

Co-operation and Competition Panel

Merger of parts of
University Hospitals Bristol
NHS Foundation Trust and
North Bristol NHS Trust

20 September 2013

CONTENTS

EXECUTIVE SUMMARY	2
INTRODUCTION	4
FRAMEWORK FOR MERGER ASSESSMENT.....	5
THE PARTIES	7
BACKGROUND TO THE TRANSACTION	8
ASSESSMENT OF MERGER COSTS.....	10
ASSESSMENT OF MERGER BENEFITS	43
SUMMARY OF CONCLUSIONS ON MERGER BENEFITS	70
ADVICE AND RECOMMENDATIONS.....	76
APPENDIX 1: TRAVEL TIMES BETWEEN HOSPITALS	74
APPENDIX 2: MARKET DEFINITION.....	76
APPENDIX 3: GP REFERRAL ANALYSIS	83
APPENDIX 4: TIME TREND ANALYSIS.....	96
APPENDIX 5: COMPETITION FOR COMMUNITY SERVICES	106
APPENDIX 6: CO-ORDINATED EFFECTS	109

EXECUTIVE SUMMARY

1. The Cooperation and Competition Panel (CCP) has reviewed the merger of parts of University Hospitals Bristol NHS Foundation Trust (University Hospitals Bristol FT) and North Bristol NHS Trust (North Bristol Trust). It found that the merger would be likely to reduce patient choice and competition for head and neck cancer, Ear Nose and Throat (ENT), Oral and Maxillofacial (OMF), urology, and symptomatic breast care services.
2. The CCP concluded that in the particular circumstances of this case the merger is likely to give rise to relevant benefits to patients resulting from the timely and effective transfer of specialist ENT and OMF consultants. The parties submitted that the merger would enable them to deliver a model of care that includes: a head and neck cancer, ENT and OMF ward; an increased number of Clinical Nurse Specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres. While in our view it is likely that the model of care described and consequent improvements for patients could have been achieved in the absence of the merger, we consider that given the particular nature of the highly complex and specialist services considered in this case, the merger is likely to facilitate the delivery of this model of care more quickly as a result of the timely and effective transfer of relevant specialist staff. We also concluded there was likely to be a benefit for a small number of head and neck cancer inpatients resulting from having radiotherapy treatment provided at a location near the site of other types of head and neck cancer treatment.
3. The CCP weighed these benefits against the impact of the reduction in patient choice and competition we had identified. In our view the reduction in patient choice and competition we identified is likely to have a significant impact on a substantial number of patients in the Bristol area on a long term basis. As a result we concluded that the benefits relating to the transfer of relevant specialist staff did not outweigh the costs we had identified. The CCP's conclusion is therefore that the merger is not consistent with Principle 10 of the Principles and Rules.
4. The review was conducted under the Principles and Rules for Cooperation and Competition (Principles and Rules)¹, which have been superseded following the Health and Social Care Act 2012 which came into force in April 2013. The review commenced in February 2013 and was therefore completed under the Principles and Rules.² On 1 April 2013, the staff team of the

¹ The Principles and Rules are available at: <https://www.gov.uk/government/publications/principles-and-rules-for-cooperation-and-competition>

² The Office for Fair Trading (OFT) has taken over responsibility for reviewing mergers between NHS foundation trusts and NHS trusts and Monitor provides advice on relevant benefits for patients. The OFT has published a set of frequently asked questions setting out its approach to jurisdiction for its review of mergers involving NHS organisations: *The OFT's role in reviewing NHS mergers – frequently asked questions*, 22 March 2013, available on the OFT's website: www.offt.gov.uk/shared_offt/press_release_attachments/NHS_FT_FAQs.pdf. See also the Monitor document: *Briefing sheet: Mergers involving NHS trusts and NHS foundation trusts*, published 22 March 2013 and available at: www.monitor-nhsft.gov.uk/home/news-events-publications/our-publications/browse-category/guidance-health-care-providers-and-co-20.

CCP became Monitor's Cooperation and Competition Directorate. The panel of members of the CCP continues to provide independent advice to Monitor on competition related issues.

5. We will send a copy of these conclusions to the merger parties, local commissioners, NHS England, and the NHS Trust Development Authority (as North Bristol NHS Trust is not an NHS foundation trust).
6. We expect the merger parties, commissioners and NHS Trust Development Authority to have regard to the costs identified in this report and ensure that the reduction in patient choice and competition the CCP identified does not lead to a reduction in the quality of care received by patients.
7. This report also contains important considerations for the merger parties and commissioners in Bristol, and the wider health system in thinking about service reconfigurations. When considering the implementation of new models of care commissioners should consider how best to secure services that meet the needs of their patients and are high quality and efficient.
8. Whenever commissioners are considering proposals which would reduce the number of providers they should consider the impact that might have for patients. For some services there will be clear clinical evidence to support limiting the number of providers. In other circumstances there may be advantages to having a number of providers. Where the number of providers is limited the process for choosing the providers should be designed to achieve the highest quality and most efficient services for patients and taxpayers, and should ensure that the incentives for improving quality and efficiency are maintained in the longer term.
9. Generally when considering service reconfigurations commissioners should have regard to their obligations under The National Health Service (Procurement Patient Choice and Competition) (No. 2) Regulations 2013. These include the obligation when procuring services to consider ways of improving quality and efficiency through: care being more integrated; enabling providers to compete; and, allowing patients a choice of provider.
10. Where any proposals give rise to a merger (whether of all or part of an organisation) commissioners and providers should consider the effects of that merger on patient choice and competition in the local area before implementing the transaction. Where there is an impact on incentives to maintain quality, parties should consider carefully and be ready to explain what benefits to patients the merger will secure that could not be achieved in another way.
11. In our view, new models of care can often be implemented through processes that enable providers to compete to provide services. In some cases a competitive process can be used to generate greater improvements in the quality of care to patients than might otherwise be achieved.

INTRODUCTION

12. On 1 April 2013, the staff team of the CCP became Monitor's Co-operation and Competition Directorate. The panel of independent members of the CCP continue to provide independent advice to Monitor on competition related issues. In addition, on 22 March 2013, the OFT took over responsibility for reviewing mergers between NHS foundation trusts and NHS trusts to assess the impact on competition. Nevertheless, it was decided that the CCP would complete its review of the present transaction under the Principles and Rules for Co-operation and Competition (Principles and Rules).³
13. On 8 February 2013, the CCP accepted for review the proposed merger of parts of University Hospitals Bristol NHS Foundation Trust (University Hospitals Bristol FT) and North Bristol NHS Trust (North Bristol Trust)⁴ ("the merger"). The merger affects head and neck cancer, ENT, OMF, urology and symptomatic breast care services. The merger met the CCP's acceptance criteria for a merger case, in particular:
 - i. the proposed arrangement falls within the scope of Principle 10 of the Principles and Rules; and
 - ii. the turnover threshold of each of the combined organisations following the transaction will exceed the relevant threshold of £70 million for providers of acute services.
14. Our administrative deadlines are set out in the CCP's *Rules of Procedure*.⁵ Phase I of our review was completed on 19 April 2013. We concluded that there was a realistic prospect that the merger may give rise to material costs to patients and taxpayers and decided to proceed to Phase II. The deadline for completion of our Phase II assessment is 20 September 2013.
15. This report outlines the CCP's Phase II assessment of the consistency of the merger with Principle 10 of the Principles and Rules. It contains the following sections:
 - Framework for merger assessment, including the models of competition;
 - Parties and the transaction;
 - Assessment of merger costs, including market definition and counterfactual;
 - Assessment of merger benefits; and
 - Advice and recommendations.

³The Principles and Rules are available at: <https://www.gov.uk/government/publications/principles-and-rules-for-cooperation-and-competition>

⁴The Notice of Acceptance for this case is available at: www.monitor.gov.uk/regulating-health-care-providers-commissioners/cooperation-and-competition/casework.

⁵The *Draft Rules of Procedure* are available at: <http://webarchive.nationalarchives.gov.uk/20130513202829/http://www.ccpanel.org.uk/reports-and-guidance/corporate-documents.html>.

FRAMEWORK FOR MERGER ASSESSMENT

16. The framework that has been used to assess this merger is set out in the Principles and Rules and the CCP's *Merger Guidelines*.⁶ The relevant provision of the Principles and Rules is Principle 10, which provides:

Principle 10: Mergers, including vertical integration, between providers are permissible when there remains sufficient choice and competition or where they are otherwise in patients' and taxpayers' interests, for example because they will deliver significant improvements in the quality of care.

