are a number of specialised PPUs – e.g. Royal Marsden (cancer), Royal Brompton (cardiac), Moorfields (eye), Great Ormond Street (paediatrics) - there are also PPUs offering a broader range of services, including Chelsea & Westminster, Imperial, King's, and Royal Free.
- (ii) Single-specialty PPUs such as Royal Marsden and Royal Brompton are formidable competitors within their clinical specialty. A patient is typically referred to a given consultant for a particular clinical treatment, and therefore the hospital does not need to provide other treatments for a given episode of care. A patient with, say, cancer or cardiac problems, wants to go to the consultant and hospital which provides the right treatment for that condition. The CMA recognised this in its competitive assessment of Central London by considering hospital shares of supply in individual consultant specialties. The CMA has sought to establish (Appendix 6.10, paragraph 40, Report) whether HCA is *"particularly strong in certain specialties or particular segments (such as the more complex specialties/treatments)"*. The CMA noted (paragraph 5.10, Report) that *"a patient's choice of treatment is largely determined by their clinician's advice on the basis of clinical need"* and that there is *"very limited scope for substitution across treatments that address different clinical needs"*. A single specialty

hospital is therefore equally effective in competing within the relevant treatment specialty.

PPU growth

- 4.40 Moreover, the CMA's entire discussion of the competitive constraints of PPUs fails to take into account the competitive advantages which PPUs enjoy over private hospitals. These have been fully set out in HCA's previous submissions and include the following:⁴⁹
- the ability to access NHS land and infrastructure such as intensive care units
 - as indicated above, the co-location of the NHS hospital with a PPU provides a strong advantage in terms of attracting consultants with private patient lists
 - PPUs do not need to contribute to staff pension costs and can offer highly attractive NHS pensions without any additional cost to the commercial business
 - NHS Trusts are able to raise capital at considerably lower cost than private hospital operators
 - there are also significant tax advantages, e.g. no liability to corporation tax.
- 4.41 In its Private Healthcare Market Study, April 2012, the OFT acknowledged that PPUs may be at a potential competitive advantage to the privately-funded healthcare market and recommended that this should be taken into account in any partnering agreements. The CMA should similarly take these implicit benefits into account when assessing the competitive position of PPUs in Central London.
- 4.42 The Report also notes (paragraph 6.218) that the competitive constraints from PPUs "*in aggregate*" are weak. However, **PPU beds now account for approximately 25% of total bed capacity in Central London**,⁵⁰ representing a substantial proportion of the capacity available to PMIs to switch patients away from HCA if they choose to do so. The CMA has ignored the PPU share of theatre, consulting room and critical care capacity on the grounds (paragraph 6.209) that it was "*unable to find data*". This is a serious flaw in the CMA's market share data which overstates HCA's share of capacity in Central London, and is discussed further below. The CMA has the opportunity to address this issue in the remittal investigation.
- 4.43 The CMA underestimated not only the competitive constraints which PPUs currently provide, but also the potential for growth and expansion of PPUs over the next few years. Whatever the CMA's views about the current position, it is wrong for the CMA to have concluded (paragraph 6.254, Report) that "*the future expansion of PPUs does not appear likely to substantively change*" the competitive pressures on HCA.
- 4.44 The CMA's conclusions in the Report about the prospects of PPU expansion are at variance with the findings from its research which is set out in Appendix 3.1 of the Report:
- The CMA noted (paragraph 22, Appendix 3.1, Report): "*Specialty PPUs, which are largely London-based, told us that the private patient income cap significantly limited their potential to increase activity and income from private patient services, and that lifting it would allow them to increase their overall revenue.*"

⁴⁹ HCA Response to working paper "*Private Healthcare in central London: Horizontal competitive constraints*", paragraph 4.6.

⁵⁰ See Annex 6.

- The CMA was told by PPUs (paragraph 19, Appendix 3.1, Report) that the removal of the private income cap *"would allow larger PPUs to exploit the market potential by undertaking more private patient activity without fear of contravening private income restrictions"* and that larger PPUs were *"already contemplating a strategic approach which incorporates an increase in private patient income by refurbishing their facilities, widening the scope of their services and attracting new consultants, and partnering with private operators to further develop activity in this area."*
- The CMA also notes the increase in NHS private patient income in 2011/12 and 2012/13 and acknowledges that *"this may indicate the beginnings of an upward growth trend"*.

4.45 The "upward growth tend" has indeed been borne out. PPUs now account for 23% of hospital revenues in Central London and 25% of inpatient beds (compared to 14% and 17.2% respectively in 2011).⁵¹

4.46 The CMA cited (paragraph 20, Appendix 3.1, Report) a number of factors which would temper PPU growth in the future, however none of these is likely to impede PPU expansion in Central London:

- (i) The CMA referred to the fact that NHS Trusts need to seek approval from their Council of Governors for increases in private patient income of more than 5%. HCA has previously addressed this point (see paragraph 6.29, Response to the Provisional Findings). As HCA pointed out, the 5% growth figure is of the total patient base (not a 5% increase on the previous private patient cap) leaving significant room for sustainable growth for those operators who have smaller caps in London. Furthermore, the evidence which HCA provided (Appendix 1 of its Response to the Provisional Findings) demonstrates that for several major NHS Trusts in Central London, the need to seek Board approval has not in any way prevented significant growth in revenue over the last few years. NHS Trusts are under growing financial pressure because of cuts in NHS budgets and this has encouraged Trusts to increase private patient revenues to make up the shortfall. Many of these Trusts have specifically highlighted in their published strategic plans their intention to substantially increase private patient income over the next few years.
- (ii) The CMA referred to the decline in private work as a result of the recession. While the recession may have impacted other parts of the country, Central London has in fact seen significant growth in private healthcare revenues and it is clear from the strategic plans of a number of NHS Trusts that they see significant growth opportunities in London. In any event, economic conditions are more favourable now than they were in 2011.
- (iii) The CMA referred to increased competition between Foundation Trusts, but there is no evidence that this is dampening the enthusiasm of NHS Trusts in Central London to invest in private services. Again, the published strategic plans of these Trusts indicate that they see strong growth in the market which will benefit PPUs and private sector competitors alike.

⁵¹ See Annex 6.

- (iv) The CMA referred to the fact that new PPUs could "*exacerbate local concentration*" if they are partnered or managed by incumbent private sector operators. However, this concern has been specifically addressed by the CMA's new PPU remedy (in the Private Healthcare Market Investigation Order 2014), which will allow the CMA to review and prohibit PPU partnering transactions which give rise to local competition concerns.

- 4.47 HCA sets out in Appendix 1 of its Response to the Provisional Findings its own analysis of PPU growth and expansion. This showed that over the four-year period 2009/10 - 2012/13 PPUs in Central London have witnessed strong revenue growth. HCA provided evidence from the Annual Reports of London NHS Trusts about their future expansion plans. The major NHS Trusts – which include key competitors to HCA such as the Royal Marsden, Great Ormond Street, Royal Brompton, King's College, and Chelsea and Westminster – have set out their strategic objectives to increase private patient revenues over the next few years. We refer the CMA to the key extracts from their annual accounts and other documents which are set out in HCA's previous submission. They do not bear out the CMA's conclusion that PPU growth in Central London is "*uncertain*" or "*tempered*".
- 4.48 HCA provides updated revenue figures based on the LaingBuisson Report in **Annex 5**, which include 2013/2014 revenues. This demonstrates that a number of Trusts have continued to grow private patient income since 2013.
- 4.49 NHS Trusts are under growing pressure to generate new income streams because of NHS funding constraints. A recent National Audit Office (NAO) Report ("The financial stability of NHS bodies", 7 November 2014)⁵² showed that over a quarter of NHS Trusts were in deficit by the end of the financial year 2013/14. The number of Foundation Trusts in deficit has more than doubled from the planned 19 to 41, while the gross deficit of NHS Trusts has increased 150% from £297.2million to £743.3million. There are therefore increasingly strong incentives for Trusts to diversify and develop their private business.

Further expansion

- 4.50 Since the date of the CMA's Report, there are even clearer indications that PPUs are growing and emerging into an even stronger competitive force. Nearly all NHS Trusts in Central London are taking steps to increase capacity and revenue, and are marketing themselves more aggressively to attract private patients. HCA has examined the Annual Reports and strategic plans of NHS Trusts in London which have been published after the CMA's Report and these confirm the significant growth projections in Central London:

- (i) The Royal Marsden is continuing with ambitious growth plans. Its 2013/14 Annual Report states as follows:

"The Trust plans to increase its private patient (PP) income to at least £100 million (from £70 million) as quickly as possible. The key factor that drives an increase in PP income is increasing inpatient capacity. The Trust has identified additional PP inpatient capacity for 2014/5 and 2015/16; however, the £100 million target is likely to require the Trust to identify capacity outside the existing hospital sites. The opportunities for this level of expansion will be explored in 2014/15. Going forward surpluses made on this activity should be used to support

⁵² Report available at <http://www.nao.org.uk/wp-content/uploads/2014/11/The-financial-sustainability-of-NHS-bodies.pdf>; accessed 1 May 2015.

developments in quality of cancer care, facilities and technology for all patients and not to subsidise NHS tariff."⁵³

The Strategic Plan shows that private patient referrals have grown by 15.4% in the last year alone.⁵⁴ The LaingBuisson Report notes that the Royal Marsden now generates the highest revenue per bed of all Central London hospitals (including HCA) - £1.5 million per bed.⁵⁵

- (ii) Great Ormond Street has the declared aim of broadening its income base and it views *"commercial income as an opportunity"*.⁵⁶ It is targeting a **"step change in private patient activity"** and intends to grow revenue from £41.9 million currently to £46.9 million by 2015/16.⁵⁷
- (iii) Imperial College is also targeting income growth. Following the refurbishment and re-opening of the Lindo wing, additional income of £2 million is planned for this year. Imperial has stated in its most recent strategy document⁵⁸ **"Around £39 million of our total income comes from private care and we would seek to increase this up to twofold in five years. This is in response to demand and to help us find investment to meet our strategic objectives. The Trust's private patient strategy will align with and support the clinical strategy for the Trust."**
- (iv) The Royal Brompton announced that *"in 2013/14 private patient income exceeded £30 million for the first time"*.⁵⁹ It unveiled a new brand identity and logo for its private patient services.⁶⁰ The Brompton cardiac division reported exceeding its income target by over 12%.⁶¹ The Royal Brompton's refurbishment of its Sir Reginald Wilson ward, a 20-bed dedicated private wing, has recently been completed. It has opened a jointly-branded clinic with BUPA in the City of London. The Trust has also announced that it intends to open a private outpatient facility in the Harley Street area in the coming year and that this *"would increase both brand awareness and market share within central and North London as well as from international patients"*.⁶² Its strategic plan refers to the fact that it is targeting a **"50% growth in private patient income over the plan period"** and that it is *"scaling up our marketing and business development activities that are*

⁵³ The Royal Marsden NHS Foundation Trust, Annual Report and Accounts 2013/14, page 15; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/339527/ROYALMARSDEN_Annual_Report_and_Accounts_2013-14_1_.pdf for details, accessed 1 May 2015.

⁵⁴ The Royal Marsden NHS Foundation Trust – Strategic Plan 2014/15 – 2018/19, page 18; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/392953/Royal_Marsden_publishable_summary_s_trategicplan_1415.pdf for details, accessed 1 May 2015.

⁵⁵ LaingBuisson Report, page 28.

⁵⁶ Great Ormond Street NHS Foundation Trust – Strategic Plan Document for 2014-19 Public Version, page 19; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/390626/GOSH_Publishable_Summary_Strategic_Plan_1415.pdf for details, accessed 1 May 2015.

⁵⁷ Great Ormond Street NHS Foundation Trust – Operational Plan Document for 2014-16, pages 25-26; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338369/GOSH_Operating_Plan_2014-16_1_.pdf for details, accessed 1 May 2015.

⁵⁸ Imperial College Healthcare NHS Trust – Clinical strategy 2014-2020 – *"Unlocking our potential to transfer health and care"*, July 2014; refer to <http://westminster.moderngov.co.uk/documents/s1890/Appendix%201%20-%20Clinical%20Strategy%202014%20-%202020.pdf> for details, accessed 1 May 2015.

⁵⁹ Royal Brompton & Harefield NHS Foundation Trust – Annual Report and Accounts 2013/14, page 10; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/339494/ROYALBROMPTON_Annual_Report_and_Accounts_2013-14_1_.pdf for details, accessed 1 May 2015.

⁶⁰ *Ibid.*

⁶¹ *Ibid.*, page 13.

⁶² *Ibid.*, page 10.

*targeted both at GPs in the geographical catchment areas around our two hospitals and also at our international referrers."*⁶³

- (v) The Royal Marsden, Brompton, and Chelsea & Westminster have recently co-ordinated their marketing activities under the banner "Chelsea's Specialist Hospitals". The LaingBuisson Report notes: *"Their combined revenues are £114 million which, if co-ordinated properly, could provide a **significant centre of gravity** which might push Harley Street and other London private healthcare more towards South West London."*⁶⁴
- (vi) Moorfields Eye Hospital reported significant income growth from £19.5 million in 2012/13 to £21.6 million in 2013/14.⁶⁵ It said that its PPU *"enjoyed a particularly successful year in 2013/14"* and talks of a *"proposed new hospital development"*.⁶⁶ It also makes the point – directly contradicting the CMA's findings – that *"changes to the private patient cap enabled by the Health and Social Care Act presents us with **unparalleled opportunities for non-NHS growth** – our brand, expertise and market position all work to our advantage in this arena."*⁶⁷
- (vii) King's College Hospital also reports that income diversification *"is a **key strategic opportunity** and we are developing our private patient and commercial services both at home and abroad to generate further investment into NHS care."*⁶⁸ King's has previously announced that it is looking for a private partner to develop its private patient business. LaingBuisson notes: *"There are plans to move the existing private patients unit to a new wing and **increase the capacity from 21 to 28 beds in the summer of 2015**, as well as plans to reconfigure the operating theatres so that will enable additional theatre space being made available to private patients."*⁶⁹
- (viii) The Chelsea and Westminster opened a new luxury post-natal maternity suite as part of its private patient Kensington wing, in August 2014. The wing boasts 14 post-natal ensuite bedrooms, a level 3 neonatal ITU, a level 3 adult ITU and associated services.⁷⁰ The Trust has prepared a private patient outline strategy and plan to maximise opportunities. It also states that it has created *"a dedicated private patient call centre to make referrals simpler for patients and GPs, improved patient pathways and the creation of a direct admission acute admissions unit facility for GPs"*.⁷¹ The Trust has appointed a new commercial

⁶³ Royal Brompton & Harefield NHS Foundation Trust – Strategic Plan for 2014-19, page 18; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/392949/ROYALBROMPTON_Publishable_Summary_Strategic_Plan_1415.pdf for details, accessed 1 May 2015.

⁶⁴ LaingBuisson Report, page 39.

⁶⁵ Moorfields Eye Hospital NHS Foundation Trust – Annual Report and Accounts 2013/14, page 41; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338737/MOORFIELDS_Annual_Report_and_Accounts_2013-14_1_.pdf for details, accessed 1 May 2015.

⁶⁶ *Ibid.*, page 37.

⁶⁷ Moorfields Eye Hospital NHS Foundation Trust – Strategic Plan Summary for 2014-19, page 16; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/390706/MOORFIELDS_Publishable_Summary_Strategic_Plan_1415.pdf for details, accessed 1 May 2015.

⁶⁸ King's College Hospital NHS Foundation Trust – Strategic Plan Statement for 2013-14, page 27; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/390649/KINGS_Publishable_Summary_Strategic_Plan_1415.pdf for details, accessed 1 May 2015.

⁶⁹ LaingBuisson Report, page 122.

⁷⁰ Chelsea and Westminster Hospital – The Kensington Wing; refer to <http://www.chelwest.nhs.uk/private-care/private-maternity-unit/about-the-kensington-wing/> for details, accessed 13 April 2015.

⁷¹ Chelsea and Westminster Hospital NHS Foundation Trust – Annual Report and Accounts 2013/14, page 16; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/337899/CHELSEA_Annual_Report_and_Accounts_2013-14_1_.pdf for details, accessed 1 May 2015.

director to lead the expansion of private patient work and is forecasting a **growth of £9 million in revenue** over the next two to three years.⁷²

- (ix) As indicated above, Barts NHS Health Trust has recently gone out to competitive tender to appoint a private provider to design, build, finance and operate a new PPU. Spire is amongst the bidders short-listed for this new hospital.

- 4.51 The published strategic plans of these NHS Trusts provide concrete evidence of the continued growth of PPUs in Central London over the next few years, which will further increase the competitive pressures on HCA.
- 4.52 The CMA's findings that PPU growth is "uncertain" sits oddly with the CMA's assessment of its PPU remedy in the Private Healthcare Market Investigation Order 2014. The CMA's case for the effectiveness of the PPU remedy is based on its analysis that PPUs will grow, in particular by partnering with private sector providers. The CMA argued that its PPU remedy is a "market opening" remedy (paragraph 11.331, Report) *"intended to introduce greater rivalry in areas where existing private hospital operators face inadequate competitive constraints"*. It is irrational for the CMA (i) to argue in its competitive assessment that PPU growth is unlikely to be significant, but at the same time, (ii) to argue that a PPU remedy is required because PPU growth will create new partnering opportunities.
- 4.53 Another reason which the CMA gave for dismissing the competitive constraints from future PPU expansion (paragraph 6.242, Report) is that *"HCA ... could be successful in winning further tenders for PPU contracts in the future ... [which] would further strengthen HCA's position in central London."* However, the PPU remedy allows the CMA to prohibit future partnerships which reduce competition in Central London. HCA notes that it has not bid for any current PPU opportunities in Central London (including the recent Barts PPU project).
- 4.54 Furthermore, much of the PPU growth in Central London is by NHS Trusts which are developing their private businesses through their own resources, without partnering with a private provider. The Royal Marsden, Royal Brompton, Chelsea & Westminster, Great Ormond Street, Imperial and Moorfields have all established and expanded their private facilities without private sector involvement. The CMA was therefore wrong to state (paragraph 2.29, Report) that *"the degree to which any increase in PPU activity will constitute greater competition for private hospitals will be affected by the number of Foundation Trusts which decide to expand in partnership with private hospitals, if and with whom they partner, and on what terms, among other things"*.

(5) Private providers in Central London

- 4.55 The CMA has also failed to take account of the strong competitive pressures from other private healthcare providers in Central London. Its conclusion that HCA is subject to "weak competitive constraints" is based on a flawed, *quantitative* analysis of shares of supply which overstate HCA's share, and is discussed further below. The CMA has not carried out a *qualitative* assessment which takes account of the nature, breadth, range and capabilities of HCA's competitors in Central London.

Competing fascias

⁷² Chelsea and Westminster Hospital NHS Foundation – Monitor Operational Plan for 2014/15 and 2015/16, April 2014 Submission, page 27; refer to https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/337900/CHELSEA_Operational_Plan_14-16_1_.pdf for details, accessed 1 May 2015.

- 4.56 Although the CMA describes the market as highly concentrated, HCA faces competition from **six** other independent providers, operating **eight** hospitals in Central London, excluding the PPU's (and NHS hospitals) which are discussed above. There are a further 10 NHS Trusts operating a variety of PPU's. Competition is therefore very broad-based. Indeed, there is a much higher number of competing fascias in Central London than in any other local healthcare market. The CMA is referred in particular to Section 2 of HCA's submission of 28 June 2013 on horizontal competitive constraints, and Sections 5.54-5.61 of its Response to the Provisional Findings.
- 4.57 The CMA's detailed assessment of competition in Central London (Appendix 6.10, Report) made no reference to the strengths and capabilities of individual competitors:
- TLC has a significantly greater bed capacity than each of HCA's hospitals individually other than the Wellington. It is the largest hospital in Central London in terms of theatres and consulting rooms, and the second largest in terms of revenues and beds. It also has the largest number of consultants (600). The CMA's case study shows how TLC has expanded in recent years by establishing a new cancer centre. The CMA also acknowledges that HCA's business cases (paragraph 6.218, Report) "*frequently*" refer to the competitive dynamic with TLC.
 - The BUPA Cromwell is comparable in size to each of HCA's individual hospitals. It is the third largest hospital in Central London in terms of beds, and the fourth largest in terms of revenue. The CMA has noted (Appendix 6.2, Annex A, Report) that the hospital has adopted a similar strategy as both HCA and TLC in developing an oncology offering. It is vertically-integrated with BUPA's insurance business. It has clear plans to grow its tertiary services (see Report, Appendix 6.2, Annex A).
 - The BMI, Aspen, St. John and St. Elizabeth, and King Edward VII hospitals are all sizeable facilities with significant bed and theatre capacity, all of which have undergone expansion in recent years.
- 4.58 The CMA also noted (paragraph 6.410 et seq, Report) that it finds little differentiation between different Central London hospitals and that (paragraph 6.422, Report) several competitors "*appear to have invested and position themselves on the high acuity end of the market and are regarded as having a strong reputation*".
- 4.59 In paragraph 6.214 of the Report, the CMA appeared to be suggesting that there is a distinct "zone 1" hospital market, which would not include Aspen's Highgate Hospital, the BMI hospital at Blackheath and the London Independent, or even the BUPA Cromwell which is "*on the fringe of this network*". This observation lacks any coherence with the CMA's definition of Central London as the relevant geographic market. The CMA provided no explanation of why it considers that hospitals have to be located in "zone 1" of the London underground network to be effective competitors. By the same reasoning, the CMA would need to exclude from its competitive assessment HCA's Wellington Hospital and London Bridge Hospital, both of which lie at the edge of zone 1. In any event, paragraph 11.93 of the Report contradicts paragraph 6.214 and concludes that there is no significant differentiation in the customer bases of Central London hospitals.

Competitive advantages

- 4.60 Three of HCA's private sector competitors – TLC, St. John and St. Elizabeth, and King Edward VII – benefit from charity status and receive significant benefits in terms of tax exemptions, including exemption from corporation tax, business rate reliefs and VAT reliefs. HCA has previously submitted evidence (the CASS Research Report of May 2013) which estimated the significant value of these tax subsidies to each of these hospitals.
- 4.61 The CMA referred only briefly to the issue of the charity status of HCA's competitors, in the context of the IPA (paragraph 6.367, Report). The CMA concluded that charity status would not have a "*material impact*" on an operator's pricing.
- 4.62 The analysis conducted by the CMA failed to account adequately for the way in which TLC's charity status may affect its costs. The CMA stated: "*We noted that HCA calculated this cost advantage to be the sum of corporation tax relief, business rates relief and VAT savings. 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. Taking these two points into consideration, we therefore did not consider charity status to have a material impact on the price comparisons*" (paragraph 6.367, Report).
- 4.63 However, the CMA did not carry out any analysis or present any evidence showing that the VAT savings specific to those hospitals with a charity status are small. This is despite HCA having presented evidence to the CMA in relation to the scale of cost advantages that TLC has as a result of its charitable status⁷³ and TLC acknowledging that its charitable status is one of the reasons it is able to charge lower prices than HCA.⁷⁴
- 4.64 The CMA was also wrong to disregard the effect on insured prices of potential differences in fixed costs between hospital operators. The CMA stated: "*...we considered that only marginal costs (as opposed to fixed costs) should be relevant for pricing decisions*" (paragraph 6.364, Report).
- 4.65 Whilst economic theory indicates that the relationship between marginal costs and prices in some contexts will be more direct, at least in the short run, it is not the case that only marginal cost is relevant to pricing decisions. Where a bargaining framework is used to determine prices, as is the case in private healthcare for insured prices, firms will take fixed costs into account when setting prices.⁷⁵
- 4.66 Further, in a market such as private healthcare, featuring high fixed costs, fixed costs may play an important role in price determination and competition between firms for two reasons.
- 4.67 First, as in any industry, firms need to recover their fixed costs in the long-run to remain in business. In an industry with relatively high fixed costs and relatively low marginal (or variable) costs, such as the private healthcare market, this may mean that prices exceed marginal costs by a larger margin than in industries characterised by a lower fixed cost base. There is a large body of academic literature that considers pricing in markets with high fixed costs. For example, Ramsey considers a model which seeks to maximise social welfare subject to a break-even constraint, finding that the social optimum involves prices above

⁷³ See, for example, HCA, Response to Provisional Findings, Appendix 4, paragraphs 4.47-4.51.

⁷⁴ Summary of hearing with The London Clinic held on 27 February 2013, paragraph 6.

⁷⁵ See, for example, J. Nash, "*Two-Person Cooperative Games*", *Econometrica*, Vol. 21 (1953), pages 128-140; and K. Binmore, A. Rubinstein and A. Wolinsky, "*The Nash Bargaining Solution in Economic Modelling*", *The RAND Journal of Economics*, Vol. 17, No. 2 (Summer, 1986), pages 176-188.

marginal cost.⁷⁶ Baumol, Bailey and Willig show that, in the presence of fixed costs, a monopolist which is subject to a fierce threat of entry (i.e., the monopolist is operating in a contestable market), will charge Ramsey prices.⁷⁷

- 4.68 Second, in an industry with relatively high fixed costs and relatively low marginal (or variable) costs, the potential to earn a positive margin acts as a powerful incentive for firms to compete for consumers,⁷⁸ for example by investing in quality and innovation, as each consumer brings a substantial contribution to fixed costs. This investment can itself contribute to the fixed costs that a firm has to shoulder and can realistically only be conducted if a return is earned on it. This again implies that a hospital operator must take its fixed costs into account for it to survive in the market at all. A simplistic model linking pricing decision only to marginal costs is therefore not only at odds with economic theory under the correct frameworks but is also contrary to basic commercial reality.⁷⁹
- 4.69 In addition to the benefits of charity status, some of HCA's private sector competitors also enjoy other competitive advantages.
- 4.70 The BUPA Cromwell derives significant benefits from being vertically-integrated. It has the substantial financial resources of the BUPA group behind it. The CMA's own evidence referred to the fact that the BUPA Cromwell can benefit from BUPA's PMI directional strategies which allow BUPA to divert patients away from HCA hospitals to the BUPA Cromwell. The CMA acknowledged (paragraph 2, Annex A, Appendix 6.2, Report): *"BCH's 2012 Business Plan noted that with the direction of open referrals it would increasingly be in a position to provide more patients to consultants which would allow it to attract new consultant users and "evolve the nature of our relationships with existing ones". It noted that of its top [] consultants [] had conducted [] private practice work at BCH. It said that it intended []."*

Breadth of offering

- 4.71 Most of HCA's Central London competitors have intensive care units which operate at critical care levels 1, 2 and 3: the BUPA Cromwell; TLC; St. John and St. Elizabeth; BMI London Independent; and King Edward VII. BMI has recently upgraded its Blackheath Hospital with a new intensive care unit.
- 4.72 All of HCA's private competitors offer a broad range of clinical services, and many of these are large hospitals, which have a large body of practising consultants.
- 4.73 The LaingBuisson Report⁸⁰ also provides some updated analysis of the top 10 individual clinical specialities (by admissions and revenue) which demonstrate that HCA faces strong competition across all the major clinical services:
- Trauma and orthopaedics is the largest specialty by both admissions and revenue. According to the LaingBuisson Report, HCA currently accounts for just **39%** of orthopaedic operations in Central London. This is based on data on the volume of operations submitted to the National Joint Registry up to early 2014. The Report

⁷⁶ Ramsey, F (1927), "A contribution to the theory of taxation", The Economic Journal, Vol. 37, No. 145, pages 47-61.

⁷⁷ William J. Baumol, Elizabeth E. Bailey and Robert D. Willig (1977), "Weak Invisible Hand Theorems on the Sustainability of Multiproduct Natural Monopoly", The American Economic Review, Vol. 67, No. 3, pages 350-365.

⁷⁸ Porter, M. (1998), "Competitive Strategy", New York: Free Press. page 18.

⁷⁹ This has been a characteristic of models of quality and innovation since, at least, Partha Dasgupta and Joseph Stiglitz "Industrial Structure and the Nature of Innovative Activity", The Economic Journal, 90 (June 1980), pages 256-293.

⁸⁰ LaingBuisson Report, Appendix 1, pages 55-66.

cites the BUPA Cromwell, London Clinic, and King Edward VII as all having a strong position in trauma and orthopaedics.

- Gastroenterology is the second largest specialty. The LaingBuisson Report states that TLC *"would appear to be the "market leader" in this specialty, with the largest number of accredited consultants (34)"* and also states that St. John and St. Elizabeth has *"a large number of gastroenterologists (19)."*
- In oncology, while HCA is cited as the "market leader", LaingBuisson notes that both TLC and Cromwell have a strong offering, based on the number of consultant oncologists, and that *"the Royal Marsden has very a strong brand in this area"*.
- In general surgery, LaingBuisson notes that the top two hospitals by numbers of consultant surgeons are TLC and St. John and St. Elizabeth, and that the BMI London Independent is also strong.
- While the Portland Hospital is the leading, specialist hospital in obstetrics and gynaecology, LaingBuisson notes that other private providers each have significant numbers of consultants and that both the Imperial and Chelsea & Westminster PPU's have a *"very strong position"*.
- TLC has the highest number of urology consultants of any individual hospital.
- In cardiology, LaingBuisson notes that the main competition to HCA comes from the BUPA Cromwell (43 consultants), and the Royal Brompton PPU.
- TLC is *"also strong"* in neurology, competing alongside HCA.
- LaingBuisson notes that in clinical radiology, *"almost all the major hospitals have invested"* in radiology, and there is significant alternative provision to HCA.
- In endocrinology, TLC and BUPA Cromwell each has a higher number of consultants per hospital than HCA, and are *"strong in this area"*.

Competitor growth

4.74 All of HCA's private competitors have recently expanded and/or are in the process of expanding their facilities:

- TLC has launched a new cancer centre which has provided it with a significantly enhanced offering in cancer services.
- BMI has also expanded its activities. It has redeveloped the Weymouth Hospital in 2010, and launched a new gynaecological wing of the Fitzroy Hospital in 2011. [REDACTED].⁸¹
- The BUPA Cromwell is currently undergoing a major redevelopment programme (which the CMA cites in Appendix 6.2, Annex A, Report).
- The Hospital of St. John and St. Elizabeth developed a new urgent care centre in 2011.

⁸¹ See business case no. 48 in Annex 4: [REDACTED].

- The CMA acknowledges (paragraph 6.69, Report) that King Edward VII is going through a significant expansion of a further 40,000 square feet of space, which will increase its capacity by one-third. Until recently, King Edward VII had an "invitation-only" policy towards consultants; it has changed this, [REDACTED].
- Aspen has also expanded the Highgate Hospital in 2013.

4.75 Many of HCA's private sector competitors have grown revenue significantly since the CMA's original competitive assessment, which is based on 2011 data:

	2011 (£)	2013 (£)
BUPA Cromwell	73m	94m
TLC	124m	137m
St. John & St. Elizabeth	43m	46m
King Edward VII	18.8m	20m

(Source: LaingBuisson Report; data unavailable for BMI and Aspen)

TLC has had an annual growth rate of 8.9% p.a., while the Cromwell, St. John & St. Elizabeth, and King Edward VII have each grown by 4%-5% p.a.