17. The merger was reviewed under Principle 10 of the Principles and Rules as it will result in parts of University Hospitals Bristol FT and North Bristol Trust, which were previously independent of each other, coming under common management and control. We have not reviewed the process by which University Hospitals Bristol FT or North Bristol Trust was selected as the acquirer of the services subject to the merger transactions for consistency with the Principles and Rules.
18. The CCP's *Merger Guidelines* set out a cost-benefit framework for the assessment of mergers under Principle 10.⁷ A merger may give rise to costs to patients or taxpayers as a result of a loss of choice or competition leading to a reduction in incentives to invest in services. These costs will be weighed against any benefits to patients and taxpayers that may arise from the merger. From this analysis, we will determine whether the merger is likely to result in a material net cost to patients and taxpayers.⁸ We may determine that the merger is inconsistent with Principle 10 of the Principles and Rules if costs to patients and taxpayers only arise for part of the services included in the merger. For example, if costs to patients and taxpayers arise with respect to a single service, or a group of services, provided by just one of the merger parties.
19. Before 1 April 2013, the CCP provided advice on the mergers of NHS organisations which it reviewed to the relevant decision makers who would make the final decision in relation to these transactions. These were the Secretary of State for Health (or any person or organisation acting under delegated authority from the Secretary of State) and, in relation to NHS foundation trusts, Monitor. Following the implementation of the Health and Social Care Act 2012, Monitor considers that the outcome of the review of this transaction is particularly relevant for the Secretary of State for Health, the merger parties, local commissioners and NHS TDA.

⁶ See the CCP's *Merger Guidelines* at:

<http://webarchive.nationalarchives.gov.uk/20130513202829/http://www.ccp-panel.org.uk/reports-and-guidance/index.html>

⁷ A merger might give rise to costs to patients and taxpayers if it diminishes patient and commissioner choice and competition. As set out in the *Framework for Managing Choice and Competition*, published by the Department of Health on 16 May 2008, patient choice and competition in the NHS can be expected to improve quality and safety in service provision, improve health and well-being, improve standards and reduce inequalities in access and outcomes, lead to better informed patients, generate greater confidence in the NHS, and provide better value for money.

⁸ Where we find that there are no costs to patients or taxpayers arising from a merger, we will not necessarily critically evaluate patient or taxpayer benefits ascribed to the merger by the merger parties.

20. Next we explain the background of patient choice and competition in the provision of hospital-based services.

MODELS OF COMPETITION

21. The merger takes place in a broader policy context of patient choice and competition that exists in the provision of health care. This context forms the background to our assessment of how patient choice and competition are likely to be affected by the merger.
22. Since 2000 a series of reforms to the NHS have aimed to strengthen patient choice, particularly in relation to elective care, with the aim of creating stronger incentives for health care providers to improve access to services and the quality of care they provide. Reforms have emphasised patient choice and competition as key drivers to improve efficiency and outcomes for patients. A patient's right to choose was enshrined in the NHS Constitution in 2009.
23. In general, there are two models of competition in health care services. First, there is competition for the market, where service providers compete for the right to provide services across a Clinical Commissioning Group (CCG) or other locality, generally on an exclusive basis. Prices are agreed between the commissioner and the provider (either on the basis of a competitive procurement exercise or by way of bi-lateral negotiation). Payment may be based on cost/volume contracts, where the provider pays for treatment on a patient/per episode of care basis and does not pay for treatments not provided, or on block contracts, where the provider pays a lump sum for the provision of a particular category of treatments. Competition for the market occurs in many community services, mental health services and tertiary services (which may be competitively tendered by specialist commissioning groups at the regional or national level).
24. Secondly, there is competition in the market, where patients (with advice from clinicians) can choose between competing providers of the same service. The 'Any Qualified Provider' (AQP) model is an example of where competition occurs in the market, where patients may choose between any NHS or independent sector provider in England that:
- is registered with the Care Quality Commission (CQC);
 - has a PCT- or nationally-let contract; and
 - is willing to provide care at the NHS tariff.⁹
25. Within the NHS, remuneration under an AQP model is often based on national or local tariffs for the relevant services. Competition in the market and competition for the market are not necessarily mutually exclusive. For example, commissioners may hold a competitive process to select a range of providers with whom they wish to contract; patients may then be able to choose which of these providers they wish to use.
26. Patients' ability to choose between providers for standard elective treatment is underpinned by a number of systems. Key elements include:

⁹ The 'Any Qualified Provider' model was previously known as the 'Any Willing Provider' model.

- the Choose and Book system, which allows patients (and GP acting on patients' behalf) to select their provider of choice and book their first outpatient appointment with that provider;
 - Payment by Results, which remunerates providers for standard elective care according to patient treatment volumes through a framework of fixed tariffs covering a range of procedures; and
 - NHS Choices, which provides performance information on each provider to assist patients in selecting their preferred provider.
27. GPs act as gatekeepers who assess the needs of patients and make referrals to secondary care for those patients that cannot be treated by primary care clinicians. The system allows all patients to choose the provider of their first outpatient appointment. Patients choose between NHS trusts (including foundation trusts) as well as nationally-contracted independent sector providers of standard elective care.

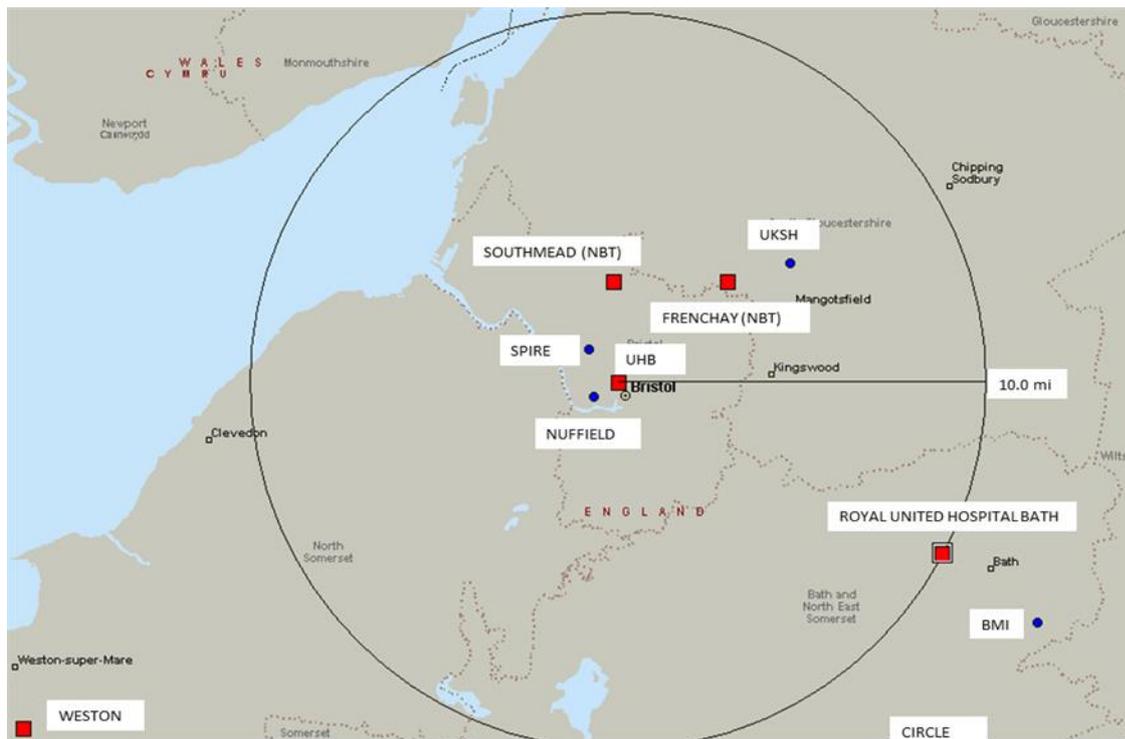
THE PARTIES

28. University Hospitals Bristol FT draws most of its patients from the central and south Bristol and north Somerset area. It provides acute and specialist services from its city-centre campus, which includes the Bristol Royal Infirmary and St Michaels' sites. It has nine other sites and also delivers services in community settings.¹⁰ University Hospitals Bristol FT has 934 beds. In 2011/12 the trust received income of approximately £36 million .
29. University Hospitals Bristol FT was authorised as a foundation trust by Monitor in 2008. As at May 2013, it had a financial risk rating of 3 and a governance risk rating of 3.
30. University Hospitals Bristol FT is registered without conditions by the CQC. We contacted the CQC to learn if there were any clinical issues at University Hospitals Bristol FT that we should be aware of and were told that the providers had reported an increase in elective care length of stay in December 2012, which it considered may have resulted from pressure on beds.
31. North Bristol Trust draws most of its patients from the north Bristol and south Gloucestershire area. North Bristol Trust provides inpatient services from Frenchay and Southmead hospitals. Southmead Hospital is currently undergoing a major refurbishment, including the development of a new breast care centre. North Bristol Trust also provides outpatient services from Cossham Hospital in Kingswood, and community services from a variety of settings operated by South Gloucestershire Community Health Services.¹¹ North Bristol Trust has 1035 beds. North Bristol Trust received income of approximately £36million in 2011/12.
32. North Bristol Trust is registered without conditions by the CQC. We contacted the CQC to learn if there were any clinical issues that we should be aware of and we were told that 3.