- 4.76 Furthermore, as discussed above, Spire has recently announced its intention to launch a new private hospital in Central London by 2018.
- 4.77 The CMA also argued (paragraph 6.217, Report) that *"where HCA mentions central London competitors in its business cases, it only considers a small subset of such competitors closest to the facility in question (as opposed to all of HCA's central London competitors)."* HCA once again repeats its criticisms of the CMA's reliance on the business cases to form its competitive assessment. In any event, however, the CMA's statement is incorrect. The business cases regularly include references to [REDACTED], and [REDACTED]. To the extent that any conclusions can be drawn from the business cases and HCA's other strategy documents, these in fact indicate that developments by major competitors, including [REDACTED] in particular, provided a strong incentive on HCA to invest in its services.
- 4.78 The CMA's assessment of HCA's position in Central London was based exclusively on HCA's alleged share of supply (as at 2011), and that it has an allegedly "high" share relative to that of its competitors. It ignores the fact that HCA is surrounded in Central London by six other private providers (as well as PUs and NHS hospitals) which are all well-resourced, credible competitors benefiting from competitive advantages. A number of these competitors are successfully growing their business and are providing increasingly vigorous competitive constraints on HCA.

(6) Greater London competitors

- 4.79 The CMA's competitive assessment has also failed to include the competitive constraints from private hospitals outside Central London, particularly in Greater London. As HCA submitted during the initial inquiry, the CMA's analysis is flawed: (i) it has adopted an incorrect approach to market definition, which excludes from the relevant geographic market providers based outside Central London; and (ii) irrespective of whether it has correctly defined the relevant geographic market, the CMA has disregarded the competitive pressures from providers based outside Central London.

4.80 In summary, the CMA's approach to competitive constraints outside Central London is unfounded:

- There is no justification for taking the North and South Circular roads as the relevant geographical market for HCA's hospital. This is a wholly arbitrary delineation which is based on a weak analysis of supply and demand factors.
- The CMA has defined the relevant geographic market outside Central London by considering where patients actually come from, and what alternatives are available to those patients. This is precisely the approach which the CMA should follow in relation to London.
- The CMA's competitive assessment outside Central London is based on an analysis of a patient catchment area - specifically, where **80%** (i.e. the **overwhelming majority**) of patients are located – and the hospitals which compete in this area. For Central London, the CMA inexplicably disregards catchment areas and instead adopted a geographical area where only [X]% (i.e. the **minority**) of HCA's patients were located.⁸²
- HCA draws its patients from a wide catchment area, which extends well beyond Central London, into Greater London and beyond. [X]% of HCA's patients are from outside Central London (and a further [X]% were from abroad), and these patients have a wide range of alternative, local providers to choose from.⁸³
- For patients travelling from outside Central London, HCA must consider the competitive constraints posed by hospitals outside Central London. If it did not do so, it would lose these patients to competitors. By virtue of it not being able to discriminate between patients, therefore, even if patients in Central London do not travel to hospitals outside this area, they nevertheless benefit from the competitive constraints provided by hospitals outside Central London on HCA's prices and quality.
- The PMIs are increasingly using directional products and policies to divert patients away from Central London hospitals to Greater London hospitals. The CMA has disregarded the way in which the PMIs view non-Central London hospitals as effective substitutes for their policyholders.

4.81 HCA's views with regard to competitive constraints outside Central London have been fully and extensively set out in previous submissions. The CMA is referred in particular to paragraphs 5.6-5.50 and 5.75-5.89 of HCA's Response to the Provisional Findings; and paragraphs 4.16-4.28 of HCA's Response to the Provisional Decision on Remedies. HCA addresses the CMA's specific findings in the Report as follows.

4.82 The CMA's reasoning for adopting a definition of the relevant geographic market based on Central London is set out in paragraph 5.59 of the Report. The CMA cites two factors:

- (i) First, it argues that Central London has a number of distinct features, including high PMI penetration rates, a significant number of private hospitals and PPU's, a wide range of complex treatments, a reputation for higher quality of care, and wider patient catchment areas.

⁸² Based on 2011 HCA patient admissions data.

⁸³ Based on 2011 HCA patient admissions data. [X]% of data could not be attributed to specific locations.

- (ii) Second, the CMA states that *"PMIs and also some hospital operators consistently expressed the view that hospitals in central London ... are closer substitutes for each other"*.

Market features

- 4.83 With regard to the first of these factors, the CMA correctly concluded that there are a number of characteristics of private healthcare provision in London (not necessarily confined to *Central* London). However, this in itself does not mean that hospitals outside Central London do not compete with patients within Central London for insured and self-pay patients. The CMA has not carried out any analysis of the choices made by patients, particularly those residents outside Central London. It has not for example conducted any survey of patients to determine either (i) the factors which govern patient choices between providers within and outside Central London; or (ii) the extent to which patients using Central London hospitals would be inclined to switch to hospitals outside Central London in response to a small but significant reduction in the value for money of hospitals in Central London, e.g. because of a decline in quality. None of the distinguishing features of Central London which are cited by the CMA, e.g. high PMI penetration rates, the larger number of hospitals within Central London, or wider catchment areas, gives rise to the conclusion that patients do not regard non-Central London hospitals as effective substitutes.
- 4.84 The CMA argued in the recent judicial review proceedings (paragraph 173, Amended Defence) that a key factor which attracts patients to Central London is the perception that quality of care is very high in the capital. However, the CMA has conceded (paragraph 6.386, Report) that it has not carried out a detailed analysis of quality because there is a *"lack of objectively comparable measures of quality"* and that any analysis of quality *"would be extremely resource-intensive and likely to be inconclusive"*. The CMA therefore has no evidence that hospitals outside Central London are vertically-differentiated in their quality offering. The CMA cannot in any event dismiss all Greater London hospitals collectively as having a lower quality offering:
- The BMI Clementine Churchill is a major facility in north-west London. The CMA notes that it offers 17 specialisms and has level 3 ITU capability and *"draws insured patients from a wide area"*. As indicated below, BMI has stated to the CMA that its Clementine Churchill Hospital has successfully attracted patients away from HCA's Princess Grace.
 - Aspen's Parkside Hospital in Wimbledon has a cancer centre with a full cancer treatment pathway and is referred to by AXA-PPP as a "London elite hospital".
 - There are consultants with multiple practising privileges at both Central London and Greater London hospitals, and so in some cases the patient would be seeing the same consultant performing the same procedure at a different location.
 - St. Anthony's Hospital in Cheam, Surrey is a major cardiac facility with level 3 ITUs. Spire has recently acquired the hospital, and has earmarked major investment into the facility.
- 4.85 The CMA itself noted that nearly half (46% according to Table 5, Appendix 6.10, Report) of patients resident in Greater London attended hospitals outside Central London. Furthermore, as stated above, [X] % of HCA's patients are resident outside Central London and will therefore fall within the catchment areas of Greater London hospitals. That figure may in fact

be even higher since some HCA patients with a Central London postcode may in fact have their main residence outside Central London. It is simply not credible to suggest that these patients do not have local, viable alternatives to Central London hospitals which are close to where they live. To illustrate the point, HCA has previously provided the example of a patient in Harrow, north-west London. This patient would have a number of local choices, including the BMI Clementine Churchill (Harrow), Spire Bushey (Watford), BMI Bishops Wood (Northwood), BMI Garden (Hendon), and NHS Northwick Park Hospital PPU, as well as the option of travelling to Central London.⁸⁴

Substitution

4.86 The second factor which the CMA referred to in support of its Central London delineation is the views of PMIs that Central London hospitals are "closer substitutes". However, the evidence relating to PMI preferences paints a different picture:

- Aviva submitted evidence that the policyholders using Central London hospitals came predominantly from areas outside Central London.⁸⁵
- HCA has submitted evidence showing that BUPA's Open referral strategy was aimed at moving patients away from HCA hospitals to outer London hospitals.⁸⁶ The CMA has accepted that Open referral policies are growing in importance.
- The recent LaingBuisson Report refers to the fact that there has been a general movement "upmarket" in terms of more complex, tertiary work in Central London *"in part, due to PMI drives to place more routine work at out-of-central London hospitals"*.⁸⁷
- The PMIs have developed restrictive networks which include both Central London and outer London providers on a single list, i.e. there are no Central London-specific policies.
- The PMIs' own websites provide a broad range of destinations for its London customers, for example BUPA's facilities finder will list a number of Central and outer London hospitals for any given postcode.

4.87 The CMA noted that "some hospital providers" also expressed the view that Central London hospitals are closer substitutes. Equally, some did not:

- Aspen told the CMA that it believed its market was the area within the M25 (i.e. Greater London).⁸⁸
- BMI submitted evidence stating that *"BMI was targeting increasing numbers of people who might be treated at central London hospitals to be treated at its peripheral London hospitals instead. By means of example, with investment and equipment, BMI have successfully attracted patients to its Clementine Churchill Hospital in Harrow away from HCA's Princess Grace Hospital."*⁸⁹

⁸⁴ HCA Response to working paper "Private Healthcare in central London: Horizontal competitive constraints", paragraph 3.8.

⁸⁵ Aviva's response to the Issues Statement, page 53.

⁸⁶ HCA Response to working paper "Private Healthcare in central London: Horizontal competitive constraints", paragraph 8.13.

⁸⁷ LaingBuisson Report, page 14.

⁸⁸ CMA Aspen hearing summary, 26 February 2013, paragraph 7.

⁸⁹ CMA BMI hearing summary, 27 March 2013, paragraph 19.

- 4.88 The CMA asserted in the Report (paragraph 5.61) that "*regardless of the precise boundaries of the geographic market*" it has taken into account the competitive constraints exerted by private hospitals and PPU's outside Central London. The relevant section is at paragraphs 6.224-6.227 of the Report.

Travel patterns

- 4.89 The CMA referred (paragraph 6.225, Report) to patient travel patterns in support of its argument that hospitals outside Central London do not impose significant competitive constraints. Again, the conclusions which it draws are misconceived.
- 4.90 The CMA repeated the point that "a sizeable number" of patients resident in Greater London are willing to travel longer distances into Central London. This observation is subject to the same criticisms that have previously been noted:
- (i) As stated above, nearly half of patients resident outside Central London attend Greater London hospitals and thus elect not to travel into Central London. This demonstrates that, notwithstanding the ease of commuting into Central London, local hospitals in Greater London are successfully competing for a substantial number of insured and self-pay patients. There are numerous suburban and outer London hospitals which provide viable alternatives.
 - (ii) The CMA suggested that Central London hospitals may represent "*a more convenient location*" because of proximity to work. There may indeed be a convenience factor in taking an *outpatient* appointment close to a commuter's workplace. However, patients are more likely to prefer a hospital which is close to their home for *inpatient* stays. BUPA's own Open referral Q&A leaflet⁹⁰ states: "*Our members prefer to see a consultant close to their home address ...*". Central London hospitals therefore do not represent "*a more convenient location*" for non-Central London patients for inpatient procedures (which forms the focus of the CMA's competitive analysis).
 - (iii) Furthermore, as stated above, the CMA has conducted no analysis to test how existing patterns of usage would change in response to a small but significant alteration in the value of a hospital's offering. This is an essential exercise to carry out when determining the extent to which one product or service may competitively constrain another.
 - (iv) The CMA also stated that the convenience factor "*may be especially relevant for patients who are members of corporate schemes that give them access to central London hospitals ...*". As stated above, PMIs are increasingly using directional policies to divert patients away from Central London providers, particularly for inpatient treatment. Even if the patient holds corporate PMI cover, he or she will typically have a range of alternative hospitals outside Central London to choose from. It may, if anything, be more convenient for the patient to elect to be treated nearer his or her home, where they can be visited by family and friends, rather than their place of work.

⁹⁰BUPA, "Open referral questions and answers"; refer to http://www.bupa.co.uk/jahia/webdav/site/bupacouk/shared/Documents/PDFs/Intermediaries/New%20Open%20Referral/44316%20Open%20referral%20July%20refresh_external.pdf for details, accessed 1 May 2015.

- (v) The CMA's patient survey evidenced that London patients are particularly willing to explore alternative healthcare options. 63% looked up relevant information online, 41% visited private consultant websites, and 36% looked up private hospital websites.⁹¹ The CMA's new information remedy in the Private Healthcare Market Investigation Order 2014 will (paragraph 11.587, Report) stimulate even *"greater competition for patients on the quality of treatment provided"* which *"would also serve to increase price competition between consultants and between hospitals by increasing the size of local markets and, thereby, the number of "local" competitors."*

4.91 The CMA also pointed out (paragraph 33, Appendix 6.10, Report) that only 5% of Central London patients attended hospitals in Greater London, suggesting that HCA has a "captive" group of patients which would only attend hospitals within Central London. Only a minority of HCA's patients are resident in Central London: [X]% have Central London postcodes, but 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. As stated above, the CMA has not actually tested whether these patients would be willing to travel to hospitals outside Central London in response to a reduction in value for money. In any event, even if the CMA is correct to say that Central London patients would not switch to non-Central London hospitals, the fact remains that the competitive pressures provided by providers in Greater London constrain HCA's pricing and quality for the benefit of all its patients. HCA cannot and does not discriminate between patients in or outside Central London and therefore non-Central London hospitals influence HCA's pricing and quality strategy, which affect all of HCA's patients regardless of their location.

Non-London catchment areas

- 4.92 The CMA's approach in relation to Central London contrasted starkly with its competitive assessment of hospitals outside Central London.
- 4.93 As the CMA noted (paragraph 6.234, Report): *"Catchment areas are a well-established pragmatic approach to geographic market definition typically used in the presence of a large number of local markets, as it is the case in this investigation."*
- 4.94 The CMA argued in the Amended Defence in the judicial review proceedings⁹² that catchment areas outside Central London were used *"as a starting point only"*. However, the CMA set out in Appendix 6.7 of the Report a detailed analysis of the catchment areas for hospitals of potential concern, taking account of the hospital's location, transport links, commuting patterns, service lines and patients' postcode data. No such analysis was carried out in respect of Central London, where the CMA adopted a purely mechanistic approach based on the North and South Circular roads. The CMA argued in paragraph 180 of its Amended Defence that *"inevitably a line had to be drawn to define central London (just as lines have to be drawn to define catchment areas)"*, but the CMA's analysis of catchment areas outside London eschewed geographic "lines" in favour of an analysis of the local competitive choices available to consumers in a given area. Furthermore, even if a line were to be drawn, it is important that it captures all information and evidence that is informative about the relevance of competitive constraints over a given geographic area. Information on the location of patients, their travel patterns, the availability of transport links, etc. is Central

⁹¹ HCA Response to Provisional Findings, paragraph 4.5.

⁹² Amended Defence, paragraph 179(a)(ii).

to the understanding of the extent to which hospitals represent an alternative to patients and PMIs.

Business cases

- 4.95 The CMA referred to HCA's business cases and found (paragraph 6.226, Report) "*only one instance of HCA taking into consideration a competitor for Greater London*". HCA's criticism of the CMA's reliance on business cases in its competitive assessment is set out in paragraph 4.20 - 4.21 above. In the one instance referred to, the business case lists several Greater London facilities, including [REDACTED], as HCA's competitors. There are in fact a total of [REDACTED] business cases in the period 2004-2014 which reference Greater London competitors. [REDACTED]. The CMA's references to business cases to support its arguments on competitive constraints are highly selective.

Greater London share of supply

- 4.96 The CMA also claims (paragraph 6.227, Report) that it has carried out a "robustness check" by considering HCA's share of supply including Greater London hospitals. HCA's comments are as follows:
- (i) The CMA refers to HCA's share of admissions and revenue but ignores HCA's share of capacity. HCA has only 27.5% of the total bed capacity of hospitals in Greater London, based on LaingBuisson's published bed numbers. This demonstrates the level of capacity available to the PMIs to redirect patients from Central London to other hospitals within Greater London.
 - (ii) In any event, even if correct, the shares of supply cited are substantially lower on a Greater London basis. On the CMA's own figures, HCA represents just [REDACTED]% of inpatient admissions, which contrasts with the much higher figures used in the CMA's analysis for Central London. BMI's share of inpatient admissions is stated to be [REDACTED]%. It is difficult to see how the CMA can have concluded that HCA's shares on a Greater London basis are "still high" or that the market is "*highly concentrated*".
 - (iii) Although the CMA claimed to use Greater London shares of supply as a "robustness check", in fact Greater London shares were wholly ignored in its competitive assessment. The CMA's AEC finding, and divestment remedy, are based only on Central London shares of supply. The CMA would have had to carry out a very different analysis on the basis of Greater London shares. Given that on a Greater London basis HCA's share is significantly lower, and BMI's significantly higher, the CMA could not have drawn the conclusions it did about the highly concentrated nature of the market and/or the need for a divestment remedy.
 - (iv) There are four omissions in the CMA's list of Greater London hospitals (within the M25) in Appendix 6.10, Annex C of the Report: Aspen Holly House; Ramsay Ashted; Ramsay North Downs; and Spire Bushey. There are also a number of other hospitals in outer London beyond the M25, including BMI Princess Margaret and BMI Fawkham Manor. The inclusion of these would further reduce HCA's share of revenue and admissions.

4.97 All of the principal private healthcare providers have been recently or are in the process of investing and / or expanding in Greater London:

- Spire acquired St Anthony's Hospital in spring 2014 and is now embarking on a £30 million expansion project comprising, among other things, a new theatre block housing six state-of-the-art theatres new treatment rooms and new consulting rooms.⁹³
- Aspen's Holly House Hospital completed a £20 million development at the beginning of 2013, doubling the size of the hospital. The new facility contains cutting-edge treatment suites for outpatients and three new integrated theatres.⁹⁴
- New Victoria Hospital in Kingston has started a planned extension and redevelopment for which it has taken out a £17 million loan to finance the project.⁹⁵
- Nuffield undertook a £5 million refurbishment programme of its Brentwood Hospital throughout 2013.⁹⁶
- Ramsay is soon to start a "multi-million pound" development at its Ashted hospital, which will comprise, among other things, a new cardiac catheter lab supported by a three-bed critical care facility.⁹⁷

(7) Outpatient/day case providers

4.98 The CMA focused its analysis on private hospitals that provide inpatient care for the following reasons:

- Providers of inpatient care account for a substantial share of the revenue generated by private patients in the UK.
- Concentration is relatively higher in the provision of inpatient care than in the provision of day-patient and outpatient care.
- 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 as those arising in the provision of inpatient treatments.

4.99 Whilst the CMA acknowledged that providers of inpatient care compete with a wider set of providers including day-case and outpatient clinics, it wrongly ignores outpatient/day-case centres in the CMA's competitive assessment in Central London (paragraphs 6.204 – 6.219 and Appendix 6.10, Report).

⁹³ Get Surrey article, 24 March 2015; refer to <http://www.getsurrey.co.uk/news/nostalgia/treatment-time-see-development-st-8869476> for details, accessed 1 May 2015.

⁹⁴ Holly House Hospital news, "New £20m hospital facility opens in Buckhurst Hill"; refer to <http://www.hollyhouse-hospital.co.uk/news/opening/> for details, accessed 1 May 2015.

⁹⁵ See The New Victoria Hospital 2014 accounts, page 5.

⁹⁶ Nuffield Brentwood news, "Refurbishment of Brentwood Hospital completed"; refer to <http://www.nuffieldhealth.com/hospitals/brentwood/news/refurbishment-completed> for details, accessed 1 May 2015.

⁹⁷ Guardian article "Ashted hospital seeks new staff for expanding services"; refer to <http://www.theguardian.com/ramsay-health-care-partner-zone/2014/nov/10/ashted-hospital-seeks-new-staff-for-expanding-services> for details, accessed 1 May 2015.

Growth in outpatient/day case care

- 4.100 The CMA correctly noted that there has been a general trend toward a greater proportion of clinical services taking place in an outpatient or day-case setting, and that day-patient admissions have begun to account for the majority of patient admissions. HCA currently derives [X]% of its revenue from outpatient/day case procedures. Specifically, the CMA found (at paragraph 2.18, Report):

*"Between the mid-1990s and mid-2000s overnight bed capacity in the sector gradually contracted by around a fifth to a low of 9,250 at 2004. In 2012/13, overnight bed capacity remained largely static on previous years, with 9,341 beds available at the 201 private hospitals offering overnight beds. Day-patient admissions by the main hospital groups represented **68% of all admissions** in 2011... and the **majority** (73 per cent) of the 1.61 million patient admissions for surgical procedures in the first half of 2013 were for day-patient procedures."*

- 4.101 The CMA ought therefore to take account of the growth of day-case and outpatient facilities which represent a large and growing share of clinical activity in the sector, both in the context of its examination of barriers to entry and in its assessment of local competition.
- 4.102 In addition, the CMA's exclusion of outpatient/day-case centres obscures the fact that, in the case of certain clinical specialties, outpatient and day-case services represent the primary mode of delivering care and account for a substantial part of the revenues for that specialty.
- 4.103 To illustrate, in the case of:
- Fertility / IVF: outpatient and day-case services accounted for [X]% of revenues in 2011 and in 2014 for this specialty, i.e. [X].
 - Orthopaedics: outpatient and day-case services accounted for [X]% and [X]% of revenues in 2011 and in 2014, respectively.
 - Oncology: in 2014 HCA derived around [X] **of its oncology revenues** from outpatient and day-case activities, i.e. inpatient care represents [X] of the overall oncology offering.
- 4.104 Both chemotherapy and radiotherapy, which represent the predominant cancer treatment modalities, tend to be delivered as an outpatient or day-case service. Indeed, there are no inpatient facilities at either the Leaders on Oncology facility (on Harley Street) or, at the time of the Final Report, at the Platinum Medical Centre, both of which house day-case chemotherapy facilities. In that regard, the CMA need only look at BUPA's "Chemotherapy at Home" service, which does away with the 'private healthcare facility' altogether, to observe how inpatient care is becoming less relevant to the delivery of cancer services.

Inpatient back-up

- 4.105 As to the issue of requiring inpatient 'back-up', a large (and growing) proportion of outpatient and day case procedures do not require any inpatient 'back-up'. The CMA has not distinguished between HCA's outpatient/day case services which require inpatient back-up and those which do not, and it has therefore given a very unbalanced picture of the market. It is unfair for the CMA to ignore outpatient/day case competition across the whole spectrum of HCA's treatments.
- 4.106 Even if inpatient care is required at a later (or earlier) stage in the patient's treatment pathway, consultants would be free to refer such patients to other inpatient hospital facilities for that part of the treatment journey. In that regard, the CMA found that it not necessarily a relevant customer benefit to remain within a single healthcare provider's treatment pathway (see Appendix 11.1, paragraph 59, Report).
- 4.107 For example, patients can be "transferred out" for NHS emergency care should such a need arise. The NHS cannot and does not discriminate against a private patient needing NHS emergency care. In the case of London, there is no shortage of nearby NHS hospitals where such patient could be directed.
- 4.108 It is therefore unreasonable for the CMA to exclude outpatient and day case centres from its assessment of competitive constraints, particularly as the CMA includes all HCA's own outpatient and day case services (including revenues and admissions) in its competitive assessment.

New entry in ambulatory care

- 4.109 There has been a growth in recent years of ambulatory day case and outpatient clinics in Central London, performing surgical procedures which previously required an inpatient stay, and HCA is facing growing competition from these providers. Over the last 12 months, there have been new entrants, which indicate the ease with which new providers are able to enter the market at relatively low cost:
- The London Claremont Clinic near Harley Street opened in 2014, and provides adult and paediatric care in over 15 specialities including cardiology, oncology and gynaecology, with over 35 member consultants.⁹⁸
 - A new outpatient and day case clinic, the Hadley Wood Hospital, has opened in 2014/15 in North London (High Barnet).⁹⁹ It is owned and managed by a team of local consultants, and includes cancer screening and treatment. The venture, started up by a group of doctors, has sought expressions of interest in a joint development from hospital operators. HCA believes the plans involve the subsequent addition of inpatient capacity to the facility.
 - One Healthcare, a new private hospital group backed by healthcare investor, Octopus, has announced plans to open a chain of surgical and diagnostic centres, **across the UK**, starting with Ashford, Kent.¹⁰⁰ The business model will replicate the prevalent ambulatory care model in the US. The first hospital in the chain will

⁹⁸ Refer to www.londonclaremontclinic.co.uk for details, accessed 1 May 2015.

⁹⁹ See The Barnet Society article "New private hospital for High Barnet", 20 June 2014; refer to <http://barnetsociety.org.uk/component/k2/new-private-hospital-for-high-barnet> for details, accessed 1 May 2015.

¹⁰⁰ See One Healthcare, Home Page; refer to <http://www.onehealthcare.co.uk/> for details, accessed 1 May 2015 and LaingBuisson's Healthcare Market news (HMn), April 2015, Vol 19, Issue 3.

house five operating theatres and is expected to offer "*complex surgery requiring an overnight stay*" as well as focusing on a core of routine procedures. Chief Executive for One Healthcare stated that: "*We see this as the future of acute surgery and medical care as proven in other health economies*". Construction has commenced on the new "One Ashford Hospital", with launch scheduled for January 2016.

(8) International competitors

- 4.110 HCA is also subject to competition from overseas healthcare providers. The CMA's finding (paragraph 6.406(b), Report) that "*international providers do not constrain HCA's actions with regard to range and quality (and price) for its UK private business*" is incorrect. It ignores the fact that approximately [X]% of HCA's patients in the UK are from abroad, and that HCA competes with major overseas hospitals for this segment of its business.

Importance of overseas patients

- 4.111 Overseas patients are an important source of revenue for HCA,¹⁰¹ compared to (paragraph 2.30, Report) the 3% of overseas revenues achieved across the UK private healthcare sector as a whole. Some HCA clinical facilities and services (particularly high-acuity, complex procedures) are even more dependent on overseas patients: for example, [X]% of patients to HCA's neurorehabilitation unit at the Wellington Hospital are from overseas. The need to attract [X] of patients from abroad is an important driver of HCA's investment decisions. [X].
- 4.112 There are a wide range of private hospitals overseas which compete for these patients. Competitors include: the Mayo Clinic (US), Cleveland Clinic (US), Gleneagles Medical Centre (Singapore), John Hopkins (UK and Singapore), Asklepios Klinik Barmbek (Germany), Fortis Memorial Research Institute (India), and many others in the Middle East and Far East. These providers impose further pressures and incentives on HCA to invest in its facilities, and improve quality and clinical outcomes, which benefits HCA's domestic and international patients alike.
- 4.113 The CMA gave two reasons for disregarding international competition, neither of which is justified.
- 4.114 First, the CMA states (paragraph 6.406(b), Report) that "*while the aim of attracting international business may provide HCA with an additional rationale for expanding its range or improving its quality, such range and quality decisions are not indicative of the strength of the competitive constraints faced by HCA with respect to its UK private business.*" This is wrong. The competition from overseas providers – which the CMA accepts creates "*an additional rationale*" for HCA to invest in its services – results in improved facilities which inure to the benefit of both overseas and UK patients. [X]. The same services are accessed by all categories of patients. The competitive constraint from overseas providers does therefore affect HCA's UK private business.
- 4.115 Second, the CMA refers to the fact that "*it is significant that only a very small number of the business cases took into consideration business from abroad and that not a single business*

¹⁰¹ This is also true when comparing HCA to other Central London hospitals. Table 2.1 of the LaingBuisson Report compares the revenue from overseas patients of different London providers. HCA derives a significantly higher proportion of its turnover from overseas patients than most other Central London operators, with the exception of Great Ormond Street (80% of revenue) and BUPA Cromwell (40%).

case being reviewed mentioning competitors from abroad (as opposed to local competition for international business)." HCA refers again to paragraphs 4.20 to 4.421 above which set out its criticisms of the CMA's reliance on the business cases and its failure to carry out its own analysis of competition. In any event, this finding is incorrect:

- [REDACTED].
- [REDACTED].
- [REDACTED].

4.116 The CMA also argued (footnote 370, Report) that *"we have not seen evidence of HCA's insured patients in the UK considering international providers as alternatives to HCA"*. The CMA has misunderstood the nature of the competitive threat from overseas providers. HCA is not suggesting that UK PMI patients would travel abroad for treatment, but rather that HCA's overseas patients who are prepared to travel internationally for treatment have alternative providers either in their home or other jurisdictions. The international competition is for these patients, who make up [REDACTED] of HCA's business. While clearly HCA has a number of local competitors which drive HCA's investment and pricing decisions, international competitors also play an important role in ensuring that HCA's offering is as competitive as it can be, and as such should be included in the CMA's competitive assessment.

Expansion of overseas competitors

- 4.117 Since the date of the Report, there has been further growth and expansion of overseas competitors. Two recent articles¹⁰² in the journal "Independent Practitioner" drew attention to the increasingly competitive market arising from international competition and the importance for London providers to position themselves to benefit from medical tourism. One of the articles notes: *"Emerging competition to the UK includes South Korea, whose representative gave doctors and managers a flavour of the country's strategy for international patients. Mr Philip Kim said the number of overseas patients there had risen from 60,000 to 101,000 in 2009 to 159,460 in 2012, and the US was now sending nearly as many patients there as China."*
- 4.118 There is considerable investment in new hospitals in the Middle East which are to open in the next one to two years. The Cleveland Clinic is launching a new 364-bed hospital in Abu Dhabi which will target UAE patients *"reducing the need for patients to travel abroad for treatment"*. Other new projects currently under development include the Dubai Investment General Hospital (160 beds), United Eastern Medical Services (140 beds), Khalifa City Hospital (250 beds) and the Medanta, Dubai (250 beds). As more of those projects come to fruition, HCA will face even greater competition for its overseas patients. HCA's investment strategy, which is geared towards the growth and expansion of highly complex tertiary procedures, is shaped by this increasingly competitive international market.
- 4.119 Indeed, some of the new investment in the Middle East is from UK healthcare providers. The NHS PPUs in particular have shown entrepreneurial flair in developing local facilities in the Gulf region to attract international patients: Moorfields has established a successful eye hospital in Dubai; and Great Ormond Street has formed a partnership with the Dubai and Kuwaiti authorities to provide local paediatric services. Both initiatives have shown that the PPU competitive threat is not just for HCA's UK, but also international, patients.

¹⁰² "Harley Street dominion under threat", Independent Practitioner, February 2014; "Breaking out of the enclave", Independent Practitioner, April 2014.

(9) Shares of supply

- 4.120 The CMA's finding that there are weak competitive constraints in Central London largely rests on HCA's alleged share of supply. These are at best very crude measures of market power, and particularly inappropriate in a market where firms compete to innovate and improve their offer. The CMA has not properly assessed the competitive constraints on HCA's business, and in any event there are a number of serious errors in the CMA's approach to measuring HCA's share of supply in Central London.

Revised 2013/2014 figures

- 4.121 The CMA's calculations were based on 2011 data, which is now nearly four years out of date. In **Annex 6**, HCA provides a comparison of the CMA's 2011 data for bed capacity and revenue shares against the updated figures in the LaingBuisson Report. The CMA will need to update its shares of supply based on the most recent data available.
- 4.122 Using the CMA's own geographic and product market scope, on the basis of the updated figures in the LaingBuisson Report, HCA's share of supply in terms of both capacity and revenue on a "like for like" basis has reduced since 2011:

	2011	Current¹⁰³
Capacity (bed)	46.5%	41.4%
Revenue	[X]%	50.4%

- 4.123 There has been an increase in the bed capacity of other private hospitals since 2011. The CMA will have to take the updated figures into account in assessing the total non-HCA capacity which is available to PMIs which wish to switch from HCA. The total volume of alternative bed capacity available is now even greater than in 2011.

PPU growth

- 4.124 There has been significant growth by PPUs since 2011. The LaingBuisson Report states that PPUs currently account for **23%** of Central London hospital revenue, compared to the CMA's figure of just 14% in 2011; and that PPUs have just over **25%** of inpatient beds, compared to the CMA's estimate of 17.2% in 2011.¹⁰⁴ This confirms the continued growth trajectory of PPUs in Central London.

Errors in calculating shares

- 4.125 As HCA has previously submitted, the CMA mistakenly excluded a number of specialist PPUs in its share of supply calculations, including in particular the Great Ormond Street Hospital PPU. This competes directly with HCA's paediatric services at HCA's hospitals, including the Portland Hospital for Women and Children and the Harley Street Clinic. Other exclusions are Moorfields Eye Hospital PPU and the National Hospital for Neurology and Neurosurgery, despite the CMA's inclusion of HCA's ophthalmology and neurology/neurosurgery admissions and revenues. These competing facilities should all be included in the CMA's share of supply estimates.

¹⁰³ The revenue shares in the LaingBuisson Report are derived from 2013 annual accounts, and will require further updating once 2014 annual accounts become available.

¹⁰⁴ LaingBuisson Report, page 39.

- 4.126 The CMA's share of supply calculations also mistakenly included service lines in which HCA faces competition from a wider set of competitors than those considered by the CMA. For example:
- The CMA has included HCA's fertility/IVF activities at the Lister Hospital, but excluded specialist rival fertility clinics in Central London.
 - The CMA has included HCA's neuro-rehabilitation admissions at the Wellington Hospital, but has disregarded specialist neuro-rehabilitation providers which compete directly with HCA.
 - The CMA included HCA's paediatric and ophthalmology admissions but excluded private patient activity from key competitors such as Great Ormond Street Hospital and Moorfields Eye Hospital.
- 4.127 As discussed in paragraphs 4.98 to 4.109 above, the CMA failed to take account of the competitive constraints from outpatient and day case-only providers in its competitive assessment. Furthermore, the CMA cannot logically include HCA's outpatient/day case activities in its share of supply calculation but exclude other outpatient/day case providers. As noted above, the CMA has not distinguished in the shares of supply between outpatient/day case treatments which require inpatient back-up, and those that do not. When considering total admissions and total revenue, to ensure fairness and consistency the CMA should include all outpatient/day case providers in Central London. Similarly, it is meaningless for the CMA to state that HCA has 54.7% of all consulting rooms,¹⁰⁵ when the CMA excluded the consulting rooms of many independent outpatient/day case providers.
- 4.128 The CMA contended that HCA has a 67% share of critical care level 3 ("CCL3") beds.¹⁰⁶ This figure however is wrong:
- (i) It is misleading to exclude all CCL2 beds and only consider CCL3 beds. A CCL2 bed can be readily converted into a level 3 bed where there is an existing critical care unit. There have been a number of examples of hospital providers upgrading from a CCL2 to CCL3 with low investment and within a short period of time (as BMI Blackheath has done recently). By only considering CCL3 beds, the CMA presented a distorted and inflated account of HCA's position in the market.
 - (ii) The CMA has failed to include the CCL3 capacity of NHS PPUs. The CMA acknowledges (paragraph 6.251, Report) *"we are aware that the NHS critical care units may be used by all patients and that there are agreements in place between private operators and NHS hospitals for that purpose."* The CMA explained that it is nevertheless excluding PPU critical care capacity because *"the NHS prioritises its own patients and that, to the extent that having critical care units represents an element of differentiation between private providers (for both PMIs and patients), as HCA claimed, it is appropriate to calculate shares among private providers which have critical care."* However, while this may have been an issue in the past, there is no evidence that PPU patients are currently encountering any difficulty in gaining access to NHS CCL3 beds. HCA is not aware of any instances in which PPU patients are being turned away from NHS CCL3 units because of a lack of capacity. On the contrary, PPUs are now

¹⁰⁵ Report, Appendix 6.10, Table 11.

¹⁰⁶ *Ibid.*

aggressively marketing themselves as offering the full back-up of a large NHS hospital, which is combined with the convenience of a dedicated private wing. The CMA is able to obtain from NHS Trusts estimates of average occupancy rates of PPU patients in NHS ITUs. It is therefore wrong to exclude PPU critical care capacity and it artificially inflates HCA's share of supply in a way which is meaningless. Furthermore, to the extent that the CMA acknowledged that CCL3 beds represent an element of differentiation, any market share information amongst private providers should only be considered as evidence of a quality differential in favour of HCA as opposed to anything indicating market power. CCL3 facilities can easily be obtained by investing. To use this information as in any way informative of market power, rather than as evidence of successful differentiation through investments driven by competitive forces, is perverse.

- 4.129 Similarly, by the same reasoning the CMA should include the NHS theatre capacity and consulting rooms which are available to PPUs. As noted above, for example, the Royal Brompton is setting-up an outpatient facility in Harley Street which will compete directly with HCA.

Capacity share

- 4.130 HCA's share of bed **capacity** in Central London is currently 41.4%. The much higher estimates based on share by **admissions** and by **revenue** are misleading for a number of reasons:
- (i) The CMA stated that (paragraph 11.107, Report) *"the key factor in determining the effectiveness of the divestiture remedy would be ensuring that non-HCA hospitals are able to absorb insurers' volumes currently treated at HCA hospitals across the full range of specialties"* and that therefore *"we consider rivals' spare capacity to be the most appropriate measure to consider"*. The share of alternative capacity available in the market indicates the extent to which PMIs are able to switch policyholders to non-HCA hospitals.
 - (ii) The CMA stated without explanation (paragraph 11.107, Report) that *"we have not been able to obtain robust data on spare capacity."* This is wrong, since the CMA is able to access data relating to total beds, operating theatres, and consulting rooms. The CMA also has data relating to CCL3 beds, and as stated above, it should include the CCL3 beds, operating theatres and consulting rooms available in NHS hospitals.
 - (iii) Shares by admissions or revenue are misleading because a hospital operator which competes more successfully, for example on quality and choice of services, will attract a higher proportion of patients. As the CMA itself recognised, HCA is a high-quality provider and has successfully attracted patients by developing high-quality facilities with a focus on high-acuity, more complex cases. Measuring shares by admissions or revenue rather than capacity provides a misleading picture of the market strength of a particular operator.
 - (iv) Furthermore, the share of revenue is distorted by quality/case mix differentials. The average revenue per patient is substantially influenced by the type, quality and complexity of services provided. HCA's share of revenue is likely to be biased by differences in the complexity of its services and in a mix of complexities

and comorbidities across individual patients receiving apparently similar treatments. [REDACTED].

PMIs' ability to switch

- 4.131 HCA has previously provided evidence to the CMA to indicate that there is sufficient existing non-HCA capacity in Central London to absorb all of the PMI patients treated at HCA hospitals: see paragraphs 9.5 and 9.6 of HCA's submission on horizontal competitive constraints dated 28 June 2013.
- 4.132 HCA pointed out that in respect of its Central London hospitals, in 2012, the peak number of BUPA inpatients on a given day was [REDACTED] patients and the peak number for AXA-PPP was [REDACTED].¹⁰⁷ The average number of inpatients in (level 3) ITUs was very small – [REDACTED] for BUPA, and just [REDACTED] for AXA-PPP. These figures have not changed materially in the intervening period. In 2014, HCA had a peak number of [REDACTED] BUPA inpatients on a given day, with [REDACTED] BUPA inpatients on an average day. In respect of AXA, on an average day in 2014, HCA had [REDACTED] AXA-PPP inpatients and a peak number of [REDACTED] AXA-PPP inpatients on a given day. The average number of inpatients in a level 3 ITU was just [REDACTED] for BUPA and [REDACTED] for AXA-PPP.¹⁰⁸
- 4.133 HCA informed the CMA that there was already likely to be sufficient alternative capacity, even during peak times, available at other private hospitals and PPUs in Central London for these patients to be accommodated. In any event, the more likely scenario is that an insurer would delist a selection of a provider's hospitals, not all of them, further reducing the impact on its subscribers.
- 4.134 The CMA's sole response to this (paragraph 6.250, Report) was as follows: *"We note that HCA's analysis takes no account of the existing number of patients in rival hospitals (reducing the amount of available capacity), the availability of consultants to perform procedures and the capacity situation at peak times of year, so in our view this analysis does not demonstrate that substitution between HCA and non-HCA hospitals is feasible for BUPA and AXA-PPP."*
- 4.135 However, the CMA's response is wholly inadequate:
- The CMA recognised in paragraphs 5.29 and 5.30 of the Report that there is substantial spare capacity in the private healthcare sector which is likely to incentivise supply-side substitution.
 - In paragraph 4.8 of the Provisional Findings, the CMA referred to under-utilisation of capacity and at paragraph 7.5(d) noted that consultants have no difficulty accessing hospital facilities.
 - The CMA clearly stated in paragraph 6.187 of the Report: *"our approach to capacity constraints is that unless we have specific evidence that a rival is capacity constrained, if we see evidence to suggest it is a close competitor, we assume it has capacity to support a delisting by an insurer of the focal hospital. This is consistent with ... data we have seen on excess capacity."* Consequently, the CMA

¹⁰⁷ HCA Response to Provisional Findings, paragraph 7.56; see also paragraph 9.6 "Private healthcare in central London: horizontal competitive constraints", 28 June 2013.

¹⁰⁸ BUPA and AXA-PPP patient census figures based on 2014 inpatient admissions data across all of HCA's hospital facilities in Central London.

itself has acknowledged that there is a presumption that competitors are able to absorb patients from rival operators.

- [REDACTED].
- The CMA could and should itself have conducted an analysis of the utilisation of capacity by HCA's competitors in Central London. The CMA conducted a detailed, two-year investigation and it used its extensive powers to obtain a large quantity of information from hospital operators. The CMA could easily have sought information from other providers about the available capacity in different hospitals.

- 4.136 HCA previously submitted (paragraph 7.56, Response to Provisional Findings) that on the CMA's provisional figures for bed capacity in Central London (2011),¹⁰⁹ spare capacity at peak times would only need to be [REDACTED]% across non-HCA facilities to absorb the [REDACTED] of BUPA patients within HCA hospitals on a given day in 2012, and [REDACTED]% to absorb the [REDACTED] AXA-PPP patients. Using the 2014 patient data (see paragraph 4.132 above), and updated capacity information (provided at Annex 6), the percentage of spare capacity needed to absorb the peak number of patients is only [REDACTED]% and [REDACTED]% for BUPA and AXA-PPP patients, respectively.¹¹⁰ It is highly likely that HCA's competitors retain at least this level of spare capacity, even during periods of peak utilisation.
- 4.137 There is also nothing to suggest that the availability of consultants would be an issue. The CMA has not identified any barriers to entry with regard to the provision of consultants within hospitals, switching costs are low, and in any event if BUPA or AXA-PPP re-directed patients this would be accompanied by a consultant drag effort whereby HCA consultants would move to rival facilities to treat all their patients.
- 4.138 The CMA referred (paragraph 11.107, Report) to the fact that HCA charges higher prices and infers from this "*an indication of the lack of spare capacity at HCA's close competitors*". The CMA has no evidence that HCA charges higher prices, and its original IPA has been withdrawn. In any event, no assumptions can be drawn from the IPA about the lack of spare capacity within the market place. If the CMA believes that there are capacity constraints which prevent major PMIs from switching to alternative hospitals, the CMA has a duty to test this by gathering the relevant capacity data from the providers.
- 4.139 Furthermore, the issue of the availability of spare capacity is clearly not an issue for PMIs of a smaller size compared to BUPA and AXA, who have a smaller number of insured patients and therefore are in a position to switch without any issues.

Inconsistency with LOCI findings

- 4.140 A clear indicator that something is awry with the CMA's share of supply calculations for HCA is the CMA's LOCI findings for HCA's Central London hospitals. The CMA adopted a set of "conservative" fascia and market share filters (using its LOCI findings) to identify "hospitals of potential concern". It set these filters at a deliberately low level. The CMA noted:

"We considered it important that this initial filtering exercise was conservative so that we did not overlook any hospitals that may be a potential concern" (paragraph 21, Appendix 6.5, Report).

¹⁰⁹ These figures were based on the CMA's Provisional Findings.

¹¹⁰ See Annex 6 for details of LaingBuisson's capacity data.

- 4.141 The CMA applied this filtering exercise to each of HCA's hospitals. If the CMA's share of supply findings were correct, one would reasonably expect all of HCA's hospitals to exceed these conservative market share thresholds. However, the precise opposite occurred. The CMA's findings were that the London Bridge Hospital and the Princess Grace (ironically, the two hospitals earmarked for divestiture) did not trigger any of the filters for hospitals of potential concern. To emphasise, they raised no concerns at all on the basis of conservative filters. In fact, the average weighted market share was [X]% and [X]% for the London Bridge Hospital and the Princess Grace Hospital, respectively. Moreover, HCA's other four hospitals were only marginally over the [X]% market share threshold. These market share findings, which take into account **actual choices** being made by patients, are wildly different to the share of supply figures derived by the CMA's North/South circular cut-off points. If anything, the CMA's LOCI findings must serve as an 'indicator' that the CMA's geographic market (and resulting share of supply calculation) is wrong and requires re-assessment.

5. PMI BARGAINING POWER

- The CMA acknowledged that PMIs and hospital operators bilaterally negotiate insured prices and other terms. However, the CMA did not apply a formal bargaining model.
- As a result, the CMA missed important aspects of the determinants of bargaining outcomes. Namely the CMA's decision to focus on PMIs' alternatives in bilateral negotiations with hospital operators including HCA is not supported by the theoretical and empirical literature on bargaining.
- 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.
- The strength of the PMIs' bargaining positions is twofold: first, evidence suggests 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.
- The BMI/BUPA delisting incident has now conclusively shown that BUPA has the power to delist a significant number of hospitals without incurring any serious damage – any reputational damage has been merely temporary, and BUPA's profits have increased over the last two years.
- All the PMIs have developed restricted network products which are becoming increasingly popular with policyholders in central London.
- Open referral products are rapidly gaining ground and both BUPA and AXA-PPP intend that Open referral should become their principal PMI product for both corporates and self-pay patients.
- The PMIs have also been further developing service line tenders, for example BUPA has recently unveiled a specialist network of chemotherapy providers.
- The PMIs have continued to use their bargaining position to extract major discounts from HCA for its new facilities.
- The evidence shows that PMIs are able to divert substantial numbers of policyholders to non-HCA hospitals.

(1) CMA's findings

5.1 The CMA's Report came to the following conclusions about the bargaining power of PMIs and hospital operators in negotiating insured prices:

- The CMA noted (paragraphs 6.278-279, Report) that both the PMI market and the private hospital market are highly concentrated, and that *"neither the hospital operators nor the PMIs appear to be 'price takers'"*.
- The CMA stated (paragraph 6.331, Report) that both sides are mutually dependent on each other and had *"some degree of bargaining power"* which would depend on the strength of each party's outside option, varying from case-to-case.
- Despite acknowledging the importance of the outside option of each party on the bargaining outcome, the CMA concluded that it was appropriate to focus its analysis on the outside option of PMIs.¹¹¹
- The strength of an insurer's outside option, for example, to delist or not recognise hospitals, depends (paragraph 6.324, Report) on the *"insurer's ability to divert patients away from the delisted hospital or the operator in the case of a full delisting"*, and therefore on the availability of alternative providers and alternative facilities in the relevant area.

¹¹¹ *"While the bargaining outcome depends on the outside options of both PMIs and hospital operators, the focus of our analysis has been on the former"* (paragraph 6.285, Report).

- In Central London, the CMA relied on the IPA to support its conclusions that HCA faces weak competitive constraints in Central London and (paragraph 6.488, Report) *"support our hypothesis that local substitutability plays a role in determining insured price outcomes."*
- The CMA stated that its divestment remedy was designed (paragraph 11.68, Report) *"to facilitate the switching by insurers away from the remaining HCA hospitals"* and (paragraph 11.73, Report) to *"release shares of supply within key specialisms to competitors to enable PMIs in particular to offer policies without HCA."*

5.2 The CMA did not properly evaluate the bargaining power of PMIs and their outside options specifically in relation to HCA in Central London:

- It did not pay due consideration to the important role of how the bargaining surplus in bilateral negotiations is shared between PMIs and hospitals. As shown in the discussion that follows, this means that even if lower local market concentration achieved by its divestment remedy could be linked to stronger outside options for PMIs (as the CMA has suggested in paragraphs 6.285 and 11.107-11.108 in the Report), 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.
- The CMA has ignored important evidence about the overall bargaining position of the PMIs, including their outside options, the strategies which they have successfully used in contract negotiations, and the degree to which they have been able to divert patients to alternative providers. The CMA can in any event no longer rely on the IPA to support its conclusions about insured price outcomes, and must re-examine the evidence which HCA has submitted concerning the constraints which PMIs are able to impose in price negotiations.

5.3 Furthermore, both alternative hospital supply and PMI "managed care" strategies such as Open Referral have developed even further since the date of the Report, significantly strengthening the ability of PMIs to divert patients away from HCA's hospitals.

FIPO judgment

5.4 HCA also refers the CMA to the Tribunal's recent judgment in *Federation of Independent Practitioner Organisations ("FIPO") v CMA*, 29 April 2015. FIPO's grounds of challenge were dismissed, but one member of the Tribunal's panel, Dermot Glynn, issued a dissenting judgment which has implications for the CMA's investigation of PMI bargaining power in this remittal investigation.

5.5 Mr Glynn is a member of the Tribunal and a highly respected and experienced economist. Although the Tribunal's majority decision was that Mr Glynn's judgment *"involves a departure from the rationality approach"* in a judicial review and involves an analysis which *"goes into the merits of the case beyond what is appropriate for the Tribunal on a challenge under section 179 of the 2002 Act"*, his comments are nevertheless important in the context of the present remittal, in which the CMA has an obligation to reconsider the merits of its AEC findings.

- 5.6 Mr Glynn emphasised the importance of the CMA's investigation into the purchasing power of PMIs. He commented that these *"issues are very important for the development of healthcare in the UK"*. Although his comments relate to PMI purchasing power over consultants, the same point applies in relation to PMI bargaining power over hospitals. This has not been given sufficient emphasis in the CMA's initial investigation.
- 5.7 Mr Glynn explained that PMIs are *"the most important source of revenue for the private sector"* and highlighted the level of concentration in the PMI market. Mr Glynn stated that *"the CMA's decision not to find an AEC in the purchasing power of the PMIs is therefore a major matter [...] for the system as a whole"* (paragraph 75, FIPO judgment). Mr Glynn has also expressed the view that the purchasing practices of the PMIs, which include fee-capping and top-up fee restrictions, have resulted in a significant reduction in choice indicating an AEC which, he considered, the CMA should have investigated further. As discussed below, the PMIs' increasing interference in the patient treatment pathway impacts not only on consultants but also on the hospitals at which they practise, and therefore also requires consideration in the context of this remittal investigation. More generally the incentives that lead PMIs to adopt certain strategies with respect to consultants, which have the potential for consumer detriment, are the same incentives that lead PMIs to deal with hospital operators by exercising their buyer power through strategies that ultimately do harm patients (for example through their choices on recognition and their ability to influence the patient pathways).
- 5.8 This is explicitly recognised by Mr Glynn who has firmly rejected the CMA's view that the interests of PMIs and consumers are aligned. Mr Glynn's analysis supports the submissions which HCA made during the course of the original inquiry: see in particular section 5, HCA's submission supplementing HCA's remedies hearing, 28 February 2014. He states in his dissenting judgment: ***"However, it is equally obvious that PMIs also have other incentives, and that these may sometimes conflict. That is why, as the Report notes, PMIs sometimes steer patients towards the assured or fee-capped consultants (see paras 7.82-7.92) and sometimes threaten to delist consultants on purely financial grounds (see para 7.116). It is also why they sometimes steer patients towards low cost medical solutions (as reported by consultants to the CMA – see Appendix 7.3, especially "interference in clinical pathway") (paragraph 91, FIPO judgment)." Mr Glynn refers to the "fundamental conflicts of interest" affecting PMIs which are commercially incentivised to direct patients to lower cost, lower quality providers in order to reduce costs and maximise profits.***
- 5.9 In the light of this dissenting judgment, HCA urges the CMA to reconsider PMIs' incentives in order to understand the dynamics of the market, the bargaining power which PMIs exercise, its sources (including from concentration in the PMI market), the potential impact this can have on the policyholders, and the effects of any remedies.

(2) The CMA's economic framework

- 5.10 The CMA made several accurate observations about the way in which insured prices are determined. In particular, the CMA acknowledged that:
- Terms of contracts between hospitals and PMIs are determined by bilateral negotiations.¹¹²

¹¹² "Contracts between a hospital operator and a PMI are typically the product of bilateral negotiations where an agreement is reached over price and the terms on which the parties will trade with each other" (paragraph 6.291, Report).

- The outcome of an insured price negotiation between a PMI and a hospital operator (hereafter: the “bargaining outcome”) will depend to some extent on the outside option of each party.¹¹³
- 5.11 The CMA did not set out a formal model of bilateral negotiations between hospitals and PMIs in the Report. The CMA acknowledged that it was unable to determine the relative bargaining strength of hospital operators and PMIs and how they affect the bargaining outcome.¹¹⁴ However, it proceeded to undertake an informal, primarily qualitative, assessment of a subset of the factors that may affect the bargaining outcome.
- 5.12 Despite acknowledging that the outside option of both parties matter, the CMA broadly wrote off the importance of hospitals’ outside options, focussing instead almost exclusively on the outside options of PMIs.¹¹⁵ It did so in the (mistaken) belief that in order to test its one-sided hypothesis – that local concentration in the provision of private healthcare services to PMIs leads to higher insured prices by restricting in some way PMIs’ outside options in negotiations – it needed only to focus on said PMIs’ outside options. In fact, this would only be appropriate in an alternative framework of “posted” prices or “take-it-or-leave-it offers”.
- 5.13 HCA accepts – indeed it informed the CMA¹¹⁶ – that outside options matter for the determination of the bargaining outcome.
- 5.14 However, the CMA was wrong to focus on PMIs’ outside options. In doing so, the CMA implicitly made two assumptions, neither of which is supported by economic theory or the empirical academic literature:
- First, it implicitly assumed that a change in the PMIs’ outside options must lead to a sufficiently large effect on negotiated contracts to justify the CMA’s divestiture remedy (which on the CMA’s reasoning is meant to improve PMIs’ outside options).¹¹⁷
 - Second, it implicitly assumed that how the bargaining outcome is affected by the PMIs’ outside options is independent of other factors related to the overall bargaining position of PMIs and hospitals.
- 5.15 Both the economic theory on bilateral negotiations and the recent empirical academic literature, in combination with the specific features of the UK private healthcare industry, demonstrate that neither of these implicit assumptions can be presumed to hold. We next discuss the implications of the CMA’s implicit assumptions.
- 5.16 The economic theory on bilateral negotiations shows that 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 crucially depends both on what is commonly referred to as the “sharing rule” (put simply, how the surplus available in the context of a negotiation is shared between parties). The CMA did not recognise adequately the important role played by the sharing

¹¹³ These are the best alternative profits that the respective party can earn in the event of either a permanent or a temporary breakdown of negotiations. “In a bilateral bargaining context, the bargaining outcome (e.g. the negotiated price) depends on the alternatives, referred to as outside options, available to both negotiating parties in the event that an agreement is not reached” (paragraph 6.280, Report).

¹¹⁴ “Our analysis of the internal documents and parties’ submissions relating to the conduct of national negotiations does not enable us to determine how their respective bargaining strength affects the bargaining outcome” (paragraph 6.331, Report).

¹¹⁵ “While the bargaining outcome depends on the outside options of both PMIs and hospital operators, the focus of our analysis has been on the former. This is because local competitive conditions in the provision of private healthcare are reflected in PMIs’ outside options” (paragraph 6.285, Report).

¹¹⁶ HCA’s Response to the Provisional Findings, paragraphs 7.4-7.5.

¹¹⁷ Paragraphs 6.285 and 11.107-11.108, Report.

rule, nor did it acknowledge how the sharing rule affects the impact of a change in one party's outside option on the bargaining outcome.

- 5.17 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. Recent empirical academic literature has found that the sharing rule varies widely, both across and within industries. Therefore no a priori assumption on the sharing rule (e.g. a 50-50 split) can be justified; nor, consequently, can any a priori assumption on the size of the effect, if any, on the bargaining outcome of a change in PMIs' outside options.
- 5.18 Furthermore, as demonstrated by the literature on bargaining power, the key determinants of a party's overall negotiating position affect both its outside option and the sharing rule. 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. As noted above, the CMA chose instead to focus almost exclusively on PMIs' outside options. More generally, the CMA did not appear to consider the economic theory of bargaining power in this literature, or acknowledge its findings. It thus erred by simply assuming that an effect of any given magnitude would arise from a given change in the PMI's outside option.
- 5.19 The above insights from the economic literature, combined with evidence from the UK private healthcare industry, suggest that the effect of a change in a PMI's outside option would not have a significant effect on the bargaining outcome.¹¹⁸ The CMA did not provide any arguments or evidence to the contrary. Instead, it simply assumed that the effect would be large enough to justify the likely effectiveness of its divestments remedy (i.e. linking a decrease in local market concentration to an improvement in the PMIs' outside options, and in turn to a more favourable bargaining outcome from the PMIs' perspective).

(3) Delisting

- 5.20 The CMA acknowledged (paragraph 3.80, Report) that the PMI market is concentrated and the top four PMIs account for 87.3% of PMI revenues. However, the CMA has downplayed the ability, particularly of the major PMIs, to delist hospitals, i.e. withdraw recognition in whole or in part of hospital operated facilities, and the leverage which this provides them in pricing negotiations.
- 5.21 As HCA has previously stated, a delisting by either BUPA or AXA-PPP would cause unsustainably large losses to HCA:¹¹⁹
- A BUPA delisting would lead to HCA losing [X]% of its total revenue, and a further [X]% of its revenue as a result of the consultant drag effect.
 - An AXA-PPP delisting would cause HCA to lose [X]% of revenue, and a further [X]% of revenue due to the consultant drag effect.
- 5.22 The CMA acknowledged that BUPA's delisting of 37 BMI hospitals in 2011/2012 was (paragraph 6.312, Report) "*intended to inflict substantial and rapid pressure on BMI in order to achieve a satisfactory renegotiation*". In commenting on the circumstances of this dispute, the CMA concluded that BUPA has also suffered adverse consequences from the incident in

¹¹⁸ As set out in the remainder of this section, and in HCA's previous submission on PMI bargaining in response to the Provisional Findings (Section 7), industry evidence clearly points towards PMIs having a strong overall bargaining position with respect to hospitals, and in particular a richer and more valuable set of outside options.

¹¹⁹ HCA Response to Provisional Findings, paragraphs 7.8 – 7.10.

the form of reputational damage which may have contributed to a loss in market share, and as in the event of a sizeable delisting, both the PMI and the hospital operator would incur "substantial damage". However, this ignores a number of points:

- The fact remains that BUPA was able to exploit its power to delist a large number of BMI hospitals, in order to secure significant discounts in a new three year agreement. This of itself demonstrates BUPA's buyer power to reduce a hospital operator's prices.
- The scale of financial damage which each party is likely to incur is very different. The CMA accepted (paragraph 6.316, Report) that a hospital operator such as HCA would incur a significant loss of revenue and loss of consultants.
- [REDACTED]. Similarly, the loss of business of a smaller PMI would be exacerbated by the loss of consultants, taking all their business to rival operators, which would also lead to [REDACTED].
- Although the CMA alleges that BUPA has incurred reputational damage, its financial performance has improved since its confrontation with BMI, and in 2013 (a year after the delisting) it reported a growth in UK profits of over 120%. For the year ended 31 December 2014, BUPA reported UK profit growth of 25%, with customer numbers up 3%.¹²⁰
- Any alleged loss in BUPA's market share has been minimal. The latest LaingBuisson Report notes that BUPA still has 40% of the PMI market overall.¹²¹ BUPA has not therefore suffered "substantial damage" as alleged by the CMA.
- [REDACTED].

5.23 The CMA stated (paragraph 11.155, Report) that derecognition of an HCA hospital would not necessarily make a hospital unviable because "*in central London, we thought that the existence of a significant level of demand from both the overseas and self-pay markets would allow a hospital to maintain its viability if it did not obtain recognition from one of the major insurers.*" However, this is incorrect:

- (i) [REDACTED].
- (ii) [REDACTED].
- (iii) [REDACTED].
- (iv) [REDACTED].
- (v) [REDACTED].

5.24 The BUPA/BMI incident involves a full delisting of a number of hospitals, but PMIs may also *partially* delist hospitals e.g. for particular clinical services. BUPA delisted HCA's hospitals for MRI services, causing severe disruption to HCA. It subsequently negotiated terms with HCA for MRI services but at a further [REDACTED].¹²² [REDACTED]. An insurer can therefore target its delisting to secure significant price reductions, without itself suffering any significant loss.

¹²⁰ BUPA, Preliminary results announcement for the year ended 31 December 2014; refer to <http://www.bupa.com/media/1053294/preliminary-announcement-fy-2014.pdf> for details, accessed 1 May 2015.

¹²¹ LaingBuisson Report, page 15.

¹²² HCA Response to working paper "*Private Healthcare in central London: Horizontal competitive constraints*", paragraph 8.7.

- 5.25 Furthermore, the mere *threat* or *prospect* that BUPA or AXA-PPP might not agree terms with a hospital operator creates a powerful constraint on HCA's pricing. [§].
- 5.26 The negotiating leverage that BUPA possesses by virtue of this threat was evident in its recent contractual negotiations with Spire, in the run-up to Spire's recent flotation. BUPA reported in its preliminary results announcement for 2014: *"In November, we signed a ground-breaking long-term agreement with Spire Healthcare on prices for all Spire's hospitals until 2021, commencing on 1 April 2015."*¹²³ BUPA added: *"We intend to work with other hospital providers in a similar way"*.
- 5.27 It was widely reported that the Spire deal was struck following BUPA's aggressive approach to contact negotiations, which represented a threat to Spire's future earnings at the time of its share offer. Specifically, it was noted that *"BUPA is demanding fees cut of up to 15 per cent from private hospitals like Spire. Spire said a reduction in pricing terms could have a "significant adverse effect on the group's revenues or profit derived from BUPA-funded patients" if it could not secure the similar terms."*¹²⁴

(4) Restricted networks

- 5.28 The PMIs also have the ability to create restricted network products, and have successfully developed network policies which exclude HCA's hospitals in favour of HCA's competitors in Central London.¹²⁵
- 5.29 The CMA stated that while it agreed that restricted networks could be expected in a well-functioning market, it did not agree that their presence *"necessarily strengthens PMIs' bargaining power against HCA"*.¹²⁶ The CMA concluded that they would only improve PMIs' outside options *"to the extent that there is enough demand for these networks (i.e. the PMI knows that it can divert a significant portion of its customer base away from HCA)"*,¹²⁷ and that there is a core set of customers in Central London that would be unwilling to switch to a network that did not include HCA hospitals.
- 5.30 HCA agrees that the overall magnitude of the impact of restricted networks on PMIs' outside options is stronger the higher the demand for these networks. However it disputes that their existence does not "necessarily" improve PMIs' outside options. The fact that PMIs are able to market and sell credible products with networks that exclude HCA hospitals shows that they are – necessarily – an alternative that PMIs have already turned to, in favour of including HCA hospitals in the network.¹²⁸
- 5.31 The CMA argued (paragraph 6.325, Report) that: (i) these network products have had only limited take up; and that (ii) many corporate customers in particular require a broad coverage of hospitals. The evidence however indicates that the PMIs have made considerable headway in rolling-out restricted networks [§].
- 5.32 AXA-PPP has embarked on a restricted network strategy in Central London:

¹²³ BUPA, Preliminary results announcement for the year ended 31 December 2014; refer to <http://www.bupa.com/media/1053294/preliminary-announcement-fy-2014.pdf> for details, accessed 1.