¹⁰ University Hospitals Bristol FT operates the following sites: Bristol Eye Hospital, Bristol General Hospital, Bristol Haematology and Oncology Centre, Bristol Heart Institute, Bristol Homeopathic Hospital, Bristol Royal Hospital for Children, Bristol Royal Infirmary (BRI), South Bristol Community Hospital, St Michael's Hospital, University of Bristol Dental Hospital, Bristol Sexual Health Centre.

¹¹ North Bristol Trust became responsible for SGCHS in April 2011.

33. A map of the areas where the merger parties provide services is shown in Figure 1 below:



BACKGROUND TO THE TRANSACTION

34. The merger under review by the CCP is the transfer between University Hospitals Bristol FT and North Bristol Trust, of those parts of their organisations providing head and neck cancer, ENT, OMF, urology and symptomatic breast care services. Contracts between the merger parties and commissioners have been varied to give effect to the merger, and relevant staff have been transferred in accordance with TUPE regulations.¹² The merger parties have advised us that they view the transactions as interdependent because the merger created additional physical space within their existing locations to enable development of specialist services on a single site. The merger was completed simultaneously on 25 March 2013, notwithstanding the CCP’s review.
35. There are three transactions being implemented by the merger parties, which the CCP decided to consider within the framework of a single merger review. The relevant activities are as follows:
- **Head and neck cancer, ENT and OMF services: comprising head and neck cancer, OMF and ENT services:** Services generating estimated revenues of £ \times ¹³ transferred from North Bristol Trust to University Hospitals Bristol FT. In 2011/12 there were 2,954 elective inpatient spells; 521 non-elective inpatient spells; and 24,064 outpatient attendances delivered by \times staff at North Bristol Trust.

¹² The Transfer of Undertakings (Protection of Employment) Regulations 2006

¹³ \times .

- **Urology services:** Services generating estimated revenue of £8.1¹⁴ transferred from University Hospitals Bristol FT to North Bristol Trust. In 2011/12 there were 3,753 elective inpatient spells; 389 non-elective inpatient spells; and 8,384 outpatient attendances, delivered by 1,200 staff at University Hospitals Bristol FT. Urological cancer services, complex urodynamics and the treatment of urological stones, were consolidated at North Bristol Trust in 2006 and so are not in the scope of the present transaction.
 - **Symptomatic breast care services:** Services generating estimated revenues of £8.1 million¹⁵ transferred from University Hospitals Bristol FT to North Bristol Trust. In 2011/12 there were 430 elective inpatient spells; 9 non-elective inpatient spells; and 5,053 outpatient attendances; delivered by 1,200 staff at University Hospitals Bristol FT. Breast screening services are not currently in the scope of this transaction, although the merger parties have indicated their intention to transfer this service to North Bristol Trust in spring 2014.
36. The merger parties told us that all of the proposed transactions are outputs of the 'Healthy Futures Programme', established by commissioners in Bristol, North Somerset, and South Gloucestershire to design new models for care in the area. The Healthy Futures Programme is managed through a partnership of commissioners, providers and local authorities. Further reconfigurations in respect of specialties, including pathology and vascular services, are planned as part of this programme and are at various stages of development.
37. NHS organisations in Bristol, North Somerset and South Gloucestershire agreed a series of changes to the configuration of local health services as part of the 'Bristol Health Services Plan' in 2005, prior to the Healthy Futures Programme. The objectives of these changes were to improve the quality of emergency and specialist services; and to improve the quality and accessibility of a range of routine services. As part of the planned improvement to acute hospital services a number of specific changes were agreed, including having breast services and adult ENT activities provided from a single site.
38. The plans for breast services and adult ENT services as set out in the Bristol Health Services plan were subsequently revisited under the Healthy Futures Programme and in 2010 reviews were published setting out conclusions for head and neck cancer, ENT, OMF and breast services, both of which set out new clinical service models based around a model the parties describe as a hub and spoke model of delivery. This involves having specialist complex and routine services provided from a central site called the hub with service connections (spokes) leading out to a number of satellite sites where less complex and routine services are provided. Further background information about the configuration of head and neck cancer, ENT, and OMF services prior to the merger and the rationale for transferring activities are set out at paragraphs 225-227. Further background information about the configuration of symptomatic breast care services and rationale for the transfer of services is set out at paragraphs 281-283.

¹⁴ 1,200

¹⁵ 1,200

39. The background in respect of urology services is different. From 2006 onwards all major pelvic oncology (including kidney, prostate and bladder cancer), complex urodynamics and the treatment of stones, were consolidated at North Bristol Trust's Southmead hospital.¹⁶ Non-cancer and standard urology services remained at both trusts, and a Service Level Agreement (SLA) was put in place to enable University Hospitals Bristol FT consultants to operate on their patients using the North Bristol Trust equipment and facilities at Southmead. This current transaction is therefore in relation to inpatient standard urology services and malignant outpatient services, as the complex and cancer services are already consolidated at North Bristol Trust's Southmead site. Further background information in respect of urology services and the rationale for the transfer of activities is set out at paragraph 256-257.
40. The merger parties and the commissioners explained that decisions to transfer the relevant services pursuant to the Healthy Futures Programme were made in accordance with the programme's process rules. This included the following steps:
- The PCT-led Healthy Futures Programme Board, which included commissioners, provider chief executives and clinical leadership, issued a mandate for the process to oversee projects and service design programmes.
 - Commissioners, providers and service users worked together to define the service that was required and set the performance standards the service should meet. Providers then decided whether they wished to bid to deliver the service as defined.
 - An independently chaired Advisory Panel was convened to consider the proposals and to undertake a detailed assessment of the location options that could deliver the clinical service model and make recommendations on how best to proceed.
 - Following acceptance of the Advisory Panels' recommendations the Programme Board discussed the recommendations with the organisations' governance committees, local scrutiny committees and patient groups to seek agreement before the proposals were implemented.
41. In respect of head and neck, and symptomatic breast care services, the merger parties and commissioners told us that discussions began as a result of requirements to comply with national guidance for head and neck cancer services, and to emulate best practice models being developed in breast care. The proposal to reconfigure urology services was initiated in a different way, by clinicians at University Hospitals Bristol FT and North Bristol Trust making a proposal for service reconfiguration which subsequently became the subject of a Healthy Futures Programme review.

ASSESSMENT OF MERGER COSTS

42. In this section we:
- I. explain our assessment of the counterfactual to the merger (see explanation in paragraph 48 below)
 - II. set out our assessment of the relevant markets within which to assess the merger; and,

¹⁶ The rationale was to meet the National Institute for Clinical Outcomes, Improving Outcomes Guidance for Urology Cancer.

- III. set out the analysis and what it indicates about the effects of the merger on patient choice and competition in each of the relevant markets.¹⁷

COUNTERFACTUAL

43. To evaluate the effect of a merger on patient choice and competition, we assess the merger against the situation that would be expected to prevail if the merger did not take place. This is known as the counterfactual to the merger. The counterfactual enables us to compare the extent of patient choice and competition after the merger with the likely extent of patient choice and competition if the merger did not proceed. This allows us to form a judgement about whether the merger would be likely to reduce patient choice and competition.¹⁸
44. The transactions being considered by this review are a result of a programme of service reconfigurations in Bristol, North Somerset and South Gloucestershire to design new models of care in the area. We considered whether the reconfiguration of each service would proceed in the absence of the merger.
45. The commissioners told us that if the transactions did not go ahead the reconfiguration of services would not proceed and they would continue to commission head and neck cancer, ENT, OMF, urology and symptomatic breast care services from both University Hospitals Bristol FT and North Bristol Trust. The merger parties also told us that if the transactions did not proceed they would continue to provide each of the services independently of one another.
46. University Hospitals Bristol FT told us that in the absence of the merger it would continue to operate its head and neck cancer, ENT and OMF, urology and symptomatic breast care services independently of North Bristol Trust.
47. North Bristol Trust told us that in the absence of the merger it would continue to operate its head and neck cancer, ENT, OMF, urology and symptomatic breast care services independently of the services provided by University Hospitals Bristol FT. North Bristol Trust added that, in the longer term, it expected the commissioner would have looked for alternative ways to create new service models, however in the meantime it expected the commissioner to retain the existing arrangements.
48. We noted the consensus view that the parties would each continue to provide the services independently of one another if the merger did not proceed.¹⁹ We expect that going forward the commissioners would naturally continue to review their options as to how best to commission high quality services for their patients. In this case the commissioners have

¹⁷ This includes, where appropriate, an assessment of barriers to entry and the extent of any countervailing commissioner buying power.