¹²⁴ City A.M. article *"Spire Healthcare lays out price rage amid BUPA contract talks"*, 8 July 2014; refer to <http://www.cityam.com/1404782168/spire-healthcare-lays-out-price-range-amid-bupa-contract-talks> for details, accessed 1 May 2015.

¹²⁵ See HCA Response to Provisional Findings, paragraph 7.20.

¹²⁶ Report, paragraph 6.426.

¹²⁷ Report, paragraph 6.426.

¹²⁸ Of course, the more economically viable these policies become – for example, due to increased demand from corporate customers and policyholders – the more valuable this alternative will become in PMIs' negotiations with HCA.

- AXA-PPP expressly acknowledged that *"our networks are central to our competitive ability to negotiate advantageous price terms"*.
- AXA-PPP re-launched its corporate Pathways product (which excluded HCA hospitals, but included other Central London hospitals) in October 2012,¹²⁹ and therefore it is hardly surprising that it stated to the CMA in 2013 that there had been low overall take-up of this product. Despite this, within a short period (2012-13), AXA-PPP reported significant subscriber growth for this corporate product,¹³⁰ a trend that could be expected to continue.
- A launch of Corporate Pathways in any event shows that it is possible for PMIs to market credible PMI products [REDACTED].

5.33 Aviva has also developed its non-HCA network products in recent years:

- The CMA acknowledged (paragraph 172, Appendix 6.11, Report) that Aviva has launched its "Key hospital" list which excludes HCA but includes most other independent Central London providers, and the CMA noted that Aviva *"decided to separate HCA hospitals from the other London hospitals so that it was clear to all its customers that there was a cost premium for them, over and above the other hospital groups"*.
- HCA has submitted evidence which shows the popularity of Aviva's Key hospital list product: in 2009 it accounted for 40% of Aviva's customers, i.e. only [REDACTED]% of Aviva's customers were capable of accessing HCA on the full "Extended hospitals" list.¹³¹ Furthermore, Aviva has confirmed to HCA that there are [REDACTED] lives covered on its Key list in London, with a treatment value of £[REDACTED] which is a very significant level of business from [REDACTED].¹³²
- There is a very significant pricing differential between Aviva's Key list and Extended hospitals list policy. Aviva is offering substantial financial incentives to promote the restricted network policy.¹³³
- Again, the success of Aviva's Key list network shows that it is perfectly possible for a PMI to provide its subscribers with a credible choice of different policies at different prices.

5.34 In the case of PruHealth, the CMA acknowledged (paragraph 170, Appendix 6.11, Report) that PruHealth's network products *"had worked relatively well"* for corporates in London and that PruHealth had reduced HCA's share of its London spend as a result.

5.35 The CMA's own analysis of employers' private healthcare schemes (Appendix 2.1, Report) demonstrated that major corporates in Central London have taken up restricted network policies. The CMA's survey of companies contradicts its finding that there is only limited take-up of these policies. While some investment banks wanted access to HCA hospitals *"not all investment banks took this view"*. Confidential details of customers are redacted, but the CMA cited many examples of major corporates, both within and outside the financial

¹²⁹ HCA Response to Provisional Findings, paragraph 7.21.

¹³⁰ HCA Response to Provisional Findings, paragraph 7.16. See also, paragraph 135, Appendix 6.11, Report.

¹³¹ HCA observations on Aviva's response to the AIS, paragraph 3.4.

¹³² *Ibid.*

¹³³ HCA observations on Aviva's response to the AIS, paragraph 3.5.

services sector, which were content to have restricted network policies which did not allow access to HCA hospitals.

- 5.36 The CMA queried (paragraph 6.426, Report) whether there is "*enough demand*" for restrictive networks, and argues that "*there is a core set of customers (e.g. corporate customers) in Central London that wants HCA's hospitals in their policy network*" and who would not switch to other hospitals. As stated above, the CMA survey of employers indicates that many large corporates are switching to lower cost network policies. The very fact that a significant number of customers are willing to switch (and have switched) constrains HCA's pricing generally.

(5) Open Referral

- 5.37 The CMA acknowledged (paragraph 6.329, Report) the introduction of PMI open referral policies, and noted that these "*may have the potential to strengthen the insurer's negotiating power*" but finds "*little evidence*" that these are in fact doing so. However, the CMA has underestimated the rapid growth of these policies and the leverage which they provide to PMIs to redirect patients away from HCA hospitals.

- 5.38 The CMA's own evidence shows that BUPA's Open Referral product accounts for a substantial share of its policies:

- The CMA's survey of employers' private healthcare schemes (paragraph 46, Appendix 2.1, Report) indicates that nearly 50% of BUPA's policy holders were on Open Referral policies.
- The CMA describes BUPA's Open Referral product (paragraph 7.111, Report) as a "*standard option for BUPA corporate policies*".
- In fact, the market penetration of BUPA Open Referral policies has grown, and in January 2014 BUPA stated that "*more than 8 out of 10 of our corporate clients have chosen Open referral*" and it is therefore now the dominant BUPA PMI offering for both corporate and individual policyholders.¹³⁴

- 5.39 In a recent announcement concerning its preliminary financial results, BUPA claimed:

*In 2014, BUPA Health Funding corporate customers experienced some of the lowest premium increases on record. Because of our success in healthcare cost containment, we were able to reduce or hold premiums level for over half our renewing corporate customers. We continue to lead reform of the UK private healthcare market through our on-going drive to reduce healthcare costs, including those charged by private hospitals...*¹³⁵

- 5.40 BUPA's continuing "success in healthcare cost containment" has had a positive impact on its financial performance. In a BUPA 2014 accounts report assessing performance by each of BUPA's UK businesses,¹³⁶ BUPA noted for its "Health insurance" segment: "*Much needed profit growth year-on-year as a result of initiatives to reduce operating costs and tackle medical inflation.*" BUPA's ability to increase revenues and profits through aggressive

¹³⁴ "Busting the myth around open referral", by Patrick Watt of BUPA, HealthcareInvestor, 15 January 2014; refer to <https://www.healthinsurancedaily.com/health-insurance/product-area/pmi/article435210.ece> for details, accessed 1 May 2015.

¹³⁵ BUPA, Preliminary results announcement for the year ended 31 December 2014; refer to <http://www.bupa.com/media/1053294/preliminary-announcement-fy-2014.pdf> for details, accessed 1.

¹³⁶ BUPA, Full year results presentation, 13 March 2014; refer to <http://www.bupa.com/media/850260/bupa-results-presentation-for-year-end-2013.pdf> for details, accessed 1 May 2015.

negotiation practices and products such as Open Referral is wholly consistent with HCA's submissions concerning the true extent of PMI bargaining power.

- 5.41 AXA-PPP has also developed its healthcare pathway policy which was launched in 2013:
- An article in Health Insurance journal in October 2014 reported that AXA-PPP is receiving an increasing number of Open Referral letters from GPs, as well as expanding the number of the approved consultants who provide services under its Fee-Approved Specialist contract.¹³⁷
 - AXA-PPP has indicated that it intends to double the number of members which it guides to consultants under Open Referral policies from around 15% to over 30% by the end of 2015, and ultimately to over 50%.
- 5.42 Aviva launched its "GuideWell" Open Referral product in 2013. Aviva's press release at the time indicated that in 2012, 18% of all Aviva PMI claims were on an Open Referral basis,¹³⁸ and this proportion is likely to have grown considerably since then.
- 5.43 The CMA's research into employer's private healthcare schemes (Appendix 2.1, Report) confirms that major corporate customers are increasingly opting for Open Referral products in order to contain costs. A number of major banks and other large corporates have given evidence that they were in the process of moving to Open Referral policies in order to reduce the cost of healthcare provision for their staff.
- 5.44 HCA submitted that directional policies such as Open Referral would become the norm across the PMI market. PruHealth's own "Vitality" product is another example of an insurer successfully expanding a new directional product. HCA understands that now **nearly half** of all PruHealth admissions into private hospitals are on an "open referral" basis, that is, under the insurer's Vitality scheme. Such customers will have been "directed" to specific consultants and hospital facilities by PruHealth. This represents a significant change in HCA's contracting landscape with PruHealth.
- 5.45 The CMA rightly noted (paragraph 7.106, Report) that Open Referral policies could distort competition between consultants, *"the greater the number of insured patients on policies that require open referrals from GPs as policyholders are channelled to lower cost consultants."* These policies also impact hospitals, as patients are diverted to hospitals on grounds of cost. HCA provided the CMA with evidence from its consultants about the impact of Open Referral in re-directing patients,¹³⁹ and HCA continues to receive feed-back from consultants about instances where they have lost patients on Open Referral policies.

(6) Service line tenders

- 5.46 Similarly, the CMA has underestimated the extent to which PMIs have created "service line" networks to remove individual services from the scope of their contracts with hospital operators. The CMA acknowledged (paragraph 6.324, Report) that these *"also enable PMIs to operate individual tenders to try to secure better prices"*.

¹³⁷ "Analysis: Open referral and fee-approved specialists", by Tony Levene, Health Insurance Magazine, 30 October 2014; refer to <https://www.healthinsurancedaily.com/health-insurance/product-area/pmi/article451228.ece> for details, accessed 1 May 2015.

¹³⁸ HCA Response to Provisional Findings, paragraph 7.18.

¹³⁹ For example, see HCA Response to Provisional Findings, paragraph 5.46.

5.47 HCA refers the CMA to the fact that there is growing evidence that both BUPA and AXA-PPP have created specialist networks for clinical services in order to secure significant price reductions:

- As stated above, BUPA has created a specialist MRI network and although this now includes HCA, [REDACTED].
- BUPA went out to tender in 2012 for its transaortic valve implementation (TAVI) network, which has excluded HCA. This tender contradicts BUPA's assertion (paragraph 222, Appendix 6.11, Report) that service line tenders only apply to "standardised procedures".
- BUPA's ophthalmology network includes [REDACTED] of HCA's hospitals.¹⁴⁰
- AXA-PPP has created an oral surgery network, [REDACTED].

5.48 Both BUPA and AXA-PPP are in the process of rolling out further specialist networks in important clinical services in order to reduce prices:

- BUPA has developed a special pathway for musculoskeletal services, under which patients are initially directed to BUPA health centres and approved physiotherapists, and once in the BUPA controlled pathway, only referred to designated healthcare providers. [REDACTED]. AXA-PPP has similarly launched its own Musculoskeletal Health Pathway, which removes the GP referral from the pathway and exerts control over the facility at which a patient is provided treatment.
- [REDACTED].

5.49 Although service line networks so far cover a relatively small number of procedures, they account for a significant volume of business and are growing in importance.

(7) PMI recognition of new facilities

5.50 The CMA acknowledged the power of PMIs to withhold recognition of new hospital facilities, but failed to draw the appropriate consequences of this in evaluating HCA's bargaining power. That is, the strong bargaining position held by insurers in respect of new facilities is representative of PMI bargaining power generally.

5.51 In view of the size and importance of PMI business, the CMA recognised (paragraph 6.117, Report) that *"If one or both of the largest PMIs were to decline to recognise a potential new entrant, it would make it difficult for it to enter a local market successfully"*. The CMA also recognised (paragraph 6.328, Report) that *"If the new facility is located in an area where the insurer has alternative providers, the insurer's outside option – i.e. not to recognise (as opposed to delist in the context of national negotiations) – would be strong and therefore the insurer will achieve a lower price."*

5.52 PMIs can, and do, use their power to withhold recognition to secure significant discounts. The CMA referred to "examples" in paragraph 179, Appendix 6.11 of the Report, and HCA has given specific evidence of the cases in [REDACTED].¹⁴¹

- BUPA delayed recognising HCA's New Malden diagnostic centre for a year, [REDACTED].

¹⁴⁰ HCA Response to AIS, paragraph 5.26.

¹⁴¹ HCA Response to Provisional Findings, paragraph 7.4.

- [REDACTED].
- [REDACTED].
- [REDACTED].
- [REDACTED].

5.53 [REDACTED].

5.54 As the CMA is aware, there is a clear precedent in Central London which demonstrates how the failure to obtain recognition from a major PMI would make a new hospital unviable. HCA has provided the CMA with details¹⁴² of the London Heart Hospital, a private cardiac hospital which was launched in the late 1990s, and which was forced to exit the market within two-three years, after failing to obtain recognition from PPP. The decision by PPP not to grant recognition deprived the new hospital of a substantial volume of business and made it financially unviable. The OFT investigated the matter at the time, yet the Report made no mention of this very clear instance of PMI power.

5.55 It may be that the CMA considered that the case is too historic, since it goes back to 2000/2001. However, at the time it sent a very strong signal to the market, affecting investment decisions in Central London for several years afterwards. In any event, it demonstrates the dependence which new hospitals have on PMIs, and the ability of PMIs to exploit this to secure discounts in exchange for recognition.

(8) Other PMI practices

5.56 There are also other practices which PMIs use in order to constrain private hospital operators, all of which have been discussed in HCA's previous submissions:

- BUPA offers cash incentives to its subscribers to use the NHS rather than claim under their policy for certain procedures, in particular cardiac and cancer treatments.¹⁴³ The LaingBuisson Report (page 15) has acknowledged that these incentives are having the effect of directing PMI patients to the NHS in Central London.
- PMIs often "steer" policyholders to alternative consultants and hospitals at the stage of pre-authorisation.¹⁴⁴
- BUPA and AXA-PPP have delisted a significant number of consultants, and this also affects the hospitals at which they practice. HCA understands that PMIs have stated to some consultants that they are only prepared to recognise them if they practice at non-HCA hospitals.
- PMIs can also reduce the scope of PMI cover on grounds of cost. One example concerns BUPA, which in 2012 withdrew PMI cover for obstetric procedures unless the insured mother's life was in danger, which had a significant impact on private procedures at HCA's Portland Hospital (leading to a [REDACTED] in obstetric admissions).

¹⁴² See HCA's Response to Provisional Findings, paragraph 7.13.

¹⁴³ *Ibid.*, paragraph 7.59.

¹⁴⁴ HCA Response to AIS, paragraph 5.33.

5.57 As part of HCA's latest contract with BUPA (which was strictly required to adhere to a BUPA standardised contract), BUPA has included a number of features which have further strengthened its bargaining position:

- [REDACTED].
- [REDACTED].
- [REDACTED].
- [REDACTED].

5.58 PMIs also have the ability to withhold the payment of invoices to put further pressure on a hospital operator. [REDACTED].

5.59 The CMA has accepted that BUPA and AXA-PPP exercise "*significant buyer power*" (paragraph 7.130, Report) over consultants, and are able to use "directional" strategies to redirect patients to lower cost providers. In his dissenting judgment in *FIPO v CMA*, Mr Glynn has indicated his view that this is likely to indicate an AEC on the part of PMIs (see above). The CMA however failed to recognise that this also directly impacts on HCA's hospitals. If PMIs are in a position to "steer" patients away from particular consultants, this has a direct impact on the hospital's business. As discussed above, the principal referral pathway to a hospital is via the consultants, and if patients are being redirected, there is a direct impact on the hospital's patient admissions.

(9) Outside options – capacity

5.60 There is no doubt that PMIs have a number of strategies as outlined above which they can use to divert patients to non-HCA hospitals and therefore to constrain HCA's pricing.

5.61 While the CMA accepted that these strategies provide the PMIs with outside options, it repeatedly fell back on the argument that the *strength* of these outside options depends on the availability of alternative capacity which can absorb PMI patients. The CMA's divestment remedy was designed to ensure (paragraph 11.68(c), Report) that "*post divestiture, the combination of all non-HCA hospitals should be able to offer customers an alternative across all medical specialities*" and that the divestiture package must be "*of a sufficient scale to facilitate the switching by insurers away from the remaining HCA hospitals*".

5.62 The availability of alternative capacity is discussed in more detail in paragraphs 4.132 - 4.133 above. In the context of the assessment of the negotiations between HCA and PMIs, the CMA has failed to recognise that spare capacity in Central London is such that PMIs' outside options at present are strong, and that the CMA's divestment remedies may not materially impact on PMIs' outside options. Specifically:

- The CMA has failed to make any enquiry or undertake any analysis about the extent to which there is alternative capacity in Central London which can accommodate PMI patients.
- HCA has previously provided evidence to the CMA to indicate that there is sufficient existing non-HCA capacity in Central London to absorb PMI patients treated at HCA hospitals. If the CMA had considered this, it would have concluded that [REDACTED].

- [X] – in reality, it is likely that a PMI would need to divert only a proportion of its patients in order to exercise a price constraint, for example by delisting a selection of a provider's hospitals.
- As a result, and given the range of strategies available to PMIs outlined above, even the larger PMIs have valuable outside options in negotiations with HCA.
- In addition, any divestments remedy may not materially improve the (already relatively strong) outside options of PMIs, as there is already the spare capacity available for even a full delisting to be a viable outside option.
- The CMA was using shares of supply as at 2011, and given the growth in the market and the reduction in HCA's market share, there is now likely to be even greater alternative capacity than in 2011.

5.63 Both BUPA and AXA-PPP have submitted evidence to the CMA (paragraphs 54-59, Appendix 6.10, Annex A, Report) that [X] of their patients are fully capable of being redirected to non-HCA hospitals:

- AXA-PPP stated that [X]% of its patients can be redirected, and that it would be cost neutral to AXA-PPP to redirect [X]% of its patients (i.e. there would be no cost consequence if it wholly delisted HCA).
- BUPA stated that it would be able to redirect up to [X]% of BUPA subscribers in HCA hospitals and that it would potentially achieve net price savings once it redirects [X]% or more of these patients.
- These figures demonstrate that PMIs have the ability to redirect [X] of patients away from HCA. This number would be subject to a "multiplier effect" due to consultant drag, whereby consultants decide to move their entire list of private patients to alternative facilities. This means that PMIs have credible strategies, either to delist HCA hospitals or to use "directional" tools such as restrictive networks, Open Referral, and service line tenders, to redirect [X] of their patients to HCA's competitors in Central London.
- In order to exercise bargaining power, PMIs do not need to be able to re-direct all their policyholders, and it suffices that they can move [X] away from HCA, which in itself would inflict significant damage on HCA.

5.64 In the light of the above, it is clear that PMIs' outside options are more valuable than those of HCA, and that this presents a powerful constraint on HCA's pricing.

Annexes

- Annex 1: Updated McKinsey report on NHS sites
- Annex 2: Spire's half-year financial results 2014
- Annex 3: Barts Health NHS Trust contract notice
- Annex 4: Summary of HCA business cases 2004-2014
- Annex 5: NHS Trust private patient income
- Annex 6: Comparison of 2011 and updated LaingBuisson data for capacity and revenue



Spire Healthcare



2014 Half-Year Results Presentation

Thursday 28th August 2014



Presentation Team

Chief Executive Officer



Rob Roger

- CEO of Spire since May 2011, previously CFO from 2007
- Formerly CFO of Tussauds Group, where he successfully grew EBITDA from £34m to £120m and sold the company to Merlin Entertainments Group
- Previously CFO of First Choice and Pizza Hut France

Chief Financial Officer



Simon Gordon

- Joined Spire in July 2011 after 8 years as Group Finance Director of Virgin Active
- During his time at Virgin Active the business grew from break-even to £150m EBITDA operating in 5 countries

H1 Key Highlights – Financial

- Revenue increased 10.5% to £417.2m
- Growth in all payor categories: PMI, Self-Pay, NHS
- In-patient & day case volumes up 9.2%
- Adjusted EBITDA up 9.3% (£79.9m) ⁽¹⁾
- Adjusted operating profit up 7.9% (£57.3m) ⁽²⁾
- PF Adj. EPS of 8.43p ⁽²⁾⁽³⁾



H1 Performance in-line with expectations

Note

- 1) Operating profit, adjusted to add back comparable rent adjustments, depreciation, amortisation and exceptional items, referred to hereafter as "Adjusted EBITDA".
- 2) Adjusted for business reorganisation, corporate restructuring and regulatory & governance costs totalling £11.1m.
- 3) Additional adjustments removing finance costs in the period relating to shareholder loans capitalised on Admission.

H1 Key Highlights – Operational

- Acquisition of St. Anthony's hospital
- Bristol radiotherapy centre opened and reached breakeven EBITDA within two months
- Cardiac catheterisation lab in Cardiff completed
- H1 capacity utilisation at 64% (+4%)
- Two theatre developments to be delivered in H2 2014



Good start to H2, including a successful listing on the LSE

Financial Review

Income Statement – Positive Growth

Key Highlights

- Strong revenue growth across all payor categories
- Adjusted EBITDA up 9.3%
- Adj. Operating profit up 7.9%
- Growth impacted by £3.7m increase in rental costs following 2013 sale & leaseback
- Pro-forma adj. EPS of 8.43p⁽¹⁾
- Finance costs reduced by 10.3% due to reductions in indebtedness

Six months ended 30/06/2014

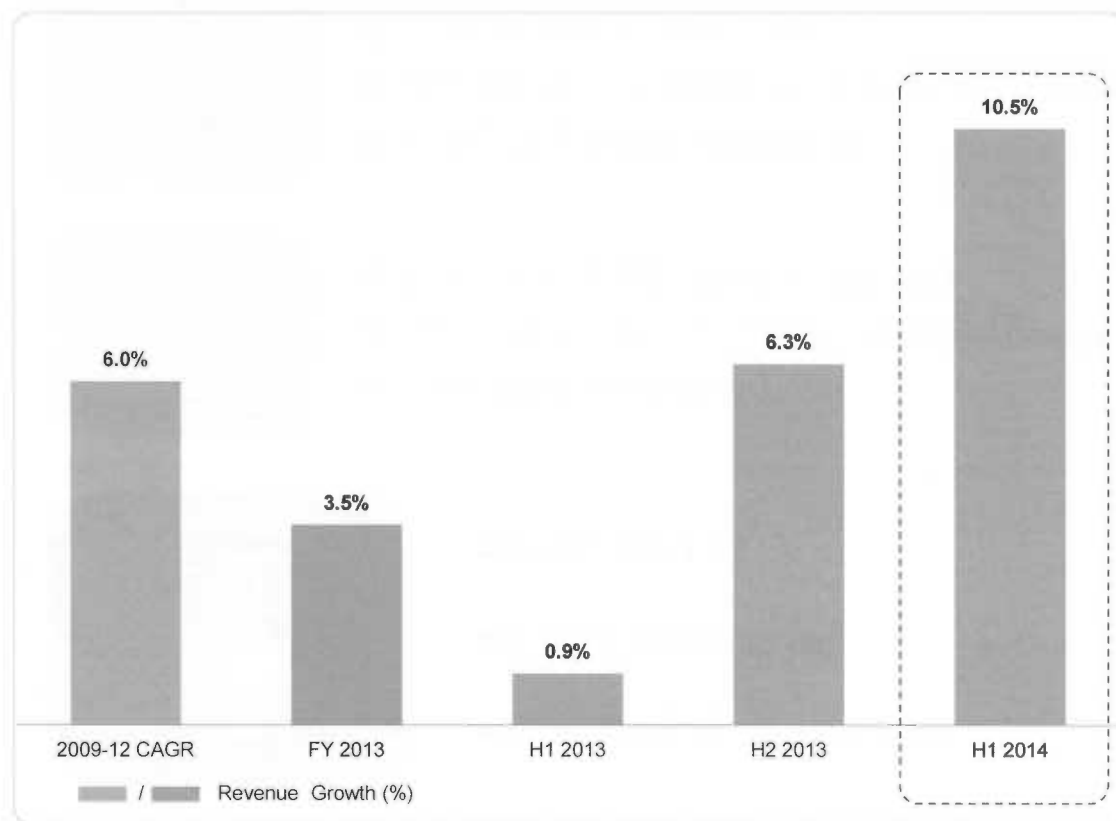
	2014	2013	% Change
	Unaudited	Unaudited	
<i>(£ million)</i>			
Revenue	417.2	377.5	10.5%
Cost of sales	(210.2)	(186.3)	12.8%
Gross profit	207.0	191.2	8.3%
Gross margin	49.6%	50.6%	(1.0%)
Other operating costs	(160.8)	(143.5)	12.1%
Exceptional items included within other operating costs	(11.1)	(5.4)	105.6%
Adj. Operating profit before exceptional items	57.3	53.1	7.9%
Adj. Operating margin	13.7%	14.1%	(0.3%)
(Loss)/profit for the period	(7.8)	148.5	n.m.
Adjusted EBITDA	79.9	73.1	9.3%

Note

1) Calculated as pro-forma profit after tax divided by the number of Ordinary Shares in issue on Admission.

Continued Top-Line Momentum

Strong Recent Revenue Growth...



...Across All Payor Categories

Revenue Growth

PMI	H1 2014	2.5%
	H2 2013	1.6%
	H1 2013	(1.6%)
Self Pay	H1 2014	8.9%
	H2 2013	10.9%
	H1 2013	5.0%
NHS	H1 2014	29.2%
	H2 2013	14.1%
	H1 2013	4.1%

Payor Highlights – PMI

PMI



H1 2014
Revenues ⁽¹⁾

- Revenues up by 2.5% to £214.5m
- Volumes flat at c.62,100
- Rates up by 1.7%

Day Case

- 73.4% of total discharges
- Less complex than in previous year including push into ophthalmology
- Rate increase positive but sub-inflationary

In-Patient

- Strong rate growth ahead of inflation
- Driven by continued operational and capital investment
- Higher complexity of case-load

Out-Patient

- Revenues up by 4.1%
- Investment in facilities and technology driving work from theatre

Payor Highlights – Self Pay & NHS

Self Pay



- Rates declined by 1.0%
- Early 2013 impacted by DePuy hip revision procedures artificially increasing rates masking positive rates improvement in underlying recurring case mix
- Out-patient revenues up 8.9% driven by increase in minor procedures

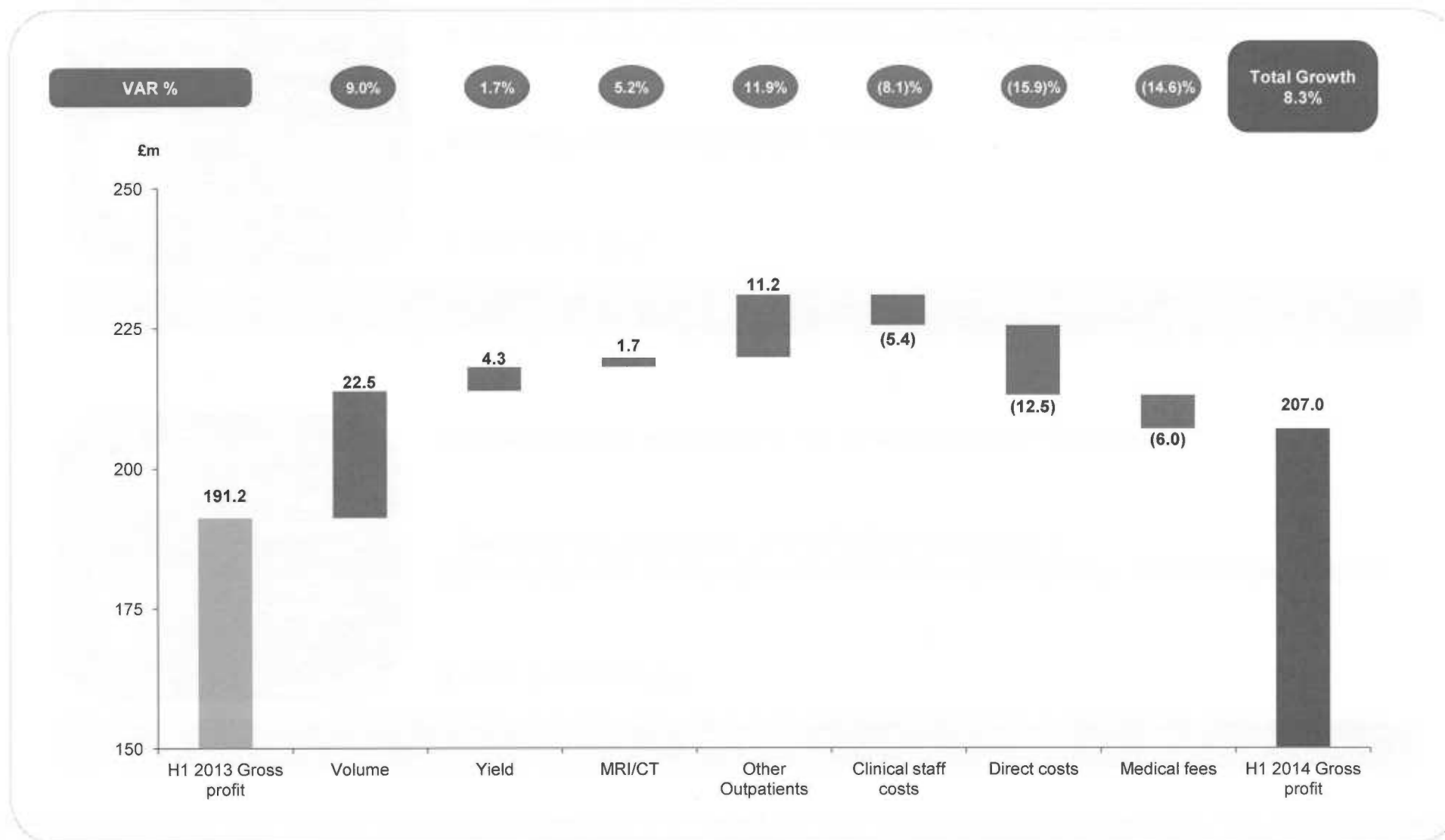
NHS



- Rates up by 2.7%
- NHS tariff reductions of 2% to 3% on average
- Out-patient revenues up 37.3% driven by increase in fees for consultations

Note
1) Excludes other revenues

Gross Profit Growth Breakdown



Operating Costs

	£m	% 2014 Revenues
2013 H1 Other Operating Costs	143.5	34.4%
<i>Movements in the Period:</i>		
Exceptional Items	5.6	1.3%
Rent	3.7	0.9%
St. Anthony's and Radiotherapy	1.2	0.3%
Underlying Operating Cost Increase	6.8	1.6%
2014 H1 Other Operating Costs	160.8	38.5%

Positive Earnings Momentum

Key Highlights

- Strong Adjusted EBITDA growth of 9.3%
- Rent increased by 14.2% to £29.8m
- Cost of sales increased by 12.8%, reducing gross margin to 49.6% (50.6% H1 2013), driven by reduction in NHS tariff and higher % of NHS mix
- Adjusted EBITDA margin of 19.2%
- Exceptional items of £11.1m include partial accrual for sale of Group
- Further exceptional costs related to the IPO will be recognised in H2 2014

Adjusted EBITDA

Six months ended 30/06/2014

	2014	2013	% Change
	Unaudited	Unaudited	
	£m	£m	
Operating Profit	46.2	47.7	(3.1%)
Exceptional items	11.1	5.4	105.6%
Operating profit before exceptional items	57.3	53.1	7.9%
Depreciation	22.6	22.9	(1.3%)
EBITDA	79.9	76.0	5.1%
Comparator rent adjustments			
Pro-rata impact of 2013 Freehold Sale	-	(2.2)	(100.0%)
Washington freehold sale subject to lease	-	(0.7)	(100.0%)
Adjusted EBITDA	79.9	73.1	9.3%
% Margin	19.2%	19.4%	

Strong Cash Flow Generation with High Cash Conversion

Key Highlights

- Positive operating cash flow of £71.0m
- Cash conversion of 88.9% (H1 2013: 37.9%)
- Significant improvement in working capital position
- Excluding acquisition of St. Anthony's, PP&E spend was £33.9m (Including St. Anthony's acquisition - £71.9m)
- Sale of freehold in Spire Washington hospital generated £32.2m of proceeds

Six months ended 30/06/2014

(£ million)	2014	2013	% Change
	Unaudited	Unaudited	
Net cash from operating activities	71.0	28.8	146.5%
<i>Of which:</i>			
(Loss) / profit before taxation	(1.7)	43.8	(103.9%)
<i>Movements in working capital:</i>			
Increase in trade and other receivables	(5.5)	(24.1)	(77.2%)
Decrease in inventories	1.3	1.2	8.3%
Increase/(decrease) in trade and other payables	3.7	(18.4)	(120.1%)
Increase/(decrease) in provisions	2.7	(0.5)	(640.0%)
<i>Cash flows from investing activities</i>			
Acquisition of group undertakings	(38.0)	–	n.a.
Purchase of property, plant and equipment	(33.9)	(17.8)	90.4%
Proceeds from disposal of property, plant and equipment	32.2	701.9	(95.4%)
Interest received	0.1	0.1	0.0%
Net cash generated from / (used in) investing activities	(39.6)	684.2	(105.8%)
<i>Net cash generated from/(used in) financing activities</i>	<i>5.3</i>	<i>(744.7)</i>	<i>(100.7%)</i>
Net increase/(decrease) in cash	36.7	(35.2)	(204.3%)
Cash at end of period	148.2	98.6	50.3%

Maintaining a Robust, Appropriate Capital Structure

Key Highlights

- Primary IPO net proceeds of £255m used to reduce leverage
- All outstanding mark to market derivatives settled at IPO
- Post-IPO leverage target of 3x Net Debt / EBITDA
- Post-IPO Net Debt of £468m ⁽¹⁾
- New long-term facilities in place

	£m
Net debt as at 30 June 2014 (incl. shareholder loans)	1,627.0
<i>Capital restructuring:</i>	
Shareholder loans	(894.0)
Net proceeds of IPO	(255.0)
Net settlement of bank debt and swaps	(11.0)
Proforma net debt as at 30 June 2014	467.0
Annualised H1 EBITDA	159.8
Proforma EBITDA leverage multiple (times)	2.9x

Note

1) £425m debt add £79.6m finance leases less £32m cash less prepaid finance costs £5m.

Financial Outlook & Guidance

Improving Payor Trends: Driving High Single Digit Growth

PMI

- Volume expected to show early signs of recovery in H2 2014
- Overall revenues above recent market trends post-market recovery in 2015

Self Pay

- Revenue growth in line with 2013
- Expected to grow ahead of historic market growth in 2015

NHS

- From H2 2014 revenue growth in-line with historic trends
- Tariff expectations from (2)% to flat over next three years

Costs

- Increased central costs of c. £3m/year (£1.3m in FY14)
- Senior management & employee LTIP costs up to c. £6m/year (£1m for remainder FY14)

Operational Review

Spire's Unique Proposition



Bushey Hospital



Manchester Development



Leicester Hospital



Brighton Hospital

Spire is uniquely positioned to capture a growing share of a rapidly expanding private healthcare market

1

Fast growing market: persistent and growing supply gap

2

Well positioned through well invested and scalable hospitals

3

Culture of excellence valued by consultants, GPs, patients and payors

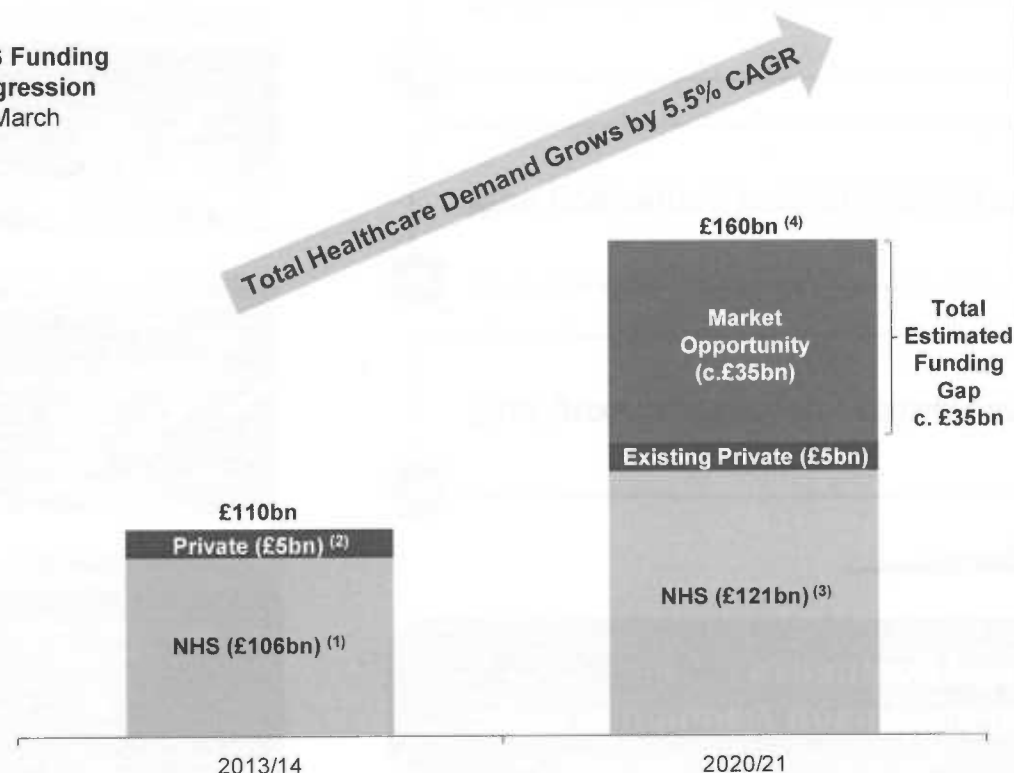
4

Strong track record of growth

Market Overview

Rapidly Growing Healthcare Supply Gap

NHS Funding
Progression
YE March



H1 Highlights

PMI

- Market continues to recover
- BUPA contract negotiations ongoing

Self Pay

- Market continues to grow as economic recovery gains pace
- Focus on top 30 rationed procedures by the NHS

NHS

- Continue to grow presence in NHS market
- Recent political commentary has not affected demand

Note

Source: Laing & Buisson Private Acute Medical Care 2013, PESA 2013, NHS England, Department of Health Annual Report 2012; NHS.

- 1) NHS expenditure excluding capex (i.e. opex) for 2013/14 based on PESA.
- 2) 2013 Independent Acute Medical Hospitals & Clinics market value based on Laing & Buisson.
- 3) Assumes 2% p.a. nominal funding growth for the NHS budget based on NHS estimates.
- 4) Assumes 5.5% p.a. Nominal UK healthcare services demand growth based on NHS estimates.

Operational Review



Acquisition of St. Anthony's

Current Proposition

- A 4 theatre facility with the ability to carry out high-acuity work
- 2 theatres are space constrained
- Low volume of orthopaedic work
- CMA approval expected by the end of September



Stage 1: Plug into Spire Platform

Sept 2014

- Shared service centre and in-house capabilities
- Take out cost base

Stage 2: Reconfiguring the Hospital

2016-18

- Increase from 4 to 6 theatres
- Improve services

Current Trading Performance

- St. Anthony's trading performance in line with expectations

Target Financial Metrics

- £60m total capex (including £38m acquisition cost)
- Target 25% run-rate EBITDAR margin by the end of 2015
- Target 25-30% pre-tax ROCE ⁽¹⁾ by 2018

Note

1) ROCE defined as incremental EBITDAR / Capex investment

Delivery of New Services

Flagship Cancer Centres

Diagnostics > Chemotherapy > Radiotherapy > Cancer Surgery

Recently completed **Radiotherapy Centre in Bristol** allows Spire to deliver entire cancer treatment pathway...

... which is in line with budget and reached EBITDA break-even within two months of opening: expected return 20% (5 year pre-tax ROCE)

- 3 additional sites currently under negotiation

Other Developments

- Cardiac catheterisation lab in Cardiff completed
- Major reconfiguration at Tunbridge Wells
- Five additional theatres added to network increasing capacity by 4% ⁽¹⁾
- Work ongoing on an additional two theatre developments for delivery in H2 2014 (Harpenden & South Bank)

Note
Source: Ambrafund.
1) Including St. Anthony's acquisition.

Projects in the Pipeline

Manchester Development

- New Spire hospital offering broader range of complex surgery and care
- Partnership with Siemens
- Construction to begin in February 2015, subject to planning permission



Announced



2 Further Regional Sites

- Two additional regional sites identified and to be constructed
- Expected opening in 2017



On Track



2 Central London Sites

- Additional sites in central London in early stages of planning
- Potentially opening in 2018



Sites Identified



Multiple Growth Drivers

Near Term

New Spire Developments: Driving Double Digit Growth

Medium Term

St. Anthony's

- £60m capex employed
- Target 25% run-rate EBITDAR margin by end of 2015
- Target 25-30% pre-tax ROCE by 2018



New Theatres

- 10 new theatres over next four years
- £3-5m of capex / theatre
- Typical 3-year pre-tax ROCE of 20-25%



Radiotherapy

- 4+ further sites to be developed by 2017
- c.£12m of capex / site
- Target year 5 pre-tax ROCE of c.20%



New Hospitals

- Manchester + 2 further regional sites opening by end of 2017
- £45m average capex / site
- Target year 5 pre-tax ROCE of 20-25%



Summary

1

Strong revenue growth across all payor groups

2

Strong earnings growth – Adjusted EBITDA up 9.3%

3

Strong balance sheet providing solid platform for further growth

4

Strong market dynamics offering multiple future growth opportunities

Any Questions?

United Kingdom-London: Hospital services

2014/S 159-286272

Contract notice

Services

Directive 2004/18/EC

Section I: Contracting authority

I.1) Name, addresses and contact point(s)

Barts Health NHS Trust
9 Prescott Street
For the attention of: Steven Thomas
E1 8PR London
UNITED KINGDOM
Telephone: +44 2074804621
E-mail: steven.thomas@bartshealth.nhs.uk

Internet address(es):

General address of the contracting authority: www.bartshealth.nhs.uk

Electronic access to information: www.nhssourcing.co.uk

Electronic submission of tenders and requests to participate: www.nhssourcing.co.uk

Further information can be obtained from: The above mentioned contact point(s)

Specifications and additional documents (including documents for competitive dialogue and a dynamic purchasing system) can be obtained from: The above mentioned contact point(s)

Tenders or requests to participate must be sent to: The above mentioned contact point(s)

I.2) Type of the contracting authority

Body governed by public law

I.3) Main activity

Health

I.4) Contract award on behalf of other contracting authorities

The contracting authority is purchasing on behalf of other contracting authorities: no

Section II: Object of the contract

II.1) Description

II.1.1) Title attributed to the contract by the contracting authority:

Private Patients Unit(s) — Barts Health NHS Trust.

II.1.2) Type of contract and location of works, place of delivery or of performance

Services

Service category No 25: Health and social services

Main site or location of works, place of delivery or of performance: Barts Healthcare NHS Trust Sites.

NUTS code UKI12

II.1.3) Information about a public contract, a framework agreement or a dynamic purchasing system (DPS)

The notice involves a public contract

II.1.4) Information on framework agreement

Justification for a framework agreement, the duration of which exceeds four years: Not applicable.

Estimated total value of purchases for the entire duration of the framework agreement

Estimated value excluding VAT:

Range: between 18 000 000 and 50 000 000 GBP

II.1.5) Short description of the contract or purchase(s)

Barts Health NHS Trust is seeking a provider to design, build, finance and operate a private patient facility on one or potentially more of its site(s). The main sites being:- The Royal London Hospital, St Bartholomew's Hospital, Newham University Hospital, Whipps Cross University Hospital and Mile End Hospital. The selected provider will be required to demonstrate considerable expertise and experience of operating a private patient facility offering services that support specialist clinics and consulting rooms, diagnostic and therapeutic scanning, specialist theatres and inpatient care.

Due to the range of options for the delivery of these services, the Trust will look for candidates to bring forward and develop appropriate solutions to meet its needs and requirements for a private patient unit(s) through the competitive dialogue process. The Trust will be able to potentially provide a range of

clinical support services to the successful provider and these will be verified through the competitive dialogue process.

- II.1.6) **Common procurement vocabulary (CPV)**
85111000, 33190000, 33180000, 85144000, 45215100, 33692000
- II.1.7) **Information about Government Procurement Agreement (GPA)**
The contract is covered by the Government Procurement Agreement (GPA): no
- II.1.8) **Lots**
This contract is divided into lots: no
- II.1.9) **Information about variants**
Variants will be accepted: yes
- II.2) **Quantity or scope of the contract**
- II.2.1) **Total quantity or scope:**
- II.2.2) **Information about options**
Options: yes
Description of these options: To be determined as part of the bidding process.
Contract length up to 360 Months.
- II.2.3) **Information about renewals**
This contract is subject to renewal: no
- II.3) **Duration of the contract or time limit for completion**
Duration in months: 360 (from the award of the contract)

Section III: Legal, economic, financial and technical information

- III.1) **Conditions relating to the contract**
- III.1.1) **Deposits and guarantees required:**
The Trust reserves the right to require deposits, guarantees, bonds or other forms of appropriate security.
- III.1.2) **Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them:**
The financing of the private patient unit will be the responsibility of the successful bidder.
- III.1.3) **Legal form to be taken by the group of economic operators to whom the contract is to be awarded:**
The Trust reserves the right to require groupings of contractors to take a particular legal form or require a single contractor to taken primary liability and/or require that each party undertakes joint and several liability. This may include establishing a special purpose vehicle or the formation of a joint venture.
- III.1.4) **Other particular conditions**
The performance of the contract is subject to particular conditions: yes
Description of particular conditions: See procurement timetable in the MOI.
- III.2) **Conditions for participation**
- III.2.1) **Personal situation of economic operators, including requirements relating to enrolment on professional or trade registers**
Information and formalities necessary for evaluating if the requirements are met: Information and formalities necessary for evaluating if the requirements are met: The Trust will evaluate all PQQ responses in accordance with Articles 45 to 50 of Directive 2004/18/EC and Regulations 23 to 25 of the Public Contracts Regulations 2006, and as set out within the PQQ available from the Trust. If there are more eligible bidders than is required, the Trust will, under regulation 18(12) of the Public Contracts Regulations 2006, use the same questions, criteria, scoring and weighting as is already set out in the PQQ to identify those bidders who will proceed to the next stage. Provided that there are a sufficient number of eligible bidders, the Trust will select to proceed through to the next stage of the competition the top eligible bidders.
- III.2.2) **Economic and financial ability**
Information and formalities necessary for evaluating if the requirements are met: Information and formalities necessary for evaluating if the requirements are met: In accordance with Article 47 of Directive 2004/18/EC and Regulation 24 of the Public Contracts Regulations 2006, and as set out in the PQQ available from the address in section I.1.
Minimum level(s) of standards possibly required: Subject to PQQ.
Minimum level(s) of standards possibly required: Hold a licence or meet the requirements to provide Private Healthcare Services in the UK. If you do not have in place a license, please describe the process you plan to employ to gain a licence and your experience in doing so.
- III.2.3) **Technical capacity**
Information and formalities necessary for evaluating if the requirements are met:
Please refer to PQQ
- III.2.4) **Information about reserved contracts**
- III.3) **Conditions specific to services contracts**

- III.3.1) **Information about a particular profession**
Execution of the service is reserved to a particular profession: no
- III.3.2) **Staff responsible for the execution of the service**

Section IV: Procedure

- IV.1) **Type of procedure**
- IV.1.1) **Type of procedure**
competitive dialogue
- IV.1.2) **Limitations on the number of operators who will be invited to tender or to participate**
Envisaged minimum number 3: and maximum number 4
Objective criteria for choosing the limited number of candidates: Objective criteria for choosing the limited number of candidates: Specified in the MOI and PQQ.
- IV.1.3) **Reduction of the number of operators during the negotiation or dialogue**
Recourse to staged procedure to gradually reduce the number of solutions to be discussed or tenders to be negotiated yes
- IV.2) **Award criteria**
- IV.2.1) **Award criteria**
The most economically advantageous tender in terms of the criteria stated in the specifications, in the invitation to tender or to negotiate or in the descriptive document
- IV.2.2) **Information about electronic auction**
An electronic auction will be used: no
- IV.3) **Administrative information**
- IV.3.1) **File reference number attributed by the contracting authority:**
This contract opportunity is a service concession. The publication of a contract notice in respect of this opportunity has been undertaken by the Trust on a voluntary basis. Any references to the EU Directive 2004/18/EC or the Public Contracts Regulations 2006 (as amended) in the contract notice, pre-qualification questionnaire or any other tender documents should be read with this in mind. Whilst the Trust is basing this tender process on the competitive dialogue procedure provided for in the Regulations, it does not consider itself bound by the provisions regarding that procedure and reserves the right to depart from the competitive dialogues procedure as provided for in the Regulations at any time.
- IV.3.2) **Previous publication(s) concerning the same contract**
no
- IV.3.3) **Conditions for obtaining specifications and additional documents or descriptive document**
Time limit for receipt of requests for documents or for accessing documents: 22.9.2014 - 12:00
Payable documents: no
- IV.3.4) **Time limit for receipt of tenders or requests to participate**
22.9.2014 - 12:00
- IV.3.5) **Date of dispatch of invitations to tender or to participate to selected candidates**
13.10.2014
- IV.3.6) **Language(s) in which tenders or requests to participate may be drawn up**
English.
- IV.3.7) **Minimum time frame during which the tenderer must maintain the tender**
Duration in months: 12 (from the date stated for receipt of tender)
- IV.3.8) **Conditions for opening of tenders**

Section VI: Complementary information

- VI.1) **Information about recurrence**
This is a recurrent procurement: no
- VI.2) **Information about European Union funds**
The contract is related to a project and/or programme financed by European Union funds: no
- VI.3) **Additional information**
This opportunity is for a service concession contract. There will be no payment from the Trust to the successful Candidate and the successful Candidate will be responsible for generating income from the award of the concession. In accordance with current law, as this opportunity is a service concession contract, the Public Contracts Regulations 2006 do not apply and as such the Trust issues this OJEU Notice on a voluntary basis. Any provisions of the Public Contracts Regulations 2006 which are used in this procurement, including the use of the competitive dialogue process, are used only as a basis on which to run the process.
The Trust currently envisages a contract term in the region of 360 months but expects to confirm the contract term during dialogue. The Trust reserves the right:
(i) not to award any contract as a result of the procurement process commenced by publication of this

notice;

(ii) to make whatever changes it may see fit to the content and structure of the tendering competition;

(iii) to terminate or award a contract(s) in respect of any part(s) of the requirements covered by this notice, and in no circumstances will the Trust be liable for any costs incurred by bidders.

Any contract entered into will be governed by English law and will be subject to the exclusive jurisdiction of the English courts and the Court of Justice of the European Union. Tenders and all supporting documentation must be written in English and priced in sterling.

Nothing in this contract notice or procurement competition shall generate any contractual obligations prior to any signature of final contracts.

The Trust is a public authority under the Freedom of Information Act 2000 (the Act). As part of its duties under the Act, the Trust may disclose information to a person making a request unless the information is covered by an exemption under the Act. The Trust is required to determine whether the public interest in maintaining the exemption from disclosing it outweighs the public interest in disclosing it. Prospective bidders should state in their submissions whether or not they consider the information supplied, if disclosed to a third party, would be prejudicial to their commercial interest and, if so, the reasons for such a view. These views will be taken into consideration by the Trust when deciding whether to disclose information.

Information and formalities necessary for evaluating if the requirements are met: Suppliers Instructions How to Express Interest in this Tender~: 1. Register your company on the eSourcing portal (this is only required once) - Browse to the eSourcing Portal: <https://www.nhssourcing.co.uk> and click the link to register - Accept the terms and conditions and click 'continue' - Enter your correct business and user details - Note the username you chose and click 'Save' when complete - You will shortly receive an email with your unique password (please keep this secure) 2. Express an Interest in the tender - Login to the portal with the username/password - Click the 'PQQs / ITTs Open To All Suppliers' link. (These are Pre-Qualification Questionnaires or Invitations to Tender open to any registered supplier) - Click on the relevant PQQ/ ITT to access the content. - Click the 'Express Interest' button at the top of the page. - This will move the PQQ /ITT into your 'My PQQs/ My ITTs' page. (This is a secure area reserved for your projects only) -You can now access any attachments by clicking 'Buyer Attachments' in the 'PQQ/ ITT Details' box 3. Responding to the tender - Click 'My Response' under 'PQQ/ ITT Details', you can choose to 'Create Response' or to 'Decline to Respond' (please give a reason if declining) - You can now use the 'Messages' function to communicate with the buyer and seek any clarification- Note the deadline for completion, then follow the onscreen instructions to complete the PQQ/ ITT - There may be a mixture of online & offline actions for you to perform (there is detailed online help available) You must then submit your reply using the 'Submit Response' button at the top of the page. If you require any further assistance please consult the online help, or contact the eTendering help desk.

VI.4) Procedures for appeal

VI.4.1) Body responsible for appeal procedures

VI.4.2) Lodging of appeals

VI.4.3) Service from which information about the lodging of appeals may be obtained

VI.5) Date of dispatch of this notice:

18.8.2014

Source: OJEU

Revenue growth in NHS PPUs

	Revenue / £m								CAGR%
	2006	2007	2008	2009	2010	2011	2012	2013	
Royal Marsden	£31.9	£38.1	£43.2	£41.5	£44.6	£51.1	£59.8	£67.8	11.4%
Great Ormond Street	£21.4	£20.7	£19.7	£21.0	£25.0	£28.2	£41.3	£41.9	10.1%
Imperial College Healthcare	£28.0	£29.4	£32.3	£31.0	£26.2	£28.6	£30.5	£34.3	3.0%
Royal Brompton & Harefield	£19.5	£19.7	£21.1	£18.5	£24.4	£29.1	£28.8	£33.6	8.1%
University College London	£8.9	£8.1	£8.7	£8.0	£7.6	£13.4	£18.3	£21.6	13.5%
Moorfields	£7.9	£9.0	£11.3	£13.4	£16.2	£17.9	£19.2	£21.3	15.3%
Royal Free Hospital	£12.5	£12.8	£14.4	£17.7	£18.5	£19.2	£21.8	£20.4	7.2%
Guy's & St. Thomas'	£13.2	£12.3	£14.3	£17.0	£19.0	£21.2	£17.2	£16.2	2.9%
King's College Hospital	£10.4	£11.7	£14.1	£14.5	£12.5	£15.4	£13.2	£13.1	3.3%
Chelsea & Westminster	£6.7	£6.9	£8.0	£8.2	£9.8	£10.5	£10.9	£12.2	8.9%
Royal National Orthopaedic	£7.0	£5.6	£5.3	£5.4	£4.4	£4.1	£5.0	£5.9	-2.4%
Barts & The London	£1.7	£1.9	£1.6	£1.6	£1.6	£2.1	£1.8	£1.8	1.1%

Source: LaingBuisson, "Private medical care in central London", March 2015

Capacity - inpatient beds						
	Hospital	Owner	CMA (2011)		LaingBuisson	
			Inpatient Beds	% share	Inpatient Beds	% share
1	Barts Hospital	NHS			0	0
2	Blackheath	BMI	69	4.3	68	3.9
3	Chelsea & Westminster Hospital	NHS			35	2
4	Cromwell	BUPA	118	7.4	128	7.4
5	Fitzroy Square	BMI	16	1		
6	Great Ormond Street Hospital	NHS			43	2.5
7	Guy's and St Thomas ¹	NHS	43	2.7	21	1.2
8	Highgate	Aspen	28	1.8	43	2.5
9	Hospital of St. John & St. Elizabeth	SS John & Elizabeth	49	3.1	48	2.8
10	Imperial College Healthcare	NHS	106	6.7	97	5.6
11	King Edward VII's Hospital Sister Agnes ²	KEVII Sister Agnes	60	3.8	58	3.3
12	King's College Hospital	NHS	21	1.3	21	1.2
13	London Independent	BMI	58	3.6	61	3.5
14	Moorfields Eye Hospital	NHS			12	0.7
15	Royal Brompton Hospital ³	NHS	31	1.9	47	2.7
16	Royal Free Hospital	NHS	52	3.3	52	3
17	Royal Marsden Hospital	NHS	21	1.3	46	2.7
18	Royal National Orthopaedic Hospital ⁴	NHS			20	1.2
19	The Harley Street Clinic	HCA	104	6.5	96	5.5
20	The Lister Hospital	HCA	74	4.6	57	3.3
21	The London Bridge Hospital	HCA	111	7	121	7
22	The London Clinic	TLC	170	10.7	185	10.7
23	The Portland Hospital	HCA	87	5.5	93	5.4
24	The Princess Grace Hospital	HCA	114	7.2	101	5.8
25	The Wellington Hospital	HCA	226	14.2	227	13.1
26	Weymouth Street Hospital	Phoenix	10	0.6	10	0.6
27	University College Hospital ⁵	NHS	24	1.5	45	2.6
Total			1592	100	1735	100
Total for HCA			716	45	719	41.4

This table compares the bed capacity figures used in the CMA's report based on 2011 data with the updated figures in the LaingBuisson Report "Private acute medical care in Central London", published in March 2015.

¹ HCA's collaboration with Guy's and St Thomas' relates solely to the Trust's new cancer PPU (under development) which is not included in these figures.

² The LaingBuisson report notes that the current expansion of the Hospital will *"increase bed numbers from 60 to 80"*.

³ This includes 12 beds at the Harefield site which is not within central London.

⁴ The RNOH sees outpatients at the Bolsover Street facility in central London, which are then referred for inpatient treatment to the hospital in Stanmore. It is therefore appropriate to include RNOH beds in the central London assessment.

⁵ This figure includes the 24 beds representing those at HCA's Harley Street at UCH facility. These 24 beds have been added to LaingBuisson's total number of 719 HCA inpatient beds.

REVENUE						
	Hospital	Owner	CMA (2011)		LaingBuisson (2013)	
			(£m)	share %	(£m)	share %
1	Highgate	Aspen		[X]	6	0.4
2	Blackheath	BMI			17	1.3
3	Fitzroy	BMI		[X]		
4	London Independent	BMI			22	1.7
5	Weymouth Street Hospital	BMI			5	0.4
6	Cromwell	BUPA		[X]	94	7.4
7	The Harley Street Clinic ¹	HCA			79	6.2
8	The Lister Hospital	HCA			71	5.6
9	The London Bridge Hospital	HCA		[X]	130	10.2
10	The Portland Hospital	HCA			83	6.5
11	The Princess Grace Hospital	HCA			80	6.3
12	The Wellington Hospital	HCA			198	15.6
14	King Edward VII's Hospital Sister Agnes	KEVII Sister Agnes		[X]	20	1.6
15	Hospital of St. John & St. Elizabeth	SS John & Elizabeth		[X]	43	3.3
16	The London Clinic	TLC		[X]	137	10.7
17	Chelsea & Westminster Hospital	NHS			12	1
18	Great Ormond Street Hospital	NHS			42	3.3
19	Guy's Hospital	NHS		[X]	16	1.3
20	Imperial College Healthcare	NHS		[X]	34	2.7
21	King's College Hospital	NHS		[X]	13	1
22	Moorfields Eye Hospital	NHS			15	1.2
23	Royal Brompton Hospital	NHS		[X]	34	2.6
24	Royal Free Hospital	NHS		[X]	20	1.6
25	Royal Marsden Hospital	NHS		[X]	68	5.3
26	Royal National Orthopaedic Hospital	NHS			6	0.5
27	St Bartholomew's Hospital	NHS			2	0.1
28	St George's Hospital	NHS			5	0.4
29	University College Hospital	NHS			22	1.7
29	Total		[X]	[X]	1274	99.9

This table compares revenue share figures in the CMA's Report against the updated figures in the LaingBuisson report, which are based on 2013 reports and accounts.

¹ It is unclear whether the LaingBuisson report has consolidated the revenues of the Harley Street Clinic and HCA's NHS venture, Harley Street at UCH. In the event that it has not been included, the total revenue of Harley Street at UCH in 2013 was £30m.



cutting through complexity

A Submission on the Analysis of Insured Prices

Prepared for HCA's legal and professional advisers in relation
to the remittal of the CMA's inquiry into the provision of
private healthcare in the United Kingdom

KPMG LLP
1 May 2015

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Important Notice

This report is made by KPMG LLP ("KPMG"), on engagement terms agreed with HCA International Limited ("HCA"), solely to HCA in relation to the remittal of the CMA's inquiry into the provision of private healthcare in the UK in which HCA is a party (the "Remittal"). KPMG's work has been performed so that KPMG might report to HCA on those matters that KPMG has agreed to report, and for no other purpose. To the fullest extent permitted by law, KPMG does not accept or assume responsibility to anyone other than HCA for KPMG's work, for this report, or for any findings, conclusions or opinions that KPMG has formed or made.

This report is released to HCA subject to agreed disclosure restrictions.

Without in any way or on any basis affecting or adding to or extending KPMG's duties and responsibilities to HCA or giving rise to any duty or responsibility being accepted or assumed by or imposed on KPMG to any party except HCA, at HCA's request KPMG has consented to the submission of this report in evidence in the Remittal, to facilitate demonstration by HCA that a report on the matters discussed has been commissioned by and provided for HCA.

Subject to such submission in evidence in the Remittal on the basis set out above, this report will remain confidential.