¹⁸ This approach is consistent with OFT and Competition Commission approach. See paragraph 4.3.5 of the joint merger assessment guidelines available at www.competition-commission.org.uk/our_role/ms_and_fm/cc2_review.htm.

¹⁹ We also note that the intensity of competition between NHS (and other) health care providers might be expected to increase in the coming years. This is because, firstly, the information available to patients (and their GP) is increasing and hence improving their ability to switch to higher quality providers. Secondly, commissioners will need to seek better value for money for services in a more tightly constrained financial environment. This might be expected to lead to more robust negotiations with health care providers and a more active assessment by commissioners of switching opportunities.

identified potential improvements to service quality for the services in question and the merger is part of the reconfiguration aimed at achieving those improvements. However, it is not clear to us that the merger in its current form was the only way of reconfiguring services.²⁰ Any alternative reconfiguration that involved a merger would also be subject to merger review. Therefore, for the purpose of analysing the effects of the proposed merger on patient choice and competition, we take the appropriate counterfactual scenario to be the pre-merger situation in which each of the merger parties would continue to provide the relevant services independently of each other.

MARKET DEFINITION

49. We assessed the relevant product and geographic markets within which to examine the merger transactions.
50. The purpose of carrying out a market definition exercise is to identify other services, and the locations from which they are provided, that are effective substitutes for the services provided by the merging organisations. This provides a framework for analysing the competitive effects of a merger by identifying providers of competing services that are capable of providing competitive pressure on the merged organisation.²¹

Product market

51. In this case the merger parties are merging the parts of their organisations that provide the relevant services, rather than their entire organisations. We identified the types of service within each of the relevant service specialties that have been provided by the parties and the extent to which the services provided by each trust overlap. For ENT and OMF, urology and symptomatic breast care the parties overlap in the supply of standard elective inpatient, non-elective inpatient, and outpatient services. In ENT and urology they also overlap in the supply of community services. In ENT, OMF, and urology services they also both provide specialist tertiary inpatient services, though the specialist urology services that each trust offers are different and do not overlap. For example University Hospitals Bristol FT provides retroperitoneal work while North Bristol provides urodynamic services.
52. We next identified which services might be effective substitutes for each of the services identified above. Given the nature of the requirements of a patient needing to be treated for a given condition, we defined separate product markets for each type of clinical speciality.²²

²⁰ If the merger and hence this particular reconfiguration were not to occur we considered that commissioners would have a number of options on how to proceed. This might involve a reconfiguration of some but not all of the services that are included in this particular merger (perhaps including different providers) and may include reconfigurations that do not involve a merger. For example, the commissioners might choose to commission services from a single provider without transferring staff.

²¹ This approach is consistent with OFT and Competition Commission approach. See section 5.2 of the joint merger assessment guidelines available at www.competition-commission.org.uk/our_role/ms_and_fm/cc2_review.htm.

²² That is because, on the demand side, a patient's diagnosis will determine the treatment that (s)he requires. For example, the patient is unable to opt to have a replacement knee if (s)he is unsatisfied with the quality of the surgery that a provider of ankle surgery is offering. However, it is our view that supply-side substitution possibilities are likely to exist within each speciality, while remaining less likely to occur between specialties, as a provider of one speciality may not necessarily be able to provide another speciality. See Appendix 2 for details of our market definition analysis.

53. For each speciality we also distinguished between the ability of different types of provider to switch capacity into the different types of service: standard elective inpatient services; non-elective inpatient services; outpatient services; and community services:²³
- Standard elective inpatient services. These services are provided by a wide range of providers in England, including NHS Trusts, NHS foundation trusts and independent sector providers holding an NHS Standard Acute Contract, that are able to admit patients into hospital.²⁴ Potential competitors include providers of standard and specialised or tertiary elective and non-elective health care services;
 - Non-elective services (e.g. accident and emergency and maternity services). These services are mainly provided by NHS trusts and NHS foundation trusts with emergency facilities. Potential competitors include providers of standard and specialised or tertiary non-elective health care services;
 - Outpatient services. These services include outpatient services which are not linked to a standard elective inpatient episode. Potential competitors therefore include providers of standard and specialised or tertiary elective and non-elective health care services; and,
 - Community-based services. These services are provided around England by NHS, independent and third sector providers with backgrounds in different areas of health and social care. Potential competitors therefore include all providers of community, primary, outpatient standard, and specialised or tertiary elective and non-elective services.
54. We note that both ENT and OMF services have cancer services as a sub-speciality (e.g. ENT cancer services are a sub-specialty of ENT).²⁵ These specialist ENT and OMF cancer services are provided by both University Hospitals Bristol FT and North Bristol Trust within their head and neck cancer departments. Given the specialist training, experience and equipment required to deliver these services it appears to us that a provider of ENT cancer services may not be able to switch quickly to using its staff to provide OMF cancer services. For the same reason we did not consider that a provider of OMF services may be able to switch quickly to providing ENT cancer services. We therefore consider that these form at least two separate specialist product markets: ENT cancer services and OMF cancer services. However, because each provider of ENT cancer services in the present case also provides OMF cancer services, for the purpose of this analysis we have assessed these together as a cluster of separate markets, under the heading ‘head and neck cancer services’.²⁶

²³ In some cases, a provider of a range of procedures within a speciality may not face similar constraints and the same set of competitors across all of its specialties. Some of its procedures may face greater or lesser constraints, for example as a result of the additional Independent Sector capacity funded by commissioners in certain procedures (e.g. endoscopy). In that case we will examine the differences within the competitive effects analysis.

²⁴ These services can also be provided by centrally contracted independent sector treatment centres (ISTCs) although many of these contracts have now expired, with the providers now holding NHS Standard Acute contracts. The nearby Emerson’s Green ITC, operated by Care UK has a contract that runs until 2025.

²⁵ We understand that small volume cancer services such as ENT and OMF cancer services are provided by fewer providers than large volume cancer services (e.g. breast cancer services) and may therefore be considered specialist rather than standard services.

²⁶ However we recognise that there may be a number of elements to an ENT cancer service that could be delivered by the same staff that provide OMF cancer services. We note that if a provider of ENT cancer services were able to switch quickly to using staff to provide OMF cancer services this would suggest that there is a single market for ENT and OMF cancer

55. We also found that each of the parties offers a number of highly specialist, though entirely different, urology services (e.g. University Hospitals Bristol FT provides retroperitoneal work while North Bristol provides urodynamic services). We considered that each of these individual services was a relevant product market as it appears to us that patients would be unable to switch services, and providers would be unable to switch capacity, if there was deterioration in quality (see Appendix 2 for further discussion).
56. Therefore as part of our analysis, we also considered the relevant product market for each of the specialist tertiary services provided by the merger parties.
57. We therefore consider that there are separate product markets within each service:
- standard elective ENT services, non-elective ENT services, outpatient ENT services, community ENT services, and a series of specialist ENT services;
 - standard elective OMF services, non-elective OMF services, outpatient OMF services, community OMF services, and a series of specialist OMF services;
 - standard elective urology services, non-elective urology services, outpatient urology services; community urology services, and a series of specialist urology services; and
 - standard elective breast care services, non-elective breast care services and outpatient breast care services.²⁷

Geographic Market

58. We have not precisely defined the relevant geographic market as it is not material to our findings. This is because we have within our competitive effects analysis considered the strength of the competitive constraints posed by all relevant potential rival providers.²⁸ For the purposes of explaining our competitive assessment we refer to Bristol and the surrounding area and have considered the role of providers located to the north (e.g. Gloucestershire Hospitals NHS Foundation Trust), to the south (e.g. Royal United Hospital Bath NHS Trust), to the west (e.g. Taunton and Somerset NHS Foundation Trust) and to the east (e.g. Great Western Hospitals NHS Foundation Trust). While we consider that providers in each of these locations are likely to be within a relevant geographic market for at least some of the services provided by the merging parties, we also note the importance of a provider's location to patients (and GPs). Providers supplying the same services in different locations will not be perfect substitutes for one another, whereas providers that are near one another will generally tend to be more important competitors than those that are not.²⁹

services. However, we note that this would not affect the analysis of competitive effects since, in any case, we analyse ENT cancer services and OMF cancer service within a single cluster (which we label head and neck cancer services in line with merger parties' terminology).