1 Introduction

1. One key issue before the CMA is whether HCA charges higher insured prices (“prices”) than other private hospital operators in London and, if so, whether any such differences are attributable to the level of market concentration. In its original inquiry, the CMA conducted an insured pricing analysis (the “IPA”) for this purpose, which was shown to be defective in a number of important respects. As part of the CMA’s new assessment, it is proposing to “*make certain changes*”¹ to the IPA conducted previously.
2. We agree that it is reasonable for the CMA to attempt to carry out an economic pricing analysis. However, in carrying out any such pricing analysis, and in designing a model that is robust, reliable, methodologically and analytically sound, and of probative value, it is axiomatic that the CMA should address in full the serious shortcomings previously identified in the IPA. In doing so, it must ensure that the economic and empirical framework that it employs is methodologically sound and not only consistent with the nature of the market but also conforms to the standards established in the extensive economics literature on competition in healthcare markets.
3. This submission represents the collective views of Martin Gaynor, Katharina Hauck, Nicola Mazzarotto, Jorge Padilla and Ariel Pakes² and explains the methodology and principles that must be applied in any new pricing model.
4. At the highest level, two key principles must be adhered to when conducting a pricing analysis in the private healthcare market.
5. First, the analysis of prices must be done on a “like-for-like” basis. This entails:
 - Appropriately accounting for differences in treatment mix between HCA and comparator hospitals. Difference in treatment mix can substantially affect the hospital’s costs of providing treatments and, additionally, different mixes of treatments can attract different complexity of patients; and
 - Correctly adjusting for systematic differences in patient complexity. Patients with more acute or complex conditions are necessarily more difficult (and potentially more expensive) to treat.
6. Second, any analysis of market power and pricing suggesting a causal linkage between local market concentration and prices must be fully and rigorously tested. The IPA did not demonstrate a causal relationship between market concentration and prices, or even attempt to do so. Prices are potentially driven by a number of different factors. Understanding what in fact drives prices requires that:
 - The model should accurately reflect the role of quality in competition in private healthcare. The academic literature and competition authorities have recognised that quality (achieved through, for example, investment in breadth and quality of equipment and systems) is a critical component of competition in healthcare markets and any analysis that does not adequately account for

¹ Letter from the CMA dated 10 April 2015, Reg CON/001, pg 1.

² Their credentials are attached as an appendix to this submission.

competition over quality will at best be uninformative, and potentially be seriously misleading; and

- The model must be reflective of how prices are set in the private healthcare market. Hospital prices for insured patients in the private healthcare market are determined via a process of negotiation between hospitals and private medical insurers (PMIs). This is quite different from the price determination process in many other markets, where firms post prices and consumers decide whether to buy or not. As a consequence, the model must be grounded in a bargaining framework in order to allow it to correctly assess the market power of individual hospital operators in relation to PMIs.³ The bargaining power of the PMIs will depend on a number of factors, including the nature of competition in the “downstream” market where insurance policies are sold, since that will determine hospitals’ alternatives to contracting with a particular PMI.

7. It is apparent to us that the IPA did not conform to these principles.
8. First, the price analysis was not conducted on a like-for-like basis. Differences in treatment mix were not properly taken into account. Furthermore, systematic differences in patient complexity were not appropriately controlled for. Both 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. 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.
9. Second, the model of competition underlying the pricing analysis was not reflective of the healthcare market for two reasons: (i) the analysis did not appropriately account for the link between investment to improve the breadth and quality of treatments and the prices charged (else the hospital could not afford to offer the services it provides), and (ii) prices in the healthcare market are determined through bargaining and any analysis that is not explicitly grounded in this framework is likely to be misleading.⁴
10. Finally, the empirical framework adopted by the CMA for the determination of any causal link between local market concentration and prices was seriously flawed in a number of ways. Notably, since the framework did not adequately control for differences in patient complexity, the mix of patients that hospitals might attract, and the range of treatments offered by different hospital operators, the IPA was incapable of ruling out differences in cost base and differences in quality driving any price difference.
11. Failing to conduct a like-for-like comparison and failing to control for alternative factors influencing prices means that the IPA could not be probative of either the

³ A bargaining model framework is employed by the US Federal Trade Commission in its assessments of hospital mergers. See Farrell, J., Balan, D. J., Brand, K., and Wendling, B. W. (2011) “Economics at the FTC: Hospital Mergers, Authorized Generic Drugs, and Consumer Credit Markets” *Review of Industrial Organization* 39(4): 271-296.

⁴ See Gaynor, M., Ho, K., and Town, R. (2015) “The Industrial Organization of Health-Care Markets” *Journal of Economic Literature*, 53(2): forthcoming. for an exposition of the difference between a bargaining model and a standard pricing model (equation 17 and the surrounding discussion). The prices determined by bargaining correspond to those from a standard pricing model only when hospitals have all the bargaining power and insurers have none. See also Gowrisankaran, G., Nevo, A., and Town, R. (2015) “Mergers When Prices Are Negotiated: Evidence from the Hospital Industry” *American Economic Review* 105(1): 172-203.

existence of any price difference between HCA and its competitors or the reasons behind any such differences. As a consequence, the IPA, as it stands, does not provide reliable and robust results on the relationship (if any) between insured prices and local market concentration.

12. If the CMA is unable to construct a robust pricing analysis that conforms to the principles set out in this submission, it should not rely on that model as evidence of anticompetitive harm.
13. The remainder of this submission will first consider the assessment of price differences and then consider the issue of establishing a causal relationship between price and concentration before concluding.

2 The assessment of price differences

14. In order for the IPA to be probative of any price differences between hospital operators, a number of key requirements must be met. Most notably, the IPA:

- Must appropriately account for the differences in treatment mix across hospital operators;
- Must appropriately account for the differences in patients treated; and
- Must use sound empirical techniques.

15. In the rest of this section we first explain the importance of these requirements and then explain why, in our view, the IPA does not meet them. Moreover, in our view, the results of the IPA, once the coding errors identified in the Data Room are corrected, do not show that there are significant price differences between HCA and TLC. Therefore the IPA does not support the finding of an AEC with regard to insured patients in central London.

2.1 The IPA must correctly account for differences in treatment mix across operators

2.1.1 The academic literature and the practice of competition authorities highlight the importance of correcting for treatment mix

16. It is important to note that in the literature and in the approach of other competition authorities, treatment mix and patient characteristics are generally not treated separately. In some studies, the mix of treatments is considered alongside patient characteristics to develop an overall “case mix” for the hospitals being compared. In others, the measures of treatment mix and patient characteristics are allowed to have individual impacts. However, in most studies, the effects of the mix of treatments and of patient characteristics are accounted for simultaneously, whether they appear individually or aggregated in an index. In light of the IPA methodology, however, whereby the mix of treatments for a given operator and PMI was treated differently from the patient characteristics, we will discuss these issues separately in this paper.
17. Understanding the overall mix of treatments offered and conducted by a provider is imperative when attempting to compare prices. The academic literature shows that it is crucial to adjust for the systematic differences in the types of patients a hospital cares for (also referred to as the case mix complexity).⁵ This is also explicitly

⁵ See, for example: Hsia, R. Y., Antwi, Y. A., and Weber, E. (2014) “Analysis of variation in charges and prices paid for vaginal and caesarean section births: a cross-sectional study”, *BMJ Open*; Gautam, G., Nevo, A., and Town, A. (2015) “Mergers When Prices Are Negotiated: Evidence from the Hospital Industry” *American Economic Review* 105(1): 172-203; Gaynor, M. and Vogt, W. (2003) “Competition among Hospitals” *Rand Journal of Economics*; Haas-Wilson, D. and Garmon, C. (2011) “Hospital Mergers and Competitive Effects: Two Retrospective Analyses” *Int. J. of the Economics of Business* 18(1): 17–32; Dranove, D., Shanley, M. and White, W. (1993) “Price and Concentration in Hospital Markets: The Switch from Patient-Driven to Payer-Driven Competition” *Journal of Law and Economics* 36: 179-204; Keeler, E., Melnick, G. and Zwanziger, J. (1999) “The Changing Effects of Competition on Non-Profit and For-Profit Hospital Pricing Behavior” *Journal of Health Economics* 18: 69-86.; Melnick, G., Zwanziger, J., Bamezai, A. and Pattison, R. (1992) “The Effects of Market Structure and Bargaining Position on Hospital Prices” *Journal of Health Economics* 11: 217-233.

recognised by competition authorities.⁶ All else being equal, it would be expected for a hospital that treats a more complex set of patients and performs a more complex set of procedures overall to face higher costs. For example, Dranove and Satterthwaite recognise the link between quality of service and its effect on case mix.⁷ They argue that higher quality hospitals may attract more severely ill patients who are more costly to treat. This literature also shows that age, gender and length of stay are insufficient to account for case mix and complexity.

18. Furthermore, a review of previous competition cases involving healthcare also shows that, in other jurisdictions, competition authorities take into account differences in case mix before reaching a view on what drives prices of healthcare services. In particular, when reviewing the merger between Evanston Northwestern and Highland Park, the FTC acknowledged the impact that case mix has on prices.⁸
19. The FTC Bureau of Economics also released working papers, some of which have been published, aimed at retrospectively evaluating a number of mergers between hospitals.⁹ These papers show that differences in case mix need to be taken into account when measuring prices. Although members at the FTC Bureau of Economics acknowledged that *"[C]onstructing 'price' and other basic variables for empirical analysis is a much more formidable task in hospital markets than in other markets"*, it noted that patient-specific information, together with admission-specific information *"enable the analyst to control for the extraordinary degree of heterogeneity in hospital admissions that doubtless accounts for much of the observed variation in 'prices' across hospital and over time."*¹⁰
20. In particular, in evaluating the merger between Evanston Northwestern and Highland Park, and the one between St. Therese Medical Center and Victory Memorial

⁶ Farrell, J., Balan, D. J., Brand, K., and Wendling, B.W. (2011) "Economics at the FTC: Hospital Mergers, Authorized Generic Drugs, and Consumer Credit Markets" *Review of Industrial Organization* 39(4): 271-296.

⁷ Dranove, D. and Satterthwaite, M. A. (2000) "The Industrial Organisation of Healthcare Markets", *Handbook of Health Economics*, Volume 1B, Chapter 20. Notably: *"It is difficult for the researcher to disentangle the various possible effects of local competition on prices. For example, simple scale economies may permit hospitals in more populous (and therefore likely more competitive) markets to offer higher quality services [Dranove, Shanley, and Simon (1992)]. This higher quality may attract more severely ill patients. In particular, if severely ill patients are willing to travel to seek out high quality, then the competition of large metropolitan areas should be associated with higher prices because large metropolitan areas attract a more difficult case mix. Conversely, hospitals in small markets may offer lower quality, and end up treating the least severely ill patients. There is some evidence to support this set of possibilities. Welch, Larson, and Welch (1993) find that a hospital's 'distant' patients (patients who more than fifteen miles from the hospital) are more costly to treat than local patients. Adams et al. (1991) and Adams and Wright (1991) find that rural patients with complex cases are more likely to travel to urban hospitals than are rural patients with relatively simple cases."*

⁸ *"[T]he eight plausible explanations of the price increases at ENH, aside from market power or learning about demand, were: (1) cost increases that affect all hospitals; (2) changes in regulations that affect all hospitals; (3) increases in consumer demand for hospital services; (4) increases in quality at ENH; (5) changes in the mix of patients; (6) changes in the mix of customers; (7) increases in teaching intensity; and (8) decreases in outpatient prices. [...] Haas-Wilson developed a multiple regression model to evaluate whether the remaining possible explanations (changes in patient mix, customer mix, or teaching intensity) were responsible for the post-merger ENH price increases. [...] In Haas-Wilson's multiple regression model, prices at ENH and control hospitals were the dependent variables, and patient mix (case mix and severity of illness), customer mix, and teaching intensity were included in the dependent variables. [...] The case mix index is used by many people who analyse hospital data, and it is a measure of the complexity of the cases that are being treated at particular hospitals. It is constructed based on a system of weights related to diagnostic related groups (DRG)." See paragraphs 696, 727, 730 and 739 of Federal Trade Commission, In the Matter of Evanston Northwestern Healthcare Corporation, Respondent. Initial Decision. October 20, 2005.*

⁹ Haas-Wilson, D. and Garmon, C. (2009) "Two Hospital Mergers on Chicago's North Shore: A Retrospective Study" pp 10-12 www.ftc.gov/sites/default/files/documents/reports/two-hospital-mergers-chicago%E2%80%99s-north-shore-retrospective-study/wp294_0.pdf; Tenn, S. (2008) "The Price Effects of Hospital Mergers: A Case Study of the Sutter-Summit Transaction" *International Journal of the Economics of Business* 18(1): 65-82; Thompson, A. (2009) "The Effect of Hospital Mergers on Inpatient Prices: A Case Study of the New Hanover-Cape" *International Journal of the Economics of Business*, 18(1): 91-101.

¹⁰ Farrell, J., Pautler, P. A., and Vita, M. G. (2009) "Economics at the FTC: Retrospective Merger Analysis with a Focus on Hospitals" pg 13 https://www.ftc.gov/sites/default/files/documents/reports/economics-ftc-retrospective-merger-analysis-focus-hospitals/farrelletal_ric2009.pdf.

Hospital, Haas-Wilson and Garmon¹¹ noted that “[T]o isolate the merger’s effect on price, it is necessary to control for all of the other factors, unrelated to the merger that could cause a hospital’s price to change over time. [...] Thus, to measure price changes and relative price changes accurately, we must adequately control for the mix of patients or, as it is referred to in the industry and the literature, the case mix.”¹²

2.1.2 The IPA’s approach to controlling for treatment mix was inadequate

21. As noted across previous submissions to the CMA, HCA is a specialist in providing care to patients with a high level of complexity. For example, the CMA itself acknowledged that HCA had a particular strength in complex specialties, such as cardiology and neurology, as well as in the four largest specialties by admissions: oncology, trauma and orthopaedics, gastroenterology, obstetrics and gynaecology.¹³ HCA also submitted evidence, showing that it has a larger number of level 3 ITUs as well as a higher levels of RMOs, intensivists and nurses.¹⁴
22. In order to attempt to account for potential differences in treatment mix across operators, the IPA adopted a “common basket” approach which led it to consider only those treatments that both hospital operators provided to a given PMI in a given year.¹⁵
23. In the Final Report, the CMA argued that the common basket approach allowed it to control appropriately for the mix of treatments across operators.¹⁶ Furthermore, it stated that the common basket presented a representative view of the operators.¹⁷ It also stated that its “review of the qualitative evidence on bargaining did not suggest there is any systematic cross-subsidization between treatments”, and that “it is reasonable to treat the price differences we have estimated using the common basket of treatments as representative of the price differences for all treatments”.¹⁸
24. We strongly disagree. First, the IPA’s common basket approach is not representative of either HCA’s or TLC’s revenue or patient admissions. Second, there are systematic differences in the complexity of the treatments inside and outside the basket. Third, these differences in treatment offerings could lead to important differences in costs for all services both as a result of the same equipment being used in different treatments (a phenomenon known as “common costs”) and because of cross-subsidization. Fourth, because of these systematic differences in treatments, the patients that are treated at each operator will typically have different levels of complexity. For all of these reasons, not only is the common basket approach uninformative about price differences between HCA and TLC, it is

¹¹ Deborah Haas-Wilson was the FTC’s economic expert in the Evanston Northwestern merger.

¹² See Haas-Wilson, D. and Garmon, C. “Two Hospital Mergers on Chicago’s North Shore: A Retrospective Study” pp 10-12 www.ftc.gov/sites/default/files/documents/reports/two-hospital-mergers-chicago%E2%80%99s-north-shore-retrospective-study/wp294_0.pdf.

¹³ CMA’s Final Report, para. 11.71.

¹⁴ HCA’s Response to PDR, para. 5.4.

¹⁵ Furthermore, for a treatment to be eligible to enter the common basket for comparison, both providers had to have provided the treatments to a minimum of six patients (see for example ‘master_IPA.do’, line 71)

¹⁶ CMA’s Final Report, para. 6.340.

¹⁷ CMA’s Final Report, para. 6.360.

¹⁸ CMA’s Final Report, para. 6.360.

also not possible to extrapolate any estimated price differences outside of the common basket.

The common basket approach was not representative of either HCA's or TLC's revenue or admissions

25. Analysis 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 [X]% of HCA's PMI-year pairs, the proportion of inpatient and daycase patient revenue associated with the common basket was less than [X]%. Similarly, for [X]% of TLC's PMI-year pairs, the proportion of inpatient and daycase patient revenue associated with the common basket was less than [X]%.¹⁹
26. This implies that the baskets in themselves provide only very limited information on the businesses of the two hospital operators and therefore, in order to reach any conclusion on price differences, the sample of treatments included in the basket must be representative of the full set of treatments offered by the two hospital operators. However, as we discuss next, the sample used is not representative.

The selection of treatments in the common basket did not reflect the treatments that HCA performs

27. If the selection of treatments within the common basket were a random selection of the treatments offered at HCA, then the lack of representativeness from a revenue perspective might not be as much of a concern. In that scenario, the CMA may have been able to conclude that the common basket is representative of the total selection of treatments offered by a hospital operator. However, the treatments inside of the common basket are instead a systematic sampling of lower complexity treatments.
28. Table 1 shows that, overall, HCA performs a far larger proportion of high complexity treatments than TLC does. Over [X]% of HCA's episodes are characterised by treatment complexity that is major or above,²⁰ accounting for close to [X]% of HCA's revenues. In contrast, fewer than [X]% of TLC's episodes are characterised by this high treatment complexity, and these types of treatments account for less than [X]% of its revenues. When comparing the treatments that each hospital operator performs exclusively, the KPMG Data Room Report showed that out of the treatments that only TLC performed, over [X]% of associated episodes are characterised by low complexity (i.e., "minor"). The equivalent statistic for HCA was [X]%.²¹

¹⁹ KPMG Data Room Report, Annex 7, paras. 1-4.

²⁰ As the CMA noted in the Final Report at paragraph 7.56, CCSDs are classified into 5 broad levels of complexity (Minor, Intermediate, Major, Major Plus, Complex Major). Tables 1 and 2 are based on the CCSD classification available during the data room. This classification contained a number of CCSDs which were assigned a complexity ranking of "Pending." Since the data room HCA has obtained an updated classification for these CCSDs. All remaining tables in this paper rely on the updated classification.

²¹ KPMG Data Room Report, Annex 7, Table A7-2.

Table 1: the overall treatment profile for HCA and TLC, 2007-2011

Level of complexity	HCA		TLC	
	% of inpatient and daycase episodes	% of inpatient and daycase revenues	% of inpatient and daycase episodes	% of inpatient and daycase revenues
Complex Major	[<]%	[<]%	[<]%	[<]%
Major Plus	[<]%	[<]%	[<]%	[<]%
Major	[<]%	[<]%	[<]%	[<]%
Intermediate	[<]%	[<]%	[<]%	[<]%
Minor	[<]%	[<]%	[<]%	[<]%

Note: The table above excludes treatments that were not classified at the time of the Data Room in August/September 2014. The unclassified treatments accounted for [<]% of HCA's episodes and [<]% of its revenues. For TLC, unclassified treatments accounted for [<]% of its episodes and [<]% of its revenues.

Source: KPMG Analysis.

29. Table 2 displays the distribution of treatments, by both patients and revenues, in the common basket for HCA and TLC. Comparison of Table 1 (all treatments performed by each hospital operator) to Table 2 (only the treatments contained in the common basket) shows that the distribution of treatments in the common basket is very different for HCA. The IPA only considered a very small proportion of patients receiving complex major treatments and a disproportionately high percentage of intermediate treatments. For example, [<]% of HCA's inpatient and daycase patients who received a complex major treatment ([<]% of revenues) were in the common basket, whereas they account for [<]% of all of HCA's inpatient and daycase patients ([<]% of revenues).

Table 2: the common basket treatment profile for HCA and TLC, 2007-2011

Level of complexity	HCA		TLC	
	% of inpatient and daycase episodes	% of inpatient and daycase revenues	% of inpatient and daycase episodes	% of inpatient and daycase revenues
Complex Major	[<]%	[<]%	[<]%	[<]%
Major Plus	[<]%	[<]%	[<]%	[<]%
Major	[<]%	[<]%	[<]%	[<]%
Intermediate	[<]%	[<]%	[<]%	[<]%
Minor	[<]%	[<]%	[<]%	[<]%

Note: The table above excludes treatments that were not classified at the time of the Data Room in August/September 2014. The unclassified treatments accounted for [<]% of HCA's episodes and [<]% of its revenues. For TLC, unclassified treatments accounted for [<]% of its episodes and [<]% of its revenues.

Source: KPMG Analysis.

30. Furthermore, Table 2 shows that even among the common basket of treatments, HCA derives more admissions and revenues from more complex treatments than TLC. Together the two tables clearly show the systematic bias towards lower complexity treatments in the common basket used in the IPA. This has significant implications for the analysis which we discuss next.

31. Another way of looking at the difference between the two operators is to consider what classes of treatments each operator provides. The CCSD coding schedule groups CCSDs into sets of treatments primarily based on the anatomical location of the procedure.²² Of the [X] total CCSD groups, there are [X] that HCA performs that TLC does not.²³ These [X] groups accounted for [X]% of HCA's inpatient and daycase patient episodes and [X]% of inpatient and daycase patient revenues in 2011.
32. Table 3 shows an example of a group of treatments that both HCA and TLC perform. Of the [X] treatments that the CCSD coding schedule classifies as the "Repair and Reconstruction of the Shoulder" (Chapter 16.7.2), HCA performs [X] while TLC performs [X]. It is clear from this that, even in cases where HCA and TLC are offering the same broad categories of treatment, HCA is offering a broader array of specific procedures.

Table 3: treatment mix for Repair and Reconstruction of the Shoulder (CCSD Chapter 16.7.2)

Complexity	CCSDs performed by HCA	CCSDs performed by TLC	Overall chapter composition
Complex Major	[X]	[X]	4
Major Plus	[X]	[X]	11
Major	[X]	[X]	15
Intermediate	[X]	[X]	4
Total	[X]	[X]	34

Source: KPMG Analysis.

The extrapolation of estimated price differences based on a common basket approach was flawed

33. The common basket approach did not appropriately control for the differences in treatments that the hospital operators perform. It is therefore inappropriate to extrapolate findings for prices of treatments in the common basket to those outside of it.²⁴ Table 4 highlights this issue by showing the proportion of insignificant price differentials by complexity of treatment. In general, the likelihood of the IPA finding a statistically significant price difference is lower for more complex treatments. For around [X]% to [X]% of complex major treatments, [X]% to [X]% of major plus treatments and [X]% to [X]% of major treatments, by revenue and episode, the IPA shows that there is no statistically significant price difference.
34. Inside the common basket, the CMA's analysis suggested that there was no significant price difference for most high complexity treatments. Tables 1 and 2 show that HCA's treatments not in the common basket are more likely to be high complexity treatments. Therefore, to the extent that the CMA considers it possible to extrapolate from the common basket to treatments outside it, it should take into

²² For a breakdown of chapters see: <http://www.ccsd.org.uk/ccsdschedule/ccsdschedulechapter>

²³ There are [X] groups that TLC performs that HCA doesn't. This analysis is based on 2007-2011 Healthcode data on treatments administered by each hospital operator.

²⁴ Importantly, when we expanded the size of the common basket by allowing multiple CCSD episodes to remain in the basket, there were significant changes to the results. This small change in basket size had a material effect on both the insurer-specific and the average price indices between HCA and TLC. In particular, when looking at the average price indices, [X].

account the possibility that treatments outside the common basket, being mostly high complexity treatments, might also be not significantly different from what the CMA considers a competitive price benchmark.

Table 4: the proportion of insignificant price differentials, by complexity of treatment

Level of complexity	Number of treatment level regressions	Number of treatments with no significant price difference	Percentage of revenue from treatments with no significant price difference	Percentage of episodes from treatments with no significant price difference
Complex Major	[X]	[X]	[X]%	[X]%
Major Plus	[X]	[X]	[X]%	[X]%
Major	[X]	[X]	[X]%	[X]%
Intermediate	[X]	[X]	[X]%	[X]%
Minor	[X]	[X]	[X]%	[X]%
Total	[X]	[X]	[X]%	[X]%

Note: Significance has been measured at the 5% level.

Source: KPMG Analysis.

35. In summary, the IPA's failure to construct a basket of treatments that was representative in terms of the volume and value of treatments conducted by HCA across its facilities undermines findings of the IPA. The fact that HCA has more patients and revenue in more complex treatments has both supply side and demand side implications. From the supply side, the fact that HCA has more patients needing complex treatment is both a consequence of HCA's investment and likely induces HCA to invest more in the costly equipment and services required to treat the more complex cases. Also it is well known in the healthcare literature that hospital operators that treat higher volumes of patients with certain conditions have better health outcomes for those patients. This is known as the "volume-outcomes effect".²⁵ Thus, to the extent HCA is providing higher volumes of care for certain treatments, it is likely that patients receiving those treatments at HCA have better outcomes. Finally, from the demand side, the finding that HCA performs more complex procedures is indicative of, indeed a consequence of, HCA's higher quality of care. Patients and their doctors choosing HCA over other options when they require a complex procedure indicates a strong market perception of higher quality at HCA.

²⁵ There is a very large literature on the volume-outcome relationship in medicine. We only cite a few papers from the literature here, e.g., Birkmeyer, J. D., Siewers, A. E., Finlayson, E. V. A., Stukel, T. A., Lucas, F. L., Batista, I., Gilbert Welch, H., and Wennberg, D. E. (2002) "Hospital Volume and Surgical Mortality in the United States, New England Journal of Medicine 346: 1128-1137; Silber, J. H., Rosenbaum, P. R., Brachet, T. J., Ross, R. N., Bressler, L. J., Even-Shoshan, O., Lorch, S. A., and Volpp, K. G. (2010) "The Hospital Compare Mortality Model and the Volume–Outcome Relationship" Health Services Research 45: 1148-1167; Dimick, J. B., Staiger, D. O., Baser, O., and Birkmeyer, J. D. (2009) "Composite measures for predicting surgical mortality in the hospital" Health Affairs 28(4): 1189-98; Halm, E. A., Lee, C., and Chassin, M. R. (2002) "Is volume related to outcome in health care? A systematic review and methodologic critique of the literature" Annals of Internal Medicine 137(6): 511-520; Gaynor, M., Seider, H., and Vogt, W. B. (2005) "The volume-outcome effect, scale economies, and learning-by-doing" American Economic Review Papers and Proceedings 243-247; Gowrisankaran, G., Ho, V., and Town, R. J. (2006) "Causality, learning and forgetting in surgery" Working Paper, University of Arizona, Rice University, University of Pennsylvania, http://www.u.arizona.edu/~gowrisan/pdf_papers/learn_forget_surgery.pdf.

36. Hospitals not only differ in the services and procedures they can offer to treat a variety of medical conditions and illnesses (and potentially complications stemming from such illnesses), but also in their scope and ability to treat patients with the same condition but of varying severities. Such variation may arise from the presence of complications associated with the underlying condition, and/or comorbidities that complicate the treatment. By excluding measures of severity for patients with the same conditions, the CMA is biasing the price comparison against hospitals who treat more seriously ill patients. Patients who are more severely ill will, quite clearly, have more costly episodes for the same treatment (as captured in the IPA) than others. Hospitals that on average treat more severely ill patients with the same conditions will have, on average, higher costs. If the CMA's future analysis does not adequately account for suitable measures of case mix severity, then it is highly likely to be biased. By excluding the large majority of HCA's treatments, and omitting severity categories within treatments, the CMA is very likely to come to the erroneous conclusion that higher quality hospitals are higher priced for the same treatment. Unless the CMA reflects these principles in its new economic model, the model will have no probative value and cannot be relied upon.

2.2 The IPA must appropriately control for patient characteristics

2.2.1 The academic literature and the practice of competition authorities highlight the importance of correcting for patient characteristics

37. A patient episode identified by a given treatment code (CCSD) is not uniform. Large price variations within treatments are driven by patient medical need as related to complications and comorbidities. Some patients, for example, may require more or more costly diagnostic procedures, drugs or nursing care at different levels of intensity, and each of these factors would result in a higher episode charge.
38. The academic literature emphasises the importance of accounting for the heterogeneity in, among other factors, treatment complexity, episode setting and patient clinical requirements. For studies that use administrative hospital data for analysis (as the IPA does), standard practice has been, in addition to risk adjusting for age and gender, to include a measure of clinical need that is based on the secondary diagnosis codes in the patient record (for example the Charlson Comorbidity Index or similar measures). In addition to these, studies usually also include the comorbidities of the patient, the number of conditions, the number of procedures, race of the patient, whether the patient is a routine case and the final patient outcome.²⁶
39. The importance of controlling for patient complexity cannot be overstated. For example, in a paper analysing the effects of hospital prices on hospital allocations in obstetrics, Ho and Pakes applied two separate methodologies for measuring

²⁶ See, for example, Lemieux and J., Mulligan, T. (2013) "Trends in Inpatient Hospital Prices, 2008 to 2010" American Journal of Managed Care 19(3): 106-113. In this paper the authors attribute c16-23% of price increases over the observed period time to 'intensity' (e.g. complexity) of admissions. The measure was derived through both detailed procedure and diagnosis codes. Also see, Street, A., Kobel, C., Renaud, T., and J. Thuilliez (2012) "How well do Diagnosis-Related Groups Explain Variations in Costs or Length of Stay Among Patients and Across Hospitals? Methods for Analysing Routine Patient Data" Health Econ. 21 (Suppl.2): 6-18. In addition to demographic characteristics, this paper included various measures of patient complexity, including the number of diagnoses and procedures performed, the route of a patient's admission, diagnostic characteristics and procedural techniques. Also see, Gutacker, N., Bojke, C., Daidone, S., Devilin, N., Parkin, D., and Street, A. (2013) "Truly Inefficient or Providing Better Quality of Care? Analysing the Relationship Between Risk-Adjusted Hospital Costs and Patients' Health Outcomes" Health Econ. 22: 931-947. This paper seeks to measure cost variation in the provision of four surgical procedures. As part of their approach, variation across providers is sought to be explained through a set of explanatory variables that include diagnostic codes, element of medical history (i.e. whether the surgery is primary or a revision) and the weighted Charlson index as a measure of comorbidity.

hospital pricing. In the first methodology, when quality of the hospital and patient complexity was not adequately controlled for, they observed positive price coefficients (i.e. more highly priced hospitals were “preferred” even though provider groups which were central in determining allocations had to pay part of the bill). However, the authors recognised that by not adequately controlling for quality and patient complexity, these coefficients were biased upward. When controlling for quality and patient complexity they found that the price coefficient turned sharply negative; i.e. the positive price coefficient was entirely a result of the fact that patients with more complex conditions were allocated to higher quality hospitals and received more costly treatments.²⁷

40. Most of the evidence we cite above in relation to treatment mix is also relevant in this context to explain the importance that other competition authorities place on controlling for patient complexity when measuring prices charged by hospitals.
41. For instance, in the assessment of the merger between Evanston Northwestern and Highland Park, the FTC explicitly pointed out that *“[N]ot all inpatient hospital stays require the same resources to treat. Patients with more complex conditions may require more resources than patients with less complex conditions. For two patients with the same condition, one may be sicker, requiring more resources to treat than the patient who is less sick. [...] The mix of patients that a hospital has will influence the hospital’s prices. If the hospital has patients who require more resources to treat than other hospitals, that will impact the hospital’s prices.”*²⁸ Similarly, the studies commissioned by the FTC Bureau of Economics to retroactively assess a number of healthcare merger decisions all controlled for patient severity of illness.²⁹
42. Without appropriate control variables in place to risk-adjust patients across competitors, the validity of the estimated price differences in the IPA cannot be assured.

²⁷ Ho, K. and Pakes A. (2014) “Hospital Choices, Hospital Prices, and Financial Incentives to Physicians” *American Economic Review* 104(12): 3841-3884. The authors sought to model the relationship between hospital choices by patients, hospital prices, and financial incentives to physicians. They conduct two separate econometric methodologies. The first is a multinomial logit model which, by construction, was unable to fully control for quality conditional on severity (patient complexity). As a result, the authors noted that this could create an upward bias in the price coefficient (insofar as higher priced hospitals may also be higher quality hospitals). Indeed, the results from the model showed a positive price coefficient. To test this, the authors restricted their analysis to the least sick patients, and found that the price coefficient turned negative. In turn, they took a selection of their data and ran a second analysis under a revealed preference inequality framework. Under this framework, they controlled for patient complexity by working with doctors to determine a severity ranking. Severity groups were defined by a combination of age, the principal diagnosis, a Charlson score, the diagnosis that determined the Charlson score, and the rank of the patients’ most serious co-morbidity. We note that the experts Ho and Pakes consulted with agreed that the number and rank of a patients comorbidities “would be likely to affect the test performed and drugs prescribed and therefore the price”. The authors find that there is a trade-off between quality and price.

²⁸ See paras. 735-736 of Federal Trade Commission (2005) “In the Matter of Evanston Northwestern Healthcare Corporation, Respondent. Initial Decision.”

²⁹ See Romano, P. S. and Balan, D. J. (2011) “A Retrospective Analysis of the Clinical Quality Effects of the Acquisition of Highland Park Hospital by Evanston Northwestern” *International Journal of the Economics of Business* 18(1): 45-64. See also Tenn, S. (2008) “The Price Effects of Hospital Mergers: A Case Study of the Sutter-Summit Transaction” *International Journal of the Economics of Business* 18(1): 65-82; and Thompson, A. (2009) “The Effect of Hospital Mergers on Inpatient Prices: A Case Study of the New Hanover-Cape Fear Transaction” *International Journal of the Economics of Business* 18(1): 91-101.

2.2.2 The results of the IPA demonstrate that it did not appropriately control for patient characteristics

43. The IPA relied on data gathered and consolidated by Healthcode, an intermediary between hospital operators and PMIs, to conduct its IPA. As the CMA itself acknowledged in its Final Report “*[e]ach row in these data sets corresponds to a patient’s purchase of a single item or service from a hospital, and during a single hospital visit a patient may receive many such items or services*”.³⁰ As part of the data cleaning process, the line items were consolidated into episodes³¹ in order to compute the total amount that a hospital operator charged to a PMI for all the services that a patient received during a given episode. These episode charges are not prices for services provided, but rather revenues for combinations of individual services that are determined by each patient’s clinical needs. Each patient has a different clinical history, different severities, and different responses to treatment and the episode charge reflects this. The CMA correctly noted that controlling for these factors is important.³²
44. The IPA attempted to control for these differences by undertaking a regression analysis of episode charges on a limited number of patient characteristics³³ – age, gender and length of stay.³⁴ Episode charges were then estimated based on a “representative patient”. In the Final Report, the CMA claimed that the included factors were able to account “*for the substantive cost differences that may exist between hospital operators that we compare*”³⁵ and therefore that the IPA was sufficient to ensure a like-for-like comparison of episode charges.
45. Table 5 shows, however, that once correcting for the errors discovered in the Data Room, these patient characteristics are not sufficient to adequately explain the observed variation in prices within a hospital operator.

³⁰ CMA Final Report, Appendix 6.12, Annex A, para. 2.

³¹ According to the CMA, an episode is defined as “*a unique combination of discharge date—visit type—date of birth—gender—patient postcode—hospital postcode*.” See CMA Final Report, Appendix 6.12, Annex A, para. 5.

³² It noted that if the patient mix were to differ across treatments then operators’ costs and prices, when averaged across patients, may be different as a result. See para. 14a of the CMA’s Appendix 6.12 to the Final Report.

³³ The KPMG Data Room Report demonstrated that there were a number of other potential features contained in the Healthcode data which the IPA failed to consider. See KPMG Data Room Report Section 6.2.

³⁴ While studies have also used the length of stay as an explanatory variable, there is doubt among health economists as to whether this is a wholly exogenous measure of patient complexity, or whether it is determined in part through the actions of the provider (which may introduce endogeneity when considering a model seeking to explain prices). See, for example, Haas-Wilson, D. and Garmon, C. (2009) “Two Hospital Mergers on Chicago’s North Shore: A Retrospective Study”, pp 10 and 12 https://www.ftc.gov/sites/default/files/documents/reports/two-hospital-mergers-chicago%E2%80%99s-north-shore-retrospective-study/wp294_0.pdf.

³⁵ CMA’s Final Report, Appendix 6.12, para. 15.

Table 5: the percentage of regressions with R² less than certain levels

R ²	CMA Specification (Not correcting for coding error)	KPMG Specification (correcting for the coding error)
Less than 10%	0.0%	1.7%
Less than 20%	0.0%	7.0%
Less than 30%	0.0%	11.6%
Less than 40%	0.0%	18.6%
Less than 50%	0.0%	25.4%
Less than 60%	0.0%	32.7%
Less than 70%	0.0%	41.6%
Less than 80%	0.6%	50.7%
Less than 90%	6.4%	68.3%
Less than 100%	100.0%	100.0%

Source: KPMG Analysis.

46. Given the large unexplained price variation and the lack of adequate control variables that adjust for patient complexity within a treatment, without considerable changes the IPA is not conducting a meaningful like-for-like comparison of treatment charges and thus of overall prices. Unless the CMA's new model compares prices on a like-for-like basis, the comparison will be meaningless and of no probative value.

2.3 The empirical techniques used in the IPA were not sound

47. In performing a price comparison, any empirical analysis must take into account all relevant information and be free of empirical errors. The IPA contained a number of basic errors which call into question the accuracy of the results.
48. First, the IPA was not an analysis of the revenue that a hospital operator received for a given treatment, but rather an analysis of the invoiced amount sent by the hospital operators to the PMIs using Healthcode. For HCA, these invoice amounts may not be reflective of the actual price paid by the PMI for two reasons:
- First, as described in HCA's Response to the Provisional Findings, HCA pays rebates to a number of different PMIs including [REDACTED].³⁶ These rebates lower the PMIs' cost of treating their patients at HCA's facilities. Not reflecting these rebates in the price analysis biases HCA's observed price upwards; and
 - Second, PMIs employ a practice known as shortfalling whereby they refuse to pay portions of the invoices submitted to them via Healthcode. The shortfalls can correspond to significant portion of the revenue from certain PMIs.³⁷ Importantly, these shortfalls are connected with specific invoices, and

³⁶ HCA's Response to Provisional Findings, Appendix 4, paras. 4.58-4.63.

³⁷ For instance, in 2014 shortfalls amounted to [REDACTED]% of revenue from Axa PPP, [REDACTED]% of revenue for WPA, and [REDACTED]% of revenue for PruHealth.

therefore depending on the reasons that PMIs refuse to pay, they might disproportionately affect some treatments more than others. Moreover, the level of shortfalls is increasing over time, suggesting that PMIs are increasingly challenging HCA's invoices.

49. Additionally, the IPA predicted negative and zero prices.³⁸ A negative episode charge means that, for the representative patient in central London, the IPA predicted that a hospital operator would be willing to "pay" a PMI to treat the patient. Similarly, a predicted zero price would indicate that for the representative patient in central London, the hospital operator would be willing to treat the patient for free.³⁹ These kind of results are a clear indication of the use of an inappropriate methodology for constructing price comparisons.
50. Furthermore, in a number of instances, the IPA derived predicted prices for treatments even though the data did not have sufficient variability to measure the impact of the relevant factors on price. For example, for certain treatments TLC's patients were only treated for one night, and therefore the IPA was unable to measure how much each additional night of treatment would cost at TLC. This inability to estimate would not have been a problem if the representative patient for the relevant treatment in central London had been treated for one night only. However, in some cases, the representative patient in central London for the relevant treatment was admitted for more than one night. In these cases, due to its inability to estimate the incremental charge, the methodology implicitly assumed that each additional night of treatment at TLC was free of charge.
51. These errors led to the difference in the insurer-specific price indices to be overstated for certain PMIs and certain years, as well as in the average price indices for 2007, 2010 and 2011.⁴⁰ Each of these errors needs to be addressed in the CMA's new model before it can be relied upon.

2.4 The IPA provided no evidence of a price difference between HCA and TLC

52. In summary, the IPA's empirical framework suffered from a number of serious flaws. It did not appropriately account for the treatment mix offered by hospital operators, did not control for severity of the patient's illness and suffered from a number of basic errors due to the choice of empirical methods used to construct the price comparisons.
53. Further, notwithstanding the limitations detailed in paragraph 52, the results from the IPA, reported in the KPMG Data Room Report, did not show that there is a significant price difference between HCA and TLC.
54. The Data Room Report showed that, once the computer coding errors relating to the statistical significance testing, the estimated price differences between HCA and TLC became statistically insignificant for [X] insurer-specific price indices, including BUPA in [X] out of 5 years. These insignificant insurer-specific price differences accounted for over [X]% of HCA's revenues considered and approximately [X]% of HCA's admissions considered. The Data Room Report also showed that of the

³⁸ KPMG Data Room Report, paras. 58–66.

³⁹ We note that the IPA performed on operators outside of central London suffers from the same errors and therefore the estimated price differentials and their relationship to local market concentration are potentially incorrect for outside of central London.

⁴⁰ KPMG Data Room Report, Tables 7-8.

[X] regressions considered in the IPA, the difference between HCA's and TLC's prices was statistically insignificant in [X]% of cases. These accounted for [X]% of total revenues considered and [X]% of the total episodes considered.

55. These results do not indicate [X]. As a result, the IPA cannot be used to support an AEC finding with respect to insured prices in central London.

3 The assessment of causality between local market concentration and prices

56. In this section we consider whether the IPA, in isolation or in conjunction with other evidence in the Final Report, could support the conclusion that any estimated price difference is caused by local market concentration.
57. There are several important considerations in this context which we explore in the rest of this section. First we discuss the relationship between concentration and prices as it emerges out of economic theory and competition practice. This emphasises the need to distinguish between market power and competitive success as potential explanations of market shares. We then move on to consider some basic methodological building blocks that should underpin any sound assessment of causality. One is that any attempt to capture empirically the existence of price differences and their potential drivers needs to be grounded in the way in which prices are formed in this industry, which in this case is the bargaining framework. Another is the way in which costs are accounted for. We believe that the IPA falls short of meeting the standard on both counts. Finally we consider the evidence produced by the corrected IPA and consider that it does not provide any evidence of causality and that, if anything (and if it is taken at face value) it undermines the idea that there is a causal relationship between local market concentration and prices.

3.1 The relationship between local market concentration and higher prices

58. In the Final Report, the CMA reached the conclusion that HCA charged higher insured prices due to its high share of the central London market. This conclusion was based on the finding of [§<] price differences between HCA and TLC coupled with HCA having a higher market share than TLC. There was no attempt by the CMA in the IPA to assess the causality of any linkage between these two factors, nor was there any attempt by the CMA to investigate any other factors that may lead to both higher market shares and higher prices.
59. While for many years antitrust analysis leaned very heavily on the use of market shares and concentration measures (sometimes called the “structural presumption” in antitrust), there has been a pronounced move away from heavy reliance on these kinds of measures as screens for anticompetitive effects and in econometric analyses of market power in antitrust. This has been true in antitrust economics scholarship for some time (e.g., “Market shares . . . do not appear in the definition of market power”).⁴¹ The fundamental reason for the move away from the structural presumption was that efficient firms selling products with attractive characteristics tend to grow as consumers choose their products. Attractive, high-quality products

⁴¹ See, for example, Kaplow, L. (2010) “Why (ever) define markets?” Harvard Law Review 124(2): 437-517. See also Baker, J. B. (2010) “Market concentration in the antitrust analysis of horizontal mergers” In Hylton, K. N., editor, Antitrust Law and Economics, Encyclopaedia of Law and Economics, 10: 234-260. Edward Elgar, Cheltenham, UK/Northampton, MA, USA, 2nd edition; Farrell, J. and Shapiro, C. (2010) “Antitrust evaluation of horizontal mergers: An economic alternative to market definition” The B.E. Journal of Theoretical Economics 10(1): 1-39.

also tend to have higher margins. A key implication is that simple correlations between market share and margins frequently do not imply causation.

60. Practice in the US antitrust enforcement agencies has also moved away from focusing heavily on market shares and concentration.⁴² This paradigmatic and evidentiary shift has been embodied in the US 2010 Horizontal Merger Guidelines,⁴³ which discuss at length the various kinds of evidence the agencies will consider in evaluating horizontal mergers, including, but far from limited to, market shares and concentration. The agencies have also moved away from reliance on market shares and concentration in their econometric analyses. This shift has occurred in no small part due to the shift away from the “structure-conduct-performance” paradigm in economics research for the last 25 years.⁴⁴
61. While the agencies do examine market shares and concentration, these metrics constitute only a starting point for examining competition and are by no means the only factors considered.⁴⁵ The key reason is that market shares can be large for a number of reasons, only one of which is market power. A successful competitor will often garner a large share of the market as a result of their efforts. In this case large market shares can clearly be due to intense competition on product characteristics, not a lack of price competition. In some markets, large market shares can be the result of successful investments in product quality which benefit consumers. Since products that are higher quality typically sell for higher prices, there will be an observed positive relationship which is spurious, in that it is associated with product characteristics competition, not market power. Basing antitrust enforcement policy on the relationship between concentration and price in such a situation will be counterproductive, since it will prevent or discourage pro-competitive behaviour in the form of investments in quality that benefits consumers.⁴⁶
62. The IPA, therefore, needs to distinguish between two scenarios:
 - One, where current market shares are the result of competitive forces and HCA is winning customers because of its quality (including the breadth and complexity of treatments offered); and
 - Two, where HCA’s market share is the result of its hospitals attracting patients mainly as a result of the weak competitive constraints in their location, which enables them to raise prices to PMIs.
63. Only under the latter scenario will price reflect local market concentration, rather than higher quality and more complex patients. The CMA has not presented any evidence that this is the case. Furthermore, for it to form a view that this is the case,

⁴² Cowie, M. G. and Denis, P. T. (2013) “The fall of structural evidence in FTC and DOJ merger review” Antitrust Source.

⁴³ Federal Trade Commission and Department of Justice (2010). Horizontal Merger Guidelines. Issued April 2, 1992, Revised September, 2010.

⁴⁴ See Bresnahan, T. (1989) “Empirical studies of industries with market power” Handbook of Industrial Organization, Volume 1. Elsevier Science Publishers, Amsterdam. See also Carlton, D. and Perloff, J. “Modern Industrial Organization” pp 292 and 298-305, Fourth Edition, Pearson Education Limited, Essex, England.

⁴⁵ For example, in the Express Scripts-Medco merger, the parties had large market shares and the merger led to a highly concentrated market, but the FTC determined that there was substantial competition due to the nature of the market, and the merger would not harm competition. See: https://www.ftc.gov/sites/default/files/documents/closing_letters/proposed-acquisition-medco-health-solutions-inc.express-scripts-inc./120402expressmedcostatement.pdf

⁴⁶ Demsetz, H. (1973) “Industry Structure, Market Rivalry, and Public Policy” The Journal of Law and Economics pp 1-3

it will need to show how HCA is able to sustain such prices without inducing entry or expansion of competitors.⁴⁷

64. Testing for which of these explanations applies in this case is very important. Incorrectly identifying a causal relationship between prices and concentration would have the unintended effect of damaging competition and harming consumers. Penalising, rather than rewarding, hospitals for high performance destroys incentives to invest and compete, to the ultimate detriment of consumers. Unless the model can establish a causal connection between local market shares and prices, the CMA cannot rely on that model in support of its theory of harm.

3.2 Key methodological planks of a causal assessment

65. There are two important components of any analysis that aims to assess price differences and seeks to understand the drivers of any such differences. The first is that any such analysis needs to be grounded in, and be consistent with, the evidence on how prices are formed. In this case the appropriate context to examine price formation, as recognised by the CMA, is the bargaining framework.⁴⁸ This is important as this context presents specific characteristics and implications that need to be reconciled with the findings of the empirical analysis for it to be considered meaningful. The second component is that the analysis needs to accurately account for any relevant cost differences when comparing prices across different operators. We consider each of these issues in turn.

3.2.1 Use of the bargaining framework

66. At a basic level, one cannot reach a proper view on causality outside a framework that sets out the likely drivers of price levels. This dissociation between the theoretical model of insured prices and the IPA calls into question the probative value of the model.
67. Leaving aside the consideration of whether the CMA's approach to the bargaining framework is correct (which we do not cover here but is considered in the PMI Bargaining Power section of HCA's submission on Structural AECs), the CMA's own views on drivers of insured prices should have led the CMA to consider whether the IPA included the right explanatory variables, and particularly whether the IPA results are consistent with the bargaining framework's predictions.
68. However, the CMA does not appear to have considered any of these issues. It did not consider explicitly what drivers of prices should be considered in the analysis and it did not examine whether the pattern of price differences across time and PMIs was consistent with its bargaining analysis. The latter, in particular, is an important point, as the CMA's own assessment of the drivers of bargaining power, and the basis for its divestment remedy, is that the ability to switch (e.g. that there is sufficient spare capacity in the market) is a key driver of the PMI's outside option and hence, in the CMA's view, of insured prices.
69. This is a testable prediction. In the CMA's bargaining analysis only the PMI's outside option is considered. If we observe that a PMI with a large number of policyholders has lower price differentials than a PMI with a small number of

⁴⁷ While the CMA has found evidence of high barriers to entry and expansion, HCA is providing evidence that there has been significant entry and expansion in central London, contradicting the CMA's finding. See section on Barriers to Entry of HCA's submission on the CMA's Findings on Structural AECs in London.

⁴⁸ CMA's Final Report, paras. 6.280 and 6.291.

policyholders, then we can assume that there is sufficient spare capacity in the market to absorb the large PMI's policyholders. The results of the IPA indicate that there are low price differentials for [X] and some higher price differentials for [Y]. This should have caused the CMA to seriously reconsider either the significance of the ability to switch as a driver of price differentials, the availability of spare capacity in the market, or the validity of the IPA, or, more likely, all three.

3.2.2 The IPA failed to appropriately account for cost differences

70. There are a number of issues with the way in which the CMA considered costs. First, we do not think its dismissal of the relevance of fixed costs is justified. Second, we think that the differences in treatment mix should also be relevant to the assessment of any cost differentials.
71. The CMA stated "*we considered that only marginal costs (as opposed to fixed costs) should be relevant for pricing decisions.*"⁴⁹ Notwithstanding that the CMA contradicts its own analysis ("*... eg high fixed costs and spare capacity may provide an incentive to price so as to increase volume*"),⁵⁰ the finding that only marginal costs matter for pricing is incorrect. In an industry where prices are determined through negotiations, firms will take fixed costs into account when setting prices.⁵¹ Indeed, if fixed costs were not remunerated by higher prices there would be no incentive to invest.
72. It is clear from Section 2.1.2 that HCA's mix of treatments is generally more complex than TLC's. This would also imply that HCA has a higher cost base than its competitors for two reasons:
 - First, the operating costs required are higher. The flow of services a hospital operator needs to provide in order to deliver high complexity treatments is more extensive and expensive than that required to deliver low complexity treatments;⁵² and
 - Second, in order to build high complexity specialisms, HCA is required to invest proportionately more than its competitors. Moreover, in its analysis the CMA should not solely focus on 'successful' investments. The wider range of complex treatments offered by HCA also incurs a larger amount of investment and innovation that 'fails' – creating a fixed cost that adds to its overall cost base but is not specific to an individual treatment.
73. This higher cost base, combined with a higher overall cost of providing services due to the enhanced quality of service provided, means that it would not be surprising for there to be some price difference – especially if the difference in cost base and additional treatments are apportioned across all of HCA's treatment prices. Such apportionment is likely. For instance, an investment in a new surgical technology may be required to perform a complex treatment, but nonetheless could still be used for a less complex treatment. Furthermore, with long term contracts and flat annual price increases, changes in the relative costs for treatments will mean that

⁴⁹ CMA's Final Report, para. 6.364.

⁵⁰ CMA's Final Report, para. 6.179.

⁵¹ See, for example, Nash, J. (1953) "Two-Person Cooperative Games" *Econometrica*, 21: 128-140; Binmore, K., Rubinstein, A., and Wolinsky, A. (1986) "The Nash Bargaining Solution in Economic Modelling" *The RAND Journal of Economics* 17(2): 176-188.

⁵² E.g. ITU facilities and on-site RMOs. See, for example, HCA's response to the CMA's Provisional Decision on Remedies, para.5.4 and paras. 5.21-5.23.

even if there was no cross-subsidization at the time of negotiation, it is likely that some would be introduced over time.

74. The IPA must therefore fully examine the potential for any cross-subsidization across the baskets of treatments that HCA and PMIs negotiate over. A qualitative review of the bargaining evidence is not sufficient to rule out any cross-subsidization across various groups of treatments that vary in their complexity and equipment requirements.

3.3 The IPA presented no evidence of a causal relationship between higher prices and local market concentration

75. The IPA attempted to determine the link between local market concentration and higher prices through the use of a “*simple graphical analysis*”.⁵³ This analysis was performed by plotting on a graph the average price index for HCA and TLC and comparing that to the market shares for each hospital operator in 2011. This approach was clearly flawed in a number of ways.
76. First, as described in the previous section, market shares are not a reliable indicator of market power. Without an assessment of the formation of market shares the IPA cannot differentiate between shares that are driven by higher quality attracting more patients, or shares that are driven by a dominant firm exercising its market power.
77. Second, by virtue of the fact that the IPA only compared HCA with TLC in central London, the analysis of the relationship between market shares and prices was performed on an extremely limited number of observations. Initially there were 10 observations available,⁵⁴ but due to the limited change in market shares across the five years in the analysis, the final analysis was performed with only two observations.
78. As the CMA correctly acknowledged it “*does not allow for statistical testing*”⁵⁵ and that only a “*simple graphical analysis*”⁵⁶ could be performed. Nonetheless it is from this analysis that the CMA decided it was able to draw the much stronger conclusion that “*local substitutability plays a role in determining insured price outcomes*”.⁵⁷ This is clearly erroneous. Beyond not providing any method of assessing causality, an analysis with only two data points is incapable of determining a statistically significant relationship between two factors.
79. Furthermore, the CMA then concluded that the IPA provided “*an indication of the magnitude of the relationship between local concentration and insured prices*”,⁵⁸ which as our previous discussion showed is also misguided. There are many possible reasons why market shares and prices might both be high (e.g. a large range of treatments attracts more patients but is also more costly to provide) which do not relate to the anticompetitive exercise of market power, and therefore, it is

⁵³ CMA’s Final Report, Appendix 6.12, para. 61.

⁵⁴ One observation each for HCA and TLC across each of the 5 years considered in the IPA.

⁵⁵ CMA’s Final Report, Appendix 6.12, para. 61.

⁵⁶ CMA’s Final Report, Appendix 6.12, para. 61.

⁵⁷ CMA’s Final Report, para. 6.383.

⁵⁸ CMA’s Final Report, para. 6.381.

also impossible for the analysis to determine the magnitude of any relationship by just examining the correlation between market shares and prices.

80. The IPA has therefore provided no evidence of a causal relationship between local market concentration and higher prices. In fact, taken at face value, the results of the IPA undermine any conclusion on the existence of any such relationship.

3.4 The IPA showed that higher prices are not caused by local market concentration

3.4.1 The IPA found variation in estimated prices and no variation in local market concentration

81. When plotting the results of the IPA against the hospital operators' market shares, the CMA used market share data for 2011 as a proxy for local substitutability in the five-year period covered by the IPA. The CMA justified this assumption by arguing that there was limited entry, exit and expansion in the UK private healthcare industry over the 2007-2011 period. In short, the CMA considered that local substitutability remained unchanged over the period under consideration.
82. However, this leaves open an important question of what drives any observed changes in the level of price indices considered, both across time for the same PMI and across different PMIs.
83. Table 6 shows that there is considerable variation in the price difference the IPA estimates within a PMI across years. For example, [3<]. These changes occurred during a period where HCA's market share⁵⁹ was broadly stable. Therefore, the large observed changes in prices cannot be driven by changes in local market concentration.

⁵⁹ Measured by shares of admissions and shares of overnight bed capacity.

Table 6: year-on-year change in insurer-specific price indices

Insurer	2008	2009	2010	2011
Axa PPP	[<]%	[<]%	[<]%	[<]%
Bupa	[<]%	[<]%	[<]%	[<]%
Bupa International	[<]%	[<]%	[<]%	[<]%
Cigna	[<]%	[<]%	[<]%	[<]%
Pruhealth		[<]%	[<]%	[<]%
Simplyhealth			[<]%	[<]%
SLH	[<]%	[<]%	[<]%	[<]%
WPA				[<]%

Note: Aviva and Exeter are not listed above given they are only in the analysis for one year.
Source: KPMG Analysis.

3.4.2 Adding additional operators highlights the lack of a relationship between higher prices and local market concentration

84. Despite finding the same conditions with regard to barriers to entry and expansion and weak competitive constraints outside of central London, the CMA did not find any causal link between concentration and prices outside central London. The CMA has provided no evidence or argument as to why the same competitive conditions would lead to one market showing evidence of a causal linkage between local market concentration and price and for another market not to show the evidence.
85. One potential explanation for the inconsistency is simply that outside central London the CMA compared more than just two hospital operators. That gave an opportunity for the data to simply show that the relationship did not hold. Notwithstanding the problems with this analysis as described above, the CMA was unable to find a consistent relationship between prices and local market concentration outside of central London.
86. By contrast, the IPA, inside central London, attempted to analyse the relationship between local market concentration and prices by examining the prices of just two hospital operators, HCA and TLC. This decision meant that the IPA did not consider almost 40% by revenue (almost 50% by inpatient beds)⁶⁰ of private healthcare provision in central London, including all of the PPUs. The CMA justified this approach by stating that HCA and TLC were the largest two hospital operators in central London and therefore the most comparable.⁶¹ However, it did not attempt to include other operators in the analysis to confirm its results. The key point is that with two data points there is very little scope to disprove any theory. And it is

⁶⁰ LaingBuisson, 'Private Acute Medical Care in Central London', Market Report, First Edition, Researched & written by Ted Townsend.

⁶¹ CMA's Final Report, para. 6.338.

possible to come up with almost any potential driver of price differences that could be consistent with or supported by this analysis.

87. The importance of comparing HCA with all of the relative competitors is further highlighted by the analysis described in Annex 8 to the KPMG Data Room Report. In this case, King Edward VII ("KEVII") was added to the analysis to produce a basket of treatments common to all three providers, and the relationship that the CMA identified between HCA and TLC with regard to market shares and prices no longer holds. Table 7 reports the average price indexes for the three hospital operators. Clearly, [§].

Table 7: IPA including KEVII, 2007-2011

Year	Average Price Index: HCA	Average Price Index: TLC	Average Price Index: KEVII
2007	£[§]	£[§]	£[§]
2008	£[§]	£[§]	£[§]
2009	£[§]	£[§]	£[§]
2010	£[§]	£[§]	£[§]
2011	£[§]	£[§]	£[§]
Average	£[§]	£[§]	£[§]

Source: KPMG Analysis.

Figure 1: Average price index for HCA, TLC and KEVII (averaged across 2007-2011) and share of supply in terms of total admissions in 2011

[§]

Source: KPMG Analysis.

88. Figure 1 extends the CMA's "*simple graphical analysis*" to incorporate the results from the IPA including KEVII analysis. In this case, despite having a higher market share in central London, [§]. These results highlight the importance of comparing HCA with all of the relevant competitors in central London and demonstrate how sensitive the conclusions are to the treatments in the common basket.⁶²

⁶² Including KEVII in the IPA analysis reduces the size of the common basket. However, the basket sizes for Bupa and Axa PPP, the two largest PMIs, in the tri-wise analysis remain larger or equal to the basket sizes for all other PMIs in the pairwise analysis (with the sole exception of Aviva in 2011)

4 Conclusion

89. It is clear to us that the IPA, as it was previously formulated, suffers from significant flaws which render it unfit to assess either the existence of a price differential between HCA and TLC or the relationship between any such difference and local market concentration. Furthermore, taken at face value, the evidence from the IPA (once the basic coding errors identified in the Data Room are corrected) does not support the CMA's conclusions in its Final Report and casts serious doubts on the existence of a causal link between local market concentration and prices.
90. If the CMA is going to rely on a pricing analysis as part of its analysis of the provision of private healthcare in central London, it is imperative that it follows the best practices adopted by both the academic community and competition authorities. That is, it must:
- Appropriately account for differences in treatment mix and correctly adjust for differences in patient complexity between HCA and comparator hospitals in order to ensure that it is comparing hospital operators on a like-for-like basis;
 - Appropriately reflect the role of quality in competition in private healthcare as a key dimension of competition and driver of innovation, as a determinant of cost differentials and therefore potentially price differences and as an important factor to consider when assessing any relationship between local market concentration and market power;
 - Be grounded in the bargaining framework that the CMA correctly identified is the method by which prices are set in this market. This includes fully considering the outside options of all market participants and weighing the impact of changes in those options on changes in prices; and
 - Fully and rigorously test any suggested relationship between local market concentration and prices making sure to fully account for any other confounding factors that may explain any observed differences in prices.
91. Without performing an analysis which accounts for these factors the CMA cannot be confident that its investigation is picking up a significant and meaningful relationship and therefore cannot support an AEC finding with regard to insured prices in central London.

Appendix 1 Expert Biographies

Martin Gaynor

- Martin Gaynor is the E.J. Barone Professor of Economics and Public Policy at Carnegie Mellon University and former Director of the Bureau of Economics at the Federal Trade Commission. He is one of the founders of the Health Care Cost Institute, an independent non-partisan non-profit dedicated to advancing knowledge about US health care spending, and served as the first Chair of its governing board. He is also a Research Associate at the National Bureau of Economic Research and an International Research Fellow at the University of Bristol.
- Prior to his tenure at Carnegie Mellon, Dr. Gaynor held faculty appointments at Johns Hopkins and a number of other universities, and was a visitor at the Hungarian Academy of Sciences in Budapest in 1991.
- His research focuses on competition and antitrust policy in health care markets. He has written extensively on this topic, testified before Congress, and advised the governments of the Netherlands and the United Kingdom on competition issues in healthcare. He has won a number of awards for his research, including the Victor R. Fuchs Research Award, the National Institute for Health Care Management Foundation Health Care Research Award, the Kenneth J. Arrow Award, the Jerry S. Cohen Award for Antitrust Scholarship (finalist), and a Robert Wood Johnson Foundation Investigator Award in Health Policy Research. Dr. Gaynor received his B.A. from the University of California, San Diego in 1977 and his Ph.D. from Northwestern University in 1983.

Katharina Hauck

- Katharina Hauck is a Senior Research Fellow at the Imperial College Business School in London where she teaches on Performance Assessment, Global Health Policy, Economic Evaluation, Financing Healthcare and Panel Data Analysis. She graduated with a Diplom Volkswirtin from Technische Universität Berlin in Germany before completing an MSc in Health Economics at the University of York where she continued to a PhD in Economics.
- Prior to her tenure at Imperial College, Dr. Hauck was a Senior Research Fellow at Monash University in Australia at the Centre for Health Economics before moving to the Department of Econometrics and Business Statistics. She has also been a Research Fellow at the University of York and a Technical officer in the Division of Health Promotion working for the World Health Organization in Switzerland.
- Her work focusses particularly on Health Economics and she has published many papers and book chapters in this area. She has won a number of grants and awards for her research including Zhao X. Award, 'Paper of the month' by the Swiss Patient Safety Foundation 2011 and grants from The Health Foundation and the Australian Research Council.