²⁷ We understand that neither the merger parties nor other providers in the area offer community breast care services.

²⁸ Given the nature of the identified product markets and the importance of convenience to patients we are able in this case to identify the potentially relevant rival providers based on the proximity of the facilities of those rivals. We have also considered the possibility of a competitive threat from more distant rivals moving into the area, and we treat these as potential new entrants to the market.

²⁹ For the purposes of our analysis we do not distinguish between whether the choice of provider is made by a GP or a patient.

59. In the following sections we consider the competitive constraints upon the head and neck cancer, ENT, OMF, urology and symptomatic breast care services provided by both of the merger parties from their respective hospital sites. The analysis begins with standard elective inpatient services. Subsequent sections set out our analysis of competition for non-elective, outpatient, and community services within these specialties.

COMPETITION FOR STANDARD ELECTIVE SERVICES IN BRISTOL AND THE SURROUNDING AREA

Introduction

60. For a merger to reduce patient choice and competition for standard elective services we must first conclude that the merger parties would impose a competitive constraint on each other in the absence of the merger.³⁰ Where we find a competitive constraint we review the strength of the competitive constraint that would remain from other providers that we have identified as operating within the relevant market.³¹ This is because, if there are alternative providers that continue to provide an effective competitive constraint on the merged entity following the merger, the merger will not lead to a reduction in patient choice and competition. As part of the analysis, we also consider whether there are low barriers to entry or countervailing buyer power that might help maintain an effective competitive constraint.
61. We therefore begin by assessing the evidence of the competitive pressure upon the parties for elective services in general (that is across a whole range of services). We then assess whether the merger would be likely to result in a loss of competition for each of the relevant services, namely head and neck cancer, ENT, OMF, urology and symptomatic breast care services in Bristol and the surrounding area.
62. Adverse effects on patients may result if a merger removes an important competitive constraint on a hospital site. This is because the merged organisation may, as a result, face significantly less risk that patients or GPs would choose to switch provider if the quality of care that it provided from that site were to deteriorate. In cases where there is reduced competition a provider has less incentive to make investments to maintain or improve quality above regulated minimum standards and this would be likely to have a material adverse effect on patients and taxpayers.
63. North Bristol Trust submitted that there are a range of other incentives for providers to supply high-quality services (e.g. contractual incentives and CQUIN payments). In the case of foundation trusts, the conditions set out in Monitor's NHS provider licence are an incentive for providers to operate efficiently.³² We note that these regulatory incentives are in place and

³⁰ By this we mean that the provision of services by University Hospitals Bristol FT leads North Bristol Trust management to take account of the potential impact on its revenue from patients and their referring clinicians or commissioners switching to University Hospitals Bristol FT when deciding how much to spend on maintaining and improving the quality of their own services (meaning range, quality, and efficiency of standard elective services).

³¹ We note that the competitive constraints faced from competitors located within the area will not be equal and will depend on factors such as the preferences of GPs, patients and commissioners.

³² The requirement to achieve foundation trust status also provides an incentive for NHS trusts to operate efficiently.

that the competitive incentives to produce higher quality, more efficient services are in addition to these.^{33,34,35}

64. To assess the competitive effects of the merger we analysed whether it would be likely to reduce patient choice and competition for standard elective services in Bristol and the surrounding area. University Hospitals Bristol FT provides elective services from Bristol Royal Infirmary and St Michael's hospitals at its central Bristol campus. North Bristol Trust provides elective services from Southmead and Frenchay hospitals in North Bristol.³⁶ We therefore refer to the constraints on the merger parties at their respective sites prior to the merger.

Competition between the merger parties' standard elective services

65. As part of our analysis, we evaluated whether the merger parties compete with one another for patients as providers of standard elective services.³⁷ In this case, we considered ✕ responses to requests for information from the parties and conducted a GP referral analysis (described further in Appendices 3 and 4).

Internal documents from merger parties

66. University Hospitals Bristol FT and North Bristol Trust both told us that they each send information about their services to every GP practice in Bristol, North Somerset and South Gloucestershire. This suggests an overlap in the patients and GPs from which both parties seek to attract referrals. In addition, University Hospitals Bristol FT told us that its catchment area for standard elective services overlaps with that of North Bristol Trust. It identified Bristol as the key location in which it faces competition and told us that it benchmarks its performance against that of North Bristol Trust as well as against Weston Area Health NHS Trust, Royal

³³ Providers of NHS services invest time and money in improving their services. However, if they do not face competitive pressure, they could be expected to invest less time and money in improving the quality of their service in order to attract patient referrals away from other hospitals. North Bristol Trust submitted that it disagrees that a loss of competition reduces the incentive to invest in services. However, North Bristol Trust did not explain how existing incentives would remain unchanged where there is a reduction in competition. It may be the case that North Bristol Trust has not in the past responded to competitive incentives that it faces (for example, if it was not seeking to increase the surplus that the trust earned, or if it had agreed not to). However, given the requirement to increase surplus to achieve foundation trust status we consider this unlikely.

³⁴ This is supported by evidence which suggests that a higher level of competition in the provision of elective care (under the current fixed price regime) has led to improvements in clinical performance: Cooper, Gibbons, Jones and McGuire, 'Does hospital competition save lives? Evidence from the English NHS patient choice reforms', *The Economic Journal*, 2011, v121, issue 554, p228-260. Gaynor, Moreno-Serra, and Propper: *Death by Market Power: Reform, Competition and Patient Outcomes in the National Health Service*, NBER Working Paper No. 16164, July 2010. Bloom, Propper, Seiler and Van Reenen 'The Impact of Competition on Management Quality: Evidence from Public Hospitals', NBER Working Papers 16032, 2010. North Bristol Trust noted that the Cooper et al paper has been criticised in some magazine articles. We note that the authors have rebutted each of the criticisms (<http://www.bristol.ac.uk/cmppo/publications/other/cpresponse.pdf>).

³⁵ Providers may also choose to react to a reduction in competition by reducing efficiency in excess of that which is required by, for example, the conditions of the NHS provider licence. This inefficiency would be expected to contribute to higher tariffs, and to reduce the funding available to commissioners to purchase other health services.

³⁶ North Bristol Trust is moving its provision of standard elective inpatient services from its Frenchay site to Southmead. All of the relevant elective services that North Bristol Trust provides following the merger transactions will be provided at Southmead.

³⁷ We considered whether these constraints were asymmetric in the sense that the constraint from North Bristol Trust was stronger (or weaker) than the constraint from University Hospitals Bristol FT. However, the information we received did not suggest there was an asymmetry.

United Hospital Bath NHS Trust, Great Western Hospitals NHS Foundation Trust and Gloucestershire Hospitals NHS Foundation Trust.³⁸

67. X identifies X as its main competitor in the Bristol and South Gloucestershire areas (it identified its main competitors in North Somerset as X and X). It described X as its strongest competitor for both elective and non-elective patients across the area. X included an analysis which looked at the trust's share of referrals relative to those of its main competitors.³⁹ It identified its main competitor in Bristol and South Gloucestershire as being X; in North Somerset it identified X Trust as its main rivals. The analysis included the following table 1.⁴⁰

68. Table 1. North Bristol Trust's analysis of share of referrals 2009/10. All non-tertiary specialities.

X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X

Spare Capacity

69. The strength of the constraint exercised by one provider upon others will depend upon the capacity available to treat the referrals that it can attract away from rival providers. Accordingly, we next considered the capacity available to each of the merger parties. We found that each merger party was able to treat additional referrals and therefore had an incentive to compete to attract those additional referrals and the funding attached to them.

70. X told us that operating theatres are running at X (some are open 24 hours a day). X told us that ward 72 in which inpatient and day case head and neck cancer, ENT and symptomatic breast services were provided prior to the merger transactions had an average overnight occupancy rate of X%. Ward 9 in which urology and vascular services were provided had average X% occupancy. X told us that they have two wards that they use to

³⁸ X
³⁹ X.
⁴⁰ X

flexibly expand their capacity when required. We also note that X has recently expanded capacity by moving services to X.

71. X told us that its operating theatres are running at X% capacity X (some are open 12 hours, and some are open 24 hours a day). This means there is capacity to extend the opening hours of the operating theatres to expand capacity. North Bristol Trust told us that its staffed beds are currently running at capacity (X%). However, since this relates to staffed or funded beds rather than the number of potential beds available, we understand that this capacity could quickly be expanded if funding was available (e.g. locums employed to staff the extra beds that are physically available). We also note that the trust expects a large proportion (X%) of its outpatient activity to move into community settings, leaving significant capacity within its hospital.

Conclusion on competition between the merger parties' standard elective services

72. Taken together the merger parties' X and responses to our requests for information suggest that, absent the merger, the two parties would have constituted a strong competitive constraint upon one another. X We consider the additional evidence on the competitive constraints between the parties on each of the specific services relevant to the merger in paragraphs 73-90 below.

Competitive constraints upon the parties' standard elective services from other providers

73. We next analysed the extent to which other providers would be likely to compete with the standard elective services provided at sites operated by the merger parties. The evidence of the extent of competition from other providers has been taken from the X and responses to our requests for information and is set out below. The following section then considers the competitive constraints that other providers are likely to exert following the merger in each of the markets identified.

UK Specialist Hospitals⁴¹ – Emersons Green

74. Emersons Green is an independent sector treatment centre (ISTC) in Bristol provided by UK Specialist Hospitals. UK Specialist Hospitals was purchased by Care UK early 2013, and Care UK told us they provide elective ENT and urology services and receive referrals from the Bristol, North Somerset and South Gloucestershire, Bath and North East Somerset, Swindon, Wiltshire, and Gloucestershire commissioning areas. UK Specialist Hospitals (Care UK) noted that it currently operates under a fixed value contract with a minimum income guarantee. We note that under such contracts, providers do not earn additional revenue above the value of the contract for each additional referral that it receives, until it reaches an agreed volume of activity. X.
75. X identified the Emersons Green ISTC as posing a threat to X elective services. However, it went on to note that in the last three years the ISTC had only managed to build market share by X switching demand to the ISTC (e.g. by transferring cases from its own waiting lists, and

⁴¹ UK Specialist Hospitals was acquired on 21 February 2013 by Care UK.

by removing its own service from Choose and Book \mathcal{X} , meaning that patients could not choose \mathcal{X}).⁴²

76. \mathcal{X} also suggest that it believed the amount of the minimum income guarantee set out in the ISTC contract for Emersons Green had decreased in 2012 (and would continue to do so), and reported that it was now starting to recover some of the market share that it had lost to the ISTC.
77. We note that information from \mathcal{X} did not refer to an impact of the Emersons Green ISTC on referrals to its services.

Royal United Hospital Bath NHS Trust

78. \mathcal{X} conducted a competitor analysis that identified its three most significant NHS competitors as University Hospitals Bristol FT, Weston Area Health NHS Trust and Royal United Hospital Bath NHS Trust. In contrast to \mathcal{X} and \mathcal{Y} , it explained that Royal United Hospital Bath NHS Trust was a possible threat if its cancer and specialist services were to grow. Other \mathcal{X} said that Royal United Hospital Bath NHS Trust posed little threat to \mathcal{X} referral volumes and this was unlikely to change in a major way (it noted minor changes might occur when \mathcal{X}).
79. \mathcal{X} noted that it had overlapping catchment with \mathcal{X} and to a lesser extent \mathcal{Y} and Royal United Hospital Bath NHS Trust.⁴³ \mathcal{X} benchmarks its performance against these three trusts as well against providers located further away (Great Western Hospitals NHS Foundation Trust and Gloucestershire Hospitals NHS Foundation Trust).⁴⁴
80. Local commissioners in Bristol, North Somerset and South Gloucestershire submitted that Royal United Hospital Bath NHS Trust is potentially a strong competitor to \mathcal{X} . Royal United Hospital Bath NHS Trust told us that its catchment area includes parts of South Gloucestershire but not Bristol or North Somerset. Royal United Hospital Bath NHS Trust sends information to GP practices in Bath and North East Somerset, Somerset and Wiltshire. Therefore there are no GPs that receive information from both Royal United Hospital Bath NHS Trust and either of the merger parties. Royal United Hospital Bath NHS Trust told us that it perceives a moderate degree of competitive pressure from \mathcal{X} .

Weston Area Health NHS Trust

81. \mathcal{X} identified its main competitor in Bristol and South Gloucestershire as \mathcal{X} ; however in North Somerset it identified \mathcal{X} and Weston Area Health NHS Trust as its main rivals. For example it noted that \mathcal{X} activity levels had increased in 2011/12, it attributed this increase partly to GPs switching referrals away from Weston Area Health NHS Trust in favour of \mathcal{X} and \mathcal{Y} . \mathcal{X} also provided us with a competitor analysis that identified \mathcal{X} , \mathcal{Y} and Weston Area Health NHS Trust as its three most significant NHS competitors. In particular the analysis identified

⁴² We understand this occurred occasionally and therefore reduced the reliability with which GPs could refer patients to the trust.

⁴³ \mathcal{X} .

⁴⁴ \mathcal{X} .

Weston Area Health NHS Trust as a potential competitor for day-case surgery and outpatient referrals in north Somerset.

82. Internal documents from X noted that in respect of services that can be provided by a district general hospital,⁴⁵ it has a catchment area that overlaps with that of X and, to a lesser extent, both Weston Area Health NHS Trust and X benchmarked its performance against these three trusts as well as two more distant providers (Great Western Hospitals NHS Foundation Trust and Gloucestershire Hospitals NHS Foundation Trust).⁴⁶
83. X. Weston Area Health NHS Trust told us that its catchment area included the area south of Portishead in North Somerset through to areas in North Sedgemoor including Axbridge, Cheddar and Burnham-on-Sea (broadly this corresponds to the northern section of the former Somerset Primary Care Trust). This area does not include Bristol. Internal documents from Weston Area Health NHS Trust calculated its share of referrals against six other providers (UK Specialist Hospitals (Care UK), North Bristol Trust, University Hospitals Bristol FT, Yeovil District Hospital NHS Foundation Trust, Royal United Hospital Bath NHS Trust and Taunton and Somerset NHS Foundation Trust), and benchmarked its performance against four of these (Royal United Hospital Bath NHS Trust, Taunton and Somerset NHS Foundation Trust, North Bristol Trust, and University Hospitals Bristol FT). The documents describe University Hospitals Bristol FT as a key competitor for local services since the population in the north of Somerset are equidistant from Weston and central Bristol. The trust told us that its competitors included Taunton and Somerset NHS Foundation Trust, North Bristol Trust and University Hospitals Bristol FT.

Other providers in the area

84. X told us that it considered Gloucestershire Hospitals NHS Foundation Trust, Great Western Hospitals NHS Foundation Trust, Taunton and Somerset NHS Foundation Trust, and Yeovil District Hospital NHS Foundation Trust, to be X. It added that each of the independent hospitals in the area were X.
85. Gloucestershire Hospitals NHS Foundation Trust provides information to GPs in south Gloucestershire and describes its catchment as extending to south Gloucestershire. Its catchment therefore appears to overlap with that of North Bristol Trust. Gloucestershire Hospitals NHS Foundation Trust told us its competitors were X. It did not include University Hospitals Bristol FT or North Bristol Trust.
86. Great Western Hospitals NHS Foundation Trust told us that its catchment area extends to Swindon, Wiltshire, Oxford, West Berkshire and Gloucestershire. The trust provides information to GPs in Swindon, Wiltshire, the borders of south Gloucestershire and parts of Bath. This suggests there is unlikely to be an overlap with the catchment area of the merger parties.

⁴⁵ District general hospital services are likely to include medicine and care of the elderly, surgery, paediatrics, obstetrics and gynaecology, diagnostics, outpatients and A&E.

⁴⁶ X.

87. Taunton and Somerset NHS Foundation Trust told us that they provide head and neck, ENT and OMF services to all of Somerset. For urology and breast services their catchment excludes East Somerset. The trust told us that they have received X referrals from Bristol and South Gloucestershire in the last nine months and do not send information to GPs outside of Somerset. X.
88. We did not receive any information from Yeovil District Hospital NHS Foundation Trust in response to our request. The trust was not identified by either of the merger parties as a competitor in the information provided.
89. X X and X told us they received private and NHS patients from across a wide geographic area and faced competitive pressure from a range of NHS and private providers. We did not receive any information from Nuffield Health, which operates a private hospital in Bristol.

Summary of general competitive constraints for standard elective services

90. The analysis above discusses the general competitive constraints upon the sites used by the merger parties to deliver a range of standard elective services. This analysis suggests that the merger parties impose a strong competitive constraint on each other and that there is limited competitive constraint from other providers in the area. We next consider the additional evidence on the competitive constraints for each of the specific activities that were transferred pursuant to the merger transactions. In each case we consider the evidence on the competitive constraints that the merger parties exert on each other and the competitive constraint that other providers can be expected to exert on the merger parties following the merger.

Elective Head and Neck Cancer Services

91. As a result of the merger, the head and neck cancer activity provided by North Bristol Trust was transferred to University Hospitals Bristol FT. Head and neck cancer services are rare in the sense that prior to the merger both institutions each treated less than 100 new patients per year. University Hospitals Bristol FT will continue to provide elective head and neck cancer services at the Bristol Royal Infirmary but the service will no longer be offered at North Bristol Trust's Southmead and Frenchay sites.

Competition between the merger parties' elective head and neck cancer services

92. In this section we assess the strength of competition between the merger parties in elective head and neck cancer services before the transaction.
93. University Hospitals Bristol FT and North Bristol Trust describe each other as strong rivals in the provision of head and neck cancer services. They said this was due to the fact that they are closely located and provide a comparable range of services.
94. This is supported by our analysis of GP referral data. It indicates that North Bristol Trust and University Hospitals Bristol FT are the most important alternatives for each other in the provision of elective head and neck cancer services. It indicates that:

- if any patients or GPs were to switch their elective head and neck referrals away from University Hospitals Bristol FT as a result of the quality of services falling, those patient referrals would be most likely to switch to North Bristol Trust.⁴⁷
- if any patients or GPs were to switch their elective head and neck referrals away from North Bristol Trust as a result of the quality of services falling, those patient referrals would be most likely to switch to University Hospitals Bristol FT.

95. Our review of GP referral patterns over time (see Appendix 4) suggests that when North Bristol Trust increases its share of elective head and neck cancer referrals, this comes at the expense of University Hospitals Bristol FT, and vice-versa.⁴⁸

Competitive constraints from other providers of elective head and neck cancer services

96. In this section we consider the evidence on the extent to which the merger parties will be constrained by other providers following the merger.

97. In their submissions, the parties do not differentiate between ENT services, OMF services and head and neck cancer services in their competitor assessment. Therefore, the parties identify the same competitors for head and neck cancer services as for ENT and OMF services (3<).

98. As noted above our analysis of GP referral data indicates that if any patients or GPs were to switch their referrals as a result of a reduction in the quality of elective head and neck cancer services provided at University Hospitals Bristol FT or North Bristol Trust, the other merging party would be the most important alternative provider. The analysis also identified Royal United Hospital Bath NHS Trust and Taunton and Somerset as the second and third most important alternative providers for elective head and neck cancer patients at University Hospitals Bristol. The analysis suggested that Weston Area Health NHS Trust, Gloucestershire Hospitals, Yeovil NHS Foundation Trust and Great Western Hospitals would be unlikely alternatives to University Hospitals Bristol or North Bristol Trust.⁴⁹

99. Our review of GP referral patterns over time (see Appendix 4) suggests that when University Hospitals Bristol increases its share of elective head and neck cancer referrals, this comes at the expense of Royal United Hospital Bath NHS Trust.⁵⁰ This suggests that there may be a

⁴⁷ Note that a further 20 per cent of University Hospitals Bristol's referrals come from GP practices that refer to no other hospital for head and neck cancer services.

⁴⁸ We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution. We have considered possible alternative explanations of these changes, and would invite the parties to submit any further explanations of which we are unaware. However, in the absence of an alternative explanation, we would interpret significant changes in the proportion of referrals that one party receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

⁴⁹ We tested the robustness of these results using different assumptions on the referral preferences of the patient and GP. See Appendix 4 for details. These did not materially affect the results that we obtained.

⁵⁰ We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution. We have considered possible alternative explanations of these changes, and would invite the parties to submit any further explanations of which we are unaware. However, in the absence of an alternative explanation, we would interpret significant changes in the proportion of referrals that one party receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

degree of substitutability between University Hospitals Bristol and Royal United Hospital Bath NHS Trust in the provision of elective head and neck cancer services.

Conclusion on the impact of the merger on choice and competition for elective head and neck cancer services

100. In conclusion, the analysis set out above indicates that the merger is likely to reduce patient choice and competition by removing the strongest competitive constraint on the elective head and neck cancer services that were provided by University Hospitals Bristol FT (from the Bristol Royal Infirmary site), and by North Bristol Trust (from the Southmead and Frenchay sites). The analysis indicates that following the merger there would remain some patient choice and competition from Royal United Hospital Bath NHS Trust. However, the analysis indicates that Royal United Hospital Bath NHS Trust is unlikely to impose a strong competitive constraint on the merged organisation in the provision of elective head and neck cancer services.

Standard Elective Ear Nose and Throat (ENT) Services

101. As a result of the merger, the ENT activity at Southmead operated by North Bristol Trust was transferred to University Hospitals Bristol FT. University Hospitals Bristol FT will continue to provide standard elective ENT services from its Bristol Royal Infirmary and St Michael's hospital sites on its Bristol campus but standard elective ENT services will no longer be provided at North Bristol Trust's Southmead site.

102. The total annual value of the combined ENT, OMF and head and neck cancer services (elective and non-elective) was £38million (£38 million North Bristol Trust, £38m University Hospitals Bristol FT) prior to the merger.⁵¹

Competition between the merger parties' standard elective ENT services

103. In this section we assess the strength of competition between the merger parties in standard elective ENT services before the transaction. 38.

104. Analysis by 38 in 2006 estimated that there was a risk that some of its referrals would switch to a rival, while there was an opportunity for the trust to attract additional referrals away from other providers. There was approximately a 38% difference between the best and worst case scenarios identified by the trust (38) This is likely to be lower estimate since we know that since the introduction of choice in 2006, patients (and GPs) in Bristol have increasingly selected from a range of different providers. This can be expected to have increased the risk of losing referrals as well as creating new opportunities to attract referrals.

⁵¹ This includes elective and non-elective activity. University Hospitals Bristol FT provided a breakdown of volumes and values for their ENT, OMF and head and neck services. This explained that ENT services (including audiology) were worth £9.3million (based on 48,157 appointments); oral surgery services were worth £2.5million (based on 10,547 appointments); maxilla-facial services were worth £1.7million (based on 5,294 appointments); orthodontics was worth £1.2million (based on 10,880 appointments); and there was a further £2.1million in other associated services (based on 16,632 appointments).

105. Our analysis of GP referral data indicates that:

- if any patients or GPs were to switch their elective ENT referrals away from University Hospitals Bristol FT as a result of the quality of services falling, these referrals would be most likely to switch to North Bristol Trust; and,
- if any patients or GPs were to switch their elective ENT referrals away from North Bristol Trust as a result of the quality of services falling, these referrals would be likely to switch to University Hospitals Bristol FT.

106. We note that this analysis does not tell us whether any referrals would in fact switch in response to such a reduction in service quality. We also note that this analysis shows that UK Specialist Hospitals may also be an important alternative to each of the merging parties; this is discussed in more detail below.

107. Our review of GP referral patterns over time (see Appendix 4) suggests that when North Bristol Trust increases its share of inpatient elective ENT referrals, this comes at the expense of University Hospitals Bristol FT, and vice-versa.⁵²

Competitive constraints from other providers of standard elective ENT services

108. In this section we consider whether there is evidence that the merger parties will be constrained by other providers of standard elective ENT services post-merger.

109. In the parties' submissions, University Hospitals Bristol FT and North Bristol Trust describe ~~X~~ and ~~X~~ as weak competitors for standard elective ENT referrals due to their location. Furthermore, they note that ~~X~~ does not provide inpatient elective ENT services (~~X~~). Both University Hospitals Bristol FT and North Bristol Trust identify ~~X~~ as a strong competitor for standard cases ~~X~~.

110. ~~X~~.

111. As noted above in paragraphs 105-107, our analysis of GP referral data indicates that if any patients or GPs were to switch their referrals as a result of a reduction in the quality of elective ENT services provided at University Hospitals Bristol FT or North Bristol Trust, the other merger party would be an important alternative provider. The analysis also identified Weston Area Health NHS Trust as a likely alternative provider of ENT services for some patients that use the services provided by North Bristol Trust, but not for patients at University Hospitals Bristol FT. In contrast, the analysis indicates that Royal United Hospital Bath NHS Trust, Spire, Gloucestershire Hospitals NHS Foundation Trust, Yeovil District NHS Foundation Trust, Circle, Great Western Hospitals NHS Foundation Trust and Taunton and

⁵² We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution. We have considered possible alternative explanations of these changes, and would invite the parties to submit any further explanations of which we are unaware. However, in the absence of an alternative explanation, we would interpret significant changes in the proportion of referrals that one party receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

Somerset NHS Foundation Trust would not be likely alternatives to either University Hospitals Bristol FT or North Bristol Trust for standard elective ENT services.⁵³

112. The GP referral analysis also identifies UK Specialist Hospitals as an important alternative provider. It suggests that it is likely to be the best alternative provider for a third of patients that use the standard elective ENT services at North Bristol Trust or University Hospitals Bristol. However, in interpreting the competitive constraint that UK Specialist Hospitals imposes upon each of the parties it is important to recognise that a number of parties describe commissioners as encouraging the utilization of capacity at UK Specialist Hospitals. For example North Bristol Trust's internal documents show that they have moved patients from their own waiting list to UK Specialist Hospitals, and removed their own service from the Choose and Book system in order to encourage patients and GPs to refer directly to UK Specialist Hospitals.
113. As noted above UK Specialist Hospitals (Care UK) told us that it operates under a fixed value contract. Therefore, until that point they have only a small incentive to compete to win referrals from the merging parties. ✂. As the number of referrals does not reflect the choices of patients and GPs we do not think the results of our analysis of GP referral patterns provide a reliable indication of the strength of the competitive constraint that UK Specialist Hospitals applied to each of the merging parties during the period of our analysis. However, the strength of the constraint may increase in future if UK Specialist Hospitals moves onto a tariff based contract in 2016. ✂.
114. Our analysis of GP referral data over time (see Appendix 4) also suggests that there has been a significant increase in the share of referrals to providers other than North Bristol Trust, University Hospitals Bristol FT and Royal United Hospital Bath NHS Trust which we found was driven by the entry of UK Specialist Hospitals (Care UK) in 2009/10. However, we treat this evidence cautiously since, as discussed above, the current pattern of referrals has, to some extent, been influenced by commissioners' wish to increase referrals to UK Specialist Hospitals (Care UK), and so may exaggerate the importance of UK Specialist Hospitals (Care UK) as an option for patients and GPs. This rapid growth is therefore better seen as sponsored entry.

Conclusion on the impact of the merger on choice and competition for elective ENT services

115. In conclusion, the analysis set out above indicates that the merger is likely to reduce patient choice and competition by removing the strongest competitive constraint upon the standard elective ENT services that were provided by University Hospitals Bristol FT (from the Bristol Royal Infirmary and St Michael's hospital sites), and by North Bristol Trust (from the Southmead site). The analysis indicates that following the merger there would remain some patient choice and competition from UK Specialist Hospitals (Care UK) for elective ENT services. However, the analysis indicates that UK Specialist Hospitals (Care UK) is unlikely to impose a strong competitive constraint on the merged organisation for elective ENT services.

⁵³ We tested the robustness of these results using different assumptions on the referral preferences of the patient and GP. These did not materially affect the results that we obtained.

Standard elective OMF services

116. As a result of the merger the OMF activity provided by North Bristol Trust at Frenchay Hospital was transferred to University Hospitals Bristol FT. University Hospitals Bristol FT will continue to provide standard elective OMF services at Bristol Royal Infirmary, but the standard elective OMF service at Frenchay Hospital will no longer be provided.

Competition between the merger parties' standard elective OMF services

117. In this section we assess the strength of competition between the merger parties in standard elective OMF services before the transaction.

118. ✕.

119. Analysis by University Hospitals Bristol FT in 2006 estimated that there was a risk that some of their referrals would switch to a rival, while there was an opportunity for the trust to attract additional referrals away from other providers. There was approximately a ✕ % difference between the best and worst case scenarios for the trust (✕) This is likely to be a lower estimate since we know that since the introduction of choice in 2006, patients (and GPs) in Bristol have increasingly selected from a range of different providers. This can be expected to have increased the risk of losing referrals as well as creating new opportunities to attract referrals.

120. This is supported by our analysis of GP referral data on both oral and maxillofacial elements of the parties' OMF services which indicates that:

- if any patients or GPs were to switch their elective referrals away from University Hospitals Bristol FT as a result of the quality of services falling, those referrals would be most likely to switch to North Bristol Trust; and,
- if any patients or GPs were to switch their elective referrals away from North Bristol Trust as a result of the quality of services falling, those referrals would be most likely to switch to University Hospitals Bristol FT.

121. We note that this analysis does not tell us whether any referrals would in fact switch in response to such a reduction.⁵⁴

Competitive constraints from other providers of standard elective OMF services

122. In this section we consider the evidence on the extent the merger parties will be constrained by other providers following the merger.

123. In their submissions, the parties do not differentiate between ENT and OMF services in their competitor assessment.⁵⁵ Therefore, the parties identify the same competitors for OMF as for ENT services (✕).

⁵⁴ See Appendix 4.

124. As noted above our analysis of GP referral data indicates that if any patients or GPs were to switch their referrals as a result of a reduction in the quality of elective OMF services provided at University Hospitals Bristol FT or North Bristol Trust, the other merger party would be the most important alternative provider. The analysis also identified:
- UK Specialist Hospitals as the second most important alternative provider for oral surgery patients at University Hospitals Bristol FT; and
 - Royal United Hospital Bath NHS Trust as the second most important alternative provider for maxillofacial surgery patients at University Hospitals Bristol FT.
125. In contrast, the analysis indicates that Weston Area Health NHS Trust, Gloucestershire Hospitals NHS Foundation Trust, Yeovil District Hospital NHS Foundation Trust, Circle, Great Western Hospitals NHS Foundation Trust and Taunton and Somerset NHS Foundation Trust would be unlikely alternatives to University Hospitals Bristol FT or North Bristol Trust⁵⁶.
126. The analysis of GP referral data over time (see Appendix 4) shows that University Hospitals Bristol lost a significant share of referrals in oral surgery to UK Specialist Hospitals in 2009/10.⁵⁷ This is similar to the pattern we observed in relation to elective ENT services. However, UK Specialist Hospitals' volume of referrals appears to result in part from commissioners encouraging the direction of referrals towards UK Specialist Hospitals at the expense of other providers. For example, \propto . This would exaggerate the importance of UK Specialist Hospitals as an option for patients and GPs. This suggests that the competitive constraint is likely to be significantly weaker than that which is suggested by the rapid growth of UK Specialist Hospitals.

Conclusion on the impact of the merger on choice and competition for elective OMF services

127. In conclusion, the analysis set out above indicates that the merger is likely to reduce patient choice and competition by removing the strongest competitive constraint upon the standard elective OMF services that were provided at University Hospitals Bristol FT and at North Bristol Trust. The analysis indicates that following the merger there would remain some patient choice and competition from UK Specialist Hospitals (Care UK). However, the analysis indicates that UK Specialist Hospitals (Care UK) is unlikely to impose a strong competitive constraint on the merged organisation in the provision of elective OMF services.

Standard elective urology services

⁵⁵ Responses were grouped together under the heading head and neck cancer services, ENT and OMF services.

⁵⁶ We tested the robustness of these results using different assumptions on the referral preferences of the patient and GP. See Appendix 4 for details. These did not materially affect the results that we obtained.

⁵⁷ We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution. We have considered possible alternative explanations of these changes, and would invite the parties to submit any further explanations of which we are unaware. However, in the absence of an alternative explanation, we would interpret significant changes in the proportion of referrals that one party receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

128. As a result of the merger, the part of University Hospitals Bristol FT providing urology services at Bristol Royal Infirmary was transferred to North Bristol NHS Trust. North Bristol NHS Trust will continue to provide urology services at its Southmead site but standard elective urology services will no longer be provided from the Bristol Royal Infirmary. The exception is paediatric urology which is excluded from the merger, and will continue to be provided by University Hospitals Bristol FT (at the Bristol Royal Hospital for Children).
129. The combined value of the urology services is £16.7 million in total (£12.3 million North Bristol Trust, £4.4 million University Hospitals Bristol FT, prior to the merger).⁵⁸ For context we note that University Hospitals Bristol FT ceased to provide complex urological cancer services and kidney stone services when these services were consolidated at North Bristol Trust in 2006.⁵⁹

Competition between the merging parties' standard elective urology services

130. In this section we assess the strength of competition between the merger parties in standard elective urology services before the transaction. This service specific analysis is in addition to the analysis on the overall extent of competition between the merger parties.
131. ✕.
132. Market analysis by University Hospitals Bristol FT from 2006 estimated that there was a risk that some of its referrals would switch to a rival, while there was an opportunity for the trust to attract additional referrals away from other providers. There was approximately an ✕% difference between the best and worst case scenarios identified by the trust (✕). This is likely to be a lower estimate since referral data shows that since the introduction of choice in 2006, patients and GPs in Bristol and the surrounding area have increasingly selected from a range of different providers.⁶⁰ This is likely to have increased the risk of losing referrals as well as creating new opportunities to attract referrals.
133. We conducted an analysis of GP referrals for elective urology services. The analysis uses observed GP referral patterns to infer which provider each referral would be likely to switch to if they were to switch away from their existing service. It therefore identifies those providers that appear likely to pose a threat to the largest proportion of the trust's volume of elective activity. In this respect it reflects the internal analysis that the providers have conducted in order to understand their competitive