Nicola Mazzarotto

- Nicola Mazzarotto is a Partner and Head of Competition Economics at KPMG LLP ("KPMG"), having joined KPMG in January 2011. During this time, he has provided clients with economic analysis and advice in relation to a range of competition matters, including in the context of mergers and market inquiries by the UK competition authorities. Dr. Mazzarotto holds a 'Laurea' (Bachelor's Degree) in Statistics and Economics from the University of Rome, an MSc in Economics from the London School of Economics and a PhD in Economics from the University of East Anglia. His academic research has mainly focused on aspects of bilateral bargaining between firms and he has published some of his research in books and international peer-reviewed journals.
- Prior to joining KPMG, Dr. Mazzarotto was Head of Policy Analysis at the UK Competition Commission ("CC"), now part of the Competition and Markets Authority ("CMA"). During his tenure at the CC, between 2003 and 2010, he led the economic analysis in a number of inquiries, including the CC's Groceries Remittal inquiry, in which the analysis focused on assessing the economic costs and benefits of proposed remedies in different scenarios. He has also led the

CC's economic analysis in a number of merger cases and was heavily involved in developing the analytical techniques used to assess the competitive effects of mergers, including isochrone analysis, price- and margin-concentration analyses, techniques based on diversion ratios and the broader use of data on customer behaviour and on catchment areas as part of the 2010 Merger Guidelines. His time at the CC included a secondment to the Office of Fair Trading.

- He has also worked at the Directorate-General for Competition (European Commission), advising on merger and antitrust cases, and at the Organisation for Economic Co-operation and Development (OECD), focusing on best practice in competition policy. Dr. Mazzorotto has presented at, and chaired, numerous conferences on competition policy matters.


Jorge Padilla

- Dr. Jorge Padilla is a Senior Managing Director and Head of Compass Lexecon Europe earning his M. Phil and D. Phil degrees in Economics from the University of Oxford. He is Research Fellow at the Centro de Estudios Monetarios y Financieros (CEMFI, Madrid) and teaches competition economics at the Barcelona Graduate School of Economics (BGSE).
- Dr. Padilla has written numerous papers on competition policy and industrial organisation in the Antitrust Bulletin, the Antitrust Law Journal, the Economic Journal, the European Competition Journal, the European Competition Law Review, the European Economic Review, the Fordham International Law Journal, Industrial and Corporate Change, the International Journal of Industrial Organization, the Journal of Competition Law and Economics, the Journal of Economics and Management Strategy, the Journal of Economic Theory, the RAND Journal of Economics, the Review of Financial Studies, the University of Chicago Law Review, and World Competition. He is also co-author of The Law and Economics of Article 102 TFEU, 2nd edition, Hart Publishing, 2013.
- He has advised on various cases and given expert testimony before competition authorities and courts of several EU member states, as well as in cases before the European Commission. Dr. Padilla has submitted written testimony to the European General Court and the UK Competition Appeals Tribunal in cartel, merger control and abuse of dominance cases. He has also given expert testimony in various civil litigation (damages) and international arbitration cases.

Ariel Pakes

- Ariel Pakes is the Thomas Professor of Economics in the Department of Economics at Harvard University, where he teaches courses in Industrial Organisation and in Econometrics. Before coming to Harvard in 1999, he was the Charles and Dorothea Dilley Professor of Economics at Yale University (1997-99). He has held other tenured positions at Yale (1988-97), the University of Wisconsin (1986-88), and the University of Jerusalem (1985-86). Pakes received his doctorate degree from Harvard University in 1980, and he stayed at Harvard as a Lecturer until he took up a position in Jerusalem in 1981.
- Pakes was elected fellow of the American Academy of Arts and Sciences in 2002. He received the Frisch Medal of the Econometric Society in 1986, and was elected as a fellow of that society in 1988. He was an editor of the RAND Journal of Economics, an associate editor of Economic Letters and of the Journal of Economic Dynamics and Control, a research associate of the NBER, and a member of the AEA Committee on Government Statistics. In the past Pakes has been a chair of the AEA Census Advisory Panel, Associate Editor of Econometrica, the Journal of Econometrics, the International Journal of Industrial Organization, and the Economics on Innovation and New Technology. He also co-edited a Proceedings of the National Academy of Science issue on "Science, Technology, and the Economy."
- Professor Pakes' research has been in Industrial Organisation (I.O.), the Economics of Technological Change and in Econometric Theory. He and his co-authors have recently focussed on developing techniques which allow us to empirically analyse I.O. models. This includes

theoretical work on how to estimate demand and cost systems and then use the estimated parameters to analyse equilibrium responses to policy and environmental changes, empirical work which uses these techniques to analyse the implications of alternative events in different industries, and the development of a framework for the numerical analysis of dynamic oligopolies (with and without collusive possibilities).



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cutting through complexity

The CMA's Assessment of Negotiations Between Hospital Operators and PMIs and the Economics of Bargaining

Prepared for HCA's legal and professional advisers in relation to the remittal of the CMA's inquiry into the provision of private healthcare in the United Kingdom

KPMG LLP
8 May 2015

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This report is made by KPMG LLP ("KPMG"), on engagement terms agreed with HCA International Limited ("HCA"), solely to HCA in relation to the remittal of the CMA's inquiry into the provision of private healthcare in the UK in which HCA is a party (the "Remittal"). KPMG's work has been performed so that KPMG might report to HCA on those matters that KPMG has agreed to report, and for no other purpose. To the fullest extent permitted by law, KPMG does not accept or assume responsibility to anyone other than HCA for KPMG's work, for this report, or for any findings, conclusions or opinions that KPMG has formed or made.

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Subject to such submission in evidence in the Remittal on the basis set out above, this report will remain confidential.

1 Introduction

1. This report was prepared by KPMG with the help of Prof Roman Inderst¹ to supplement HCA's submission on the CMA's Findings on Structural AECs in London of 1 May 2015. In its Final Report on the private healthcare market of 2 April 2014 (the "CMA Final Report"), the CMA made a number of observations about how insured prices are determined in the private healthcare market. Specifically, the CMA:
 - Noted that contracts between hospital operators and private medical insurers ("PMIs") are determined by bilateral negotiations,² or "bargaining", as opposed to the alternative of prices being "posted" by the buyer or seller in a marketplace or subject to "take-it-or-leave-it" offers;³
 - Identified that the outcome of insured price negotiations (hereafter: the "bargaining outcome") between PMIs and hospital operators will depend on what it calls the "outside options" of both parties.⁴ The CMA stated that the outside option of each negotiating party is the "best" alternative profits that it can earn, in the event of either a permanent or a temporary breakdown of negotiations;⁵ and
 - Concluded that both parties' outside options are important determinants of the bargaining outcome, and specifically, of prices: *"Given the dependence of the bargaining outcome on parties' outside options, all else equal, the less (more) attractive a PMI's outside option, the higher (lower) will be the negotiated price. A similar but reverse relationship holds for the hospital operator—it will receive a higher (lower) price the more (less) attractive its outside option"*.⁶
2. Despite acknowledging the importance of both parties' outside options on the bargaining outcome, the CMA focused its analysis on the outside options of PMIs and their hypothesised relationship with local concentration of hospital operators.⁷
3. The CMA's one-sided approach to considering primarily the PMIs' outside options is not innocuous:

¹ Prof Inderst's credentials are set out in Appendix 2.

² "Contracts between a hospital operator and a PMI are typically the product of bilateral negotiations where an agreement is reached over price and the terms on which the parties will trade with each other". CMA Final Report, paragraph 6.291.

³ "[N]either the hospital operators nor the PMIs appear to be 'price takers' ... Similarly, neither of the two appears to be in a position to make 'take-it-or-leave-it offers' with respect to insured prices. This is consistent with the observation that insured prices are bilaterally negotiated". CMA Final Report, paragraph 6.279.

⁴ "In a bilateral bargaining context, the bargaining outcome (eg the negotiated price) depends on the alternatives, referred to as outside options, available to both negotiating parties in the event that an agreement is not reached". CMA Final Report, paragraph 6.280.

⁵ CMA Final Report, footnote 391.

⁶ CMA Final Report, paragraph 6.282.

⁷ "While the bargaining outcome depends on the outside options of both PMIs and hospital operators, the focus of our analysis has been on the former ... We note the fact that the bargaining outcome depends on the outside options of PMIs is what gives rise to a positive relationship between local hospital concentration and insured prices." CMA Final Report, paragraph 6.285.

- First, it suggests that the way in which a bargaining outcome is affected by a PMI's outside option is independent of other factors related to the overall bargaining position of the PMI and of the hospital operator; and
 - Second, more specifically, it implies that a change in a PMI's outside option *must* lead to a sufficiently large effect on the bargaining outcome. This principle underpins the CMA's divestiture remedy (which is meant to reduce prices by increasing PMIs' outside options⁸).
4. This report sets out how, based on insights from the theoretical and empirical academic literature on bargaining, the CMA's approach is incorrect. In summary, it shows that:
- First, contrary to what the CMA's approach implies, a *change* in one negotiating party's outside option may have a very small (even negligible) effect on the bargaining outcome. According to bargaining theory, this effect crucially depends on what is commonly referred to as the "sharing rule" (put simply, how the surplus available in the context of a negotiation is shared between the negotiating parties). The CMA did not adequately recognise the important role played by the sharing rule or how the sharing rule affects the impact of a change in one party's outside option on the bargaining outcome;
 - Second, the empirical academic literature that speaks directly to the sharing rule has found that it varies widely, both across and within industries. No a priori assumption on the sharing rule is thus justified; nor, consequently, is any a priori assumption on the size of the effect, if any, on the bargaining outcome of a change to a PMI's outside option. The CMA thus erred by implicitly assuming that an effect of any given magnitude should arise from a given change to any PMI's outside option;
 - Third, the CMA's approach of considering "all else equal"⁹ the effects of a change in PMIs' outside options is flawed. The recent empirical academic literature on bargaining power suggests that key determinants of a negotiating party's overall bargaining position affect both its outside option *and* the sharing rule. It is thus essential to consider the determinants of hospital operators' outside options in order to learn about both parties' overall bargaining positions, as they affect the impact that a change in PMIs' outside options will have on bargaining outcomes; and
 - Fourth, evidence from the private healthcare industry, together with findings from the literature, suggest that the overall bargaining position of PMIs and hospital operators may in fact be such that any change in PMIs' outside options would not have a significant effect on bargaining outcomes. The CMA did not provide any arguments or evidence to the contrary; instead it appears to have simply assumed that the effect would be large enough to justify its divestment remedy.
5. The analysis presented in this report shows that the CMA likely overestimated the impact of the change in the PMIs' outside options on the bargaining outcome.¹⁰ Put otherwise, even if one believes (as the CMA does) that HCA's market share is linked to PMI's outside options, there is nothing in the CMA's analysis of bargaining that indicates that a change in HCA's market share would lead to meaningfully lower

⁸ CMA Final Report, paragraphs 11.107-11.108.

⁹ CMA Final Report, paragraph 6.282.

¹⁰ These four results are presented under the assumption of "efficient contracting" between hospital operators and PMIs. They also fully hold under the less analytically tractable assumption of "non-efficient contracting".

prices. In fact, the evidence from the private healthcare market suggests any change is likely to be negligible.

6. The remainder of this report proceeds as follows:

- Section 2 sets out the role of the sharing rule in negotiations under efficient contracting, with reference to both the theoretical and the empirical academic literature; and
- Section 3 discusses how the sharing rule itself depends on a party's overall negotiating position, and applies this result to the private healthcare market.

2 The role of the sharing rule in bilateral negotiations

7. An accurate consideration of the economics of bargaining shows that there is an internal inconsistency in the CMA's position. On the one hand, the CMA acknowledged in its Final Report that hospital operators and PMIs enter into bilateral negotiations over insured prices, as opposed to the alternatives of prices being posted by either party in a marketplace, or subject to take-it-or-leave-it offers. On the other hand, the CMA adopted an approach that only focused on PMIs' outside options.¹¹
8. This section shows why the CMA was incorrect in focusing on the outside options of PMIs in its assessment of bargaining. It sets out the importance of the "sharing rule" in bilateral negotiations and how this affects the relationship between changes in a party's outside option and the bargaining outcome. Finally, it discusses recent empirical findings on sharing rules, and their implications for the CMA's analysis.

2.1 Why the CMA was incorrect in focusing on the outside options of PMIs

9. In a framework of posted prices or take-it-or-leave-it offers made by a seller to many buyers, what constrains the seller's scope to raise prices is *only* the outside option of each buyer, which is his or her option to purchase instead a substitute product or not to purchase at all. When competitors reduce prices, thereby improving the outside options of buyers, the seller may have to reflect these price reductions to some degree if it wants to avoid losing sales.¹² These are implications that hold true in markets where contractual terms are determined by one side (the seller) and where the other side (the buyer) is protected only by the opportunity to switch, thereby taking up its "outside option". However, this does not apply when prices are negotiated.
10. Importantly, the CMA's presumption that a change in the outside option of one negotiating party has a potentially sizeable impact on the bargaining outcome can also only be justified within a framework of posted prices or take-it-or-leave-it offers. As Section 2.2 shows, where prices are bilaterally negotiated, there can be no a priori presumption on the relationship between the value of either party's outside options and the negotiated price.
11. In summary, the price determination framework that would justify the CMA's approach of only looking at one negotiating party's outside option is not actually consistent with the framework that the CMA itself acknowledged applies to insured prices. The CMA's analysis, by only focusing on the outside option of one party, is not only unsupported by market evidence, but is also likely to lead to erroneous conclusions.

¹¹ "[N]either the hospital operators nor the PMIs appear to be 'price takers' ... Similarly, neither of the two appears to be in a position to make 'take-it-or-leave-it offers' with respect to insured prices. This is consistent with the observation that insured prices are bilaterally negotiated". CMA Final Report, paragraph 6.279.

¹² This simple setting abstracts from issues of quality or innovation.

2.2 How the sharing rule affects the impact of a change in outside options on the bargaining outcome

12. This section sets out the standard framework that is used in the academic literature to analyse bilateral negotiations, with a simple application to the commercial relationship between a PMI and a hospital operator.
13. In order to analyse formally the relationship between outside options and the bargaining outcome, certain assumptions need to be made. One assumption relates to the tools that firms have to contract with each other, and makes a big difference to the tractability of the analysis. In the academic literature this is sometimes referred to a distinction between contracting which is “efficient” (in the sense that the parties just share a given surplus) and contracting that is “non-efficient” (in the sense that when the parties divide the surplus in different ways they also alter the size of the surplus). This section sets out results for “efficient contracting”, as these are considerably easier to derive formally, before discussing the extension of these results to the case of non-efficient contracting.

2.2.1 The bargaining model with efficient contracting

14. Consider a bilateral negotiation between a PMI and a hospital operator (denoted by H). When the parties come to an agreement, they jointly realise a total value (the “gross surplus”), denoted by V . When the two sides fail to come to an agreement, their respective profits earned from their next best alternative (the parties’ “outside options”) are denoted by D_H (for the hospital operator) and D_{PMI} (for the PMI).¹³ The so-called “net surplus” is obtained by subtracting the value of both parties’ outside options from the gross surplus, and therefore given by the difference $V - D_H - D_{PMI}$.
15. To determine what the negotiated price will be, one must assess how this net surplus is shared between the two parties. The very fact that this assessment is necessary is an essential feature of bilateral negotiations. It would not arise in the framework of posted prices or take-it-or-leave-it offers, as in such a framework (that is, in the absence of bilateral negotiations) a buyer could only accept or reject a seller’s offer (or vice-versa). In what follows, the hospital operator’s share of the net surplus is denoted by b_H and the PMI’s share is denoted by $b_{PMI} = 1 - b_H$.¹⁴
16. From the perspective of the PMI, the bargaining outcome thus yields the profit:

$$U_{PMI} = D_{PMI} + b_{PMI} \times (V - D_H - D_{PMI}) \quad (1)$$

¹³ Formally, D_H and D_{PMI} are the “disagreement points” of the hospital operator and the PMI respectively. Each party’s disagreement point is the profit that it can obtain from turning to its best alternative “option” to the present negotiation. Disagreement points do not refer only to the profits that could be realised following a permanent breakdown in negotiations. Rather, as the literature shows, when a permanent breakdown is not a realistic option, the disagreement points are those profits that both sides can earn following a temporary impasse in negotiations. Though the literature frequently refers to these two possibilities differently, namely as “outside options” (in the case of a permanent breakdown) and “inside options” (in the case of a temporary impasse), the CMA has nevertheless chosen to only use the term “outside options” to refer to both. To avoid confusion, this report adheres to the CMA’s terminology.

¹⁴ To follow the CMA’s “all else equal” analysis these (“sharing rule”) weights, b_H and b_{PMI} , are presently treated separately from the outside options, D_H and D_{PMI} . This is discussed further in Section 3 below.

Equation (1) shows that the PMI's profit is equal to the value of its outside option, D_{PMI} , plus the share b_{PMI} of the net surplus. After rearrangement, (1) can also be written as follows:

$$U_{PMI} = b_{PMI} \times (V - D_H) + b_H \times D_{PMI} \quad (2)$$

17. Equation (2) allows for an analysis of the impact of a change in the PMI's outside option on the bargaining outcome, "all else equal" (as envisaged by the CMA¹⁵).
18. Consider next a change in the PMI's outside option, denoted by ΔD_{PMI} , with all other parameters remaining unchanged. The resulting change in the PMI's profit (denoted by ΔU_{PMI}) is given by:

$$\Delta U_{PMI} = b_H \times \Delta D_{PMI} \quad (3)$$

19. Equation (3) shows that without knowledge of the parameter b_H , (that being the hospital operator's share of the net surplus), one cannot conclude whether an "all else equal" change in the PMI's outside option would have a large or small (or indeed any) effect on the bargaining outcome. If b_H was small or even zero, then a change in the PMI's outside option would have a negligible impact or no impact at all on the bargaining outcome. Whether this is or is not the case or not cannot simply be presumed.
20. The above discussion can be summarised as follows:

Finding 1: *In a bilateral negotiation, the effect of a change in a negotiating party's outside option on the bargaining outcome depends on the sharing rule. Without knowledge of the sharing rule, any given change in the PMI's outside option may have only a negligible (even zero) effect on the bargaining outcome.*

21. Section 2.3 below sets out results from the recent empirical academic literature on bilateral negotiations. These results show that seemingly extreme sharing rules (e.g. b_H being close to zero) are not actually rare. In this case the CMA's "all else equal" analysis may predict a change in the bargaining outcome (following a change in the outside option of a PMI), where in fact there would be (nearly) no change.

2.2.2 A simple numerical example

22. The following stylised example uses equations (2) and (3) to illustrate numerically the importance of the sharing rule for the "all else equal" impact of a change in a PMI's outside option on the bargaining outcome.
23. Assume $V = 100$, and consider a change around $D_{PMI} = 30$, with the hospital operator's outside option varying between $D_H = 5$ and $D_H = 30$.¹⁶ Table 1 below reports the elasticity of the bargaining outcome U_{PMI} with respect to D_{PMI} .¹⁷ Note that the elasticity depends on both the value of b_H and the value of D_H .

¹⁵ CMA Final Report, paragraph 6.282.

¹⁶ Since $\frac{\Delta U_{PMI}}{\Delta D_{PMI}} = b_H$, it follows that $\frac{\Delta U_{PMI}/U_{PMI}}{\Delta D_{PMI}/D_{PMI}} = \frac{1}{1 + \frac{b_{PMI} V - D_H}{b_H D_{PMI}}}$.

¹⁷ Formally, the elasticity is calculated as $\frac{\Delta U_{PMI}/U_{PMI}}{\Delta D_{PMI}/D_{PMI}}$, replacing term $\frac{\Delta U_{PMI}}{\Delta D_{PMI}}$ by the derivative (for small changes).

Table 1: Elasticity of the bargaining outcome (from the PMI's perspective) with respect to the value of the PMI's outside option (D_{PMI}) with efficient contracting, setting $V = 100$ and $D_{PMI} = 30$

Value of b_H	Value of DH					
	5	10	15	20	25	30
0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.10	0.03	0.04	0.04	0.04	0.04	0.05
0.20	0.07	0.08	0.08	0.09	0.09	0.10
0.30	0.12	0.13	0.13	0.14	0.15	0.16
0.40	0.17	0.18	0.19	0.20	0.21	0.22
0.50	0.24	0.25	0.26	0.27	0.29	0.30
0.60	0.32	0.33	0.35	0.36	0.38	0.39
0.70	0.42	0.44	0.45	0.47	0.48	0.50
0.80	0.56	0.57	0.59	0.60	0.62	0.63
0.90	0.74	0.75	0.76	0.77	0.78	0.79
1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: KPMG Analysis.

24. Table 1 shows that if the sharing rule is such that 10 per cent of the net surplus goes to the hospital operator ($b_H = 0.1$), then for all considered values of the hospital operator's outside option, a 1 per cent increase in the PMI's outside option will result in an improvement in the bargaining outcome (from the PMI's perspective) of between 0.03 per cent and 0.05 per cent.¹⁸ When there is an equal sharing rule, so that one half of the net surplus goes to the hospital operator, then the corresponding range is between 0.24 per cent and 0.30 per cent. It is only when the hospital operator's share becomes very large that the share rises above 0.5 per cent. For example, when 90 per cent of the net surplus goes to the hospital operator, then the respective range is between 0.74 per cent and 0.79 per cent, depending again on the value of the hospital operator's outside option.

2.2.3 Extension to non-efficient contracting

25. The results set out above also fully hold under the alternative assumption of non-efficient contracting. Where contracting is non-efficient, the relationship between outside options and the bargaining outcome is more complex than the efficient contracting case, and for brevity it is not set out in this report. But it is important to note that with non-efficient contracting the impact of a change in the buyer's (e.g. a PMI's) outside option on the bargaining outcome is further dampened compared to the case of efficient contracting, and under certain assumptions it may be much smaller. This means that the results presented above are if anything strengthened with non-efficient contracting.

2.3 Empirical findings on the sharing rule

26. The analysis set out in Section 2.2 shows the importance of the sharing rule in determining the impact on the bargaining outcome of a change in the outside option of one party. This section summarises findings from the recent empirical academic

¹⁸ That is, between 3 per cent and 5 per cent of the original supposed 1 per cent change in the PMI's outside option.

literature on the level of the sharing rule in different industries. In particular, this review shows that one cannot a priori assume that the sharing rule takes any particular value. Instead, the literature documents a wide variation in the sharing rule, both across and within different industries.¹⁹

27. The recent literature on sharing rules applies empirical techniques to a variety of industries where prices are determined by negotiations, including wholesale contracts negotiated between manufacturers and retailers; prices negotiated between television channel conglomerates and distributors for bundles of television channels; and contracts in the healthcare industry. This literature typically considers vertical relationships in a supply chain, that is, buyer-seller relationships. This does not mirror the relationship between hospital operators and PMIs, given the latter are not “customers” in a way that is analogous to those industries. Nonetheless, the core insights on the drivers of bargaining outcomes and the role of the sharing rule do not depend directly on this distinction.
28. Several contributions to the literature have directly estimated the sharing rule in bilateral negotiations. Applied to the simple framework presented in Section 2.2, these papers provide estimates of the sharing rule weights b_H and b_{PMI} (for the industry in question).
29. Table 2 reports the ranges of estimated sharing rule weights in a selection of recent empirical papers.

Table 2: Ranges of estimated sharing rules in the empirical academic literature

Negotiating parties	Authors	Range of estimated sharing rule weights across bilateral negotiations (“ b_H ” or “ b_{PMI} ”, if applied to the simple framework presented)
Manufacturers and retailers	Draganska et al. (2010)	[0.26 – 0.8] Retailer perspective
Manufacturers and retailers of organic milk	Bonnet and Bouamra-Mechemache (2015)	[0.2 – 1] Retailer perspective
Television channel conglomerates and distributors	Crawford and Yurukoglu (2012)	[0.17 – 0.77] Distributor perspective
Hospitals and suppliers	Grennan (2013)	[0.08 – 0.71] Supplier perspective
Hospitals and managed care organisations (MCOs)	Gowrisankaran et al. (2015) ²⁰	[0.03– 1] MCO perspective

Source: KPMG analysis of listed papers. See Appendix 1 for full references.

¹⁹ For the sake of brevity, the literature review that follows is confined to the documentation of this finding.

²⁰ The results of Gowrisankaran et al. (2015) are particularly noteworthy as they apply to negotiations in the healthcare industry. The paper’s appendix contains a detailed description of their results, which speak directly to several of the points made in this report. Specifically, the paper’s Table A2 reports the authors’ estimates of the sharing rule weights in individual MCO-hospital negotiations, and Table A3 reports how the outcome of a merger simulation between hospitals depends (to a large extent) on the sharing rule (bargaining weight) assumed. The authors note that there is “*significant variation*” in their sharing rule estimates across negotiations, and that these sharing rule estimates “*tend to be imprecise*” (Online appendix, p2). While the authors, in order to conduct a merger simulation selected a 50-50 sharing rule, the result that is relevant to the analysis of the sharing rule in this report is that there is a broad range of possible values.

30. Table 2 shows that a wide range of sharing rules have been estimated in the literature. In particular, seemingly extreme sharing rules – for example those which are close to zero from the perspective of either party – are not uncommon. This can be summarised by the following finding:

Finding 2: *Empirical estimations of the sharing rule for a variety of industries and markets suggest, first, that there should be no presumption of a particular sharing rule (e.g., “50:50”) and, second, that seemingly extreme sharing rules (that would approach the equivalent of $b_H = 0$ in the simple framework presented above) are not rare.*

3 Joint determination of the outside option and the sharing rule

31. This section considers the drivers of the values of sharing rules in actual bilateral negotiations. Recent contributions to the empirical academic literature have found that factors determining negotiating parties' outside options also affect the sharing rule, meaning in any negotiation over insured prices the outside options of both parties, rather than simply that of the PMI, should be considered. Given the evidence on the balance of bargaining power between hospital operators and PMIs, a one-sided approach that focuses on PMIs' outside options has the potential to significantly bias conclusions.

3.1 Determinants of the sharing rule

32. The recent literature summarised in Table 2 above has considered not only the level of the sharing rule in various industries, but also the factors that determine the sharing rule.
33. With respect to the possible role and determinants of the sharing rule, the CMA noted only the following: *"The way the bargaining surplus is shared depends on a party's degree of patience, which is related to their financial strength, and possibly other factors such as negotiating ability."*²¹ This statement shows that the CMA's assessment was incomplete. In particular, it does not reflect findings in the recent empirical academic literature that investigate the determinants of the sharing rule: these determinants go beyond factors such as "patience" and "negotiating ability", which are the only factors that the CMA explicitly mentioned.
34. The specific determinants of the sharing rule depend on the specific industry under consideration. The academic literature suggests that these determinants relate both to (i) observable structural characteristics of firms and the market (for example respective size, reliance of different distribution channels, etc.) and (ii) unobservable firm-specific effects.²² Both types of determinants can have a significant effect on the sharing rule and are likely to explain the wide variation of sharing rules across and within industries as seen in Table 2. Each and all of these determinants must be considered to obtain a reliable estimate of the impact that a change in the PMIs' outside option has on the bargaining outcome. Moreover, these factors also explain the value of outside options for either party.
35. When the same factors that affect outside options also affect the sharing rule, the overall bargaining position of hospital operators and PMIs reflects the sharing rule and therefore also the potential impact that a change in a PMI's outside option has on the bargaining outcome. In particular, when the value of hospital operators' outside options is low, then – according to the literature discussed – this would suggest that their overall bargaining position should be such that the sharing rule is tilted towards PMIs. The CMA failed to recognise this, which can be summarised as follows:

²¹ CMA Final Report, footnote 392.

²² See, for example, Grennan (2014).

Finding 3: *The empirical literature on bargaining shows that factors that determine parties' outside options also affect the sharing rule. A consideration of PMIs' outside options in isolation (as was conducted by the CMA) may therefore be misleading: such a consideration fails to recognise that hospital operators' outside options are informative about the overall bargaining position of both parties and thereby about the impact on the bargaining outcome of a change in a PMI's outside option. In particular, this impact is likely to be smaller when a hospital operator's outside option is less valuable.*

3.2 Application to the private healthcare market

36. Finding 3 implies that negotiating parties' outside options are an important source of information about the sharing rule. Evidence presented to the CMA with respect to the provision of private healthcare in the London area²³ points towards PMIs having a strong overall bargaining position with respect to hospital operators, and in particular a richer and more valuable set of strategies leading to more valuable outside options.²⁴ For example, the evidence pointing to the damage that each party can inflict with only temporary disagreements periods indicates that PMIs should be in a stronger bargaining position.
37. This evidence, in combination with the previous three findings, means that it is crucial that the position of both parties (hospital operators and PMIs) is analysed in full and in detail (a generic statement that each party has some bargaining power is simply not sufficient) in order to form a view as to the overall bargaining position of each party and hence on the link between hospital operators' market shares and insured prices.
38. An approach focusing only on PMIs' outside options is simply incomplete and potentially biased in favour of finding a significant effect from changes in hospital operators' market shares. This can be summarised in the following overall conclusion:
39. **Finding 4:** *An overall strong bargaining position of at least some PMIs relative to hospital operators suggests that the sharing rule is tilted towards PMIs. This in turn implies that any change in the PMIs' outside options would have a proportionately small (and potentially negligible) effect on the bargaining outcome.*

²³ See HCA's submission on the CMA's Findings on Structural AECs in London, Section 5.

²⁴ For example, HCA has previously showed that if Bupa decided to delist HCA's hospitals, HCA would lose approximately [3<] % of its total revenue directly, and a further [3<] % of its total revenue due to the consultant drag effect. [3<]. See HCA response to PFs, paragraph 7.9.

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Appendix 2 Biography of Prof Roman Inderst

- Prof Roman Inderst is a Professor of Economics and Finance at the Goethe University Frankfurt. Before returning to Germany he was Full Professor of Economics and Full Professor of Accounting & Finance at the London School of Economics. Previous positions include that of tenured Professor of Finance at INSEAD. He currently keeps an affiliation also with Imperial College London.
- Prof Inderst received a doctorate in economics in 1998 and earned degrees (at the equivalent levels to both bachelor and master degrees) in economics, sociology and business administration. He has published extensively at the highest level in economic theory, industrial organisation and finance. He is a recipient of a Leibniz Preis, the highest academic award in Germany across all fields and has been awarded an Advanced ERC Grant, the highest European research grant.
- As a member of the respective councils of academic advisers, Prof Inderst advises both the German Ministry of Economic Affairs and Energy and the Chief Competition Economist of the European Commission. He has been an advisor to or has carried out consulting services for the European Central Bank and various competition and regulatory agencies in Germany (such as the BMELV), in the UK (such as the Financial Conduct Authority and Office of Fair Trading), and at the European Commission (such as SANCO).



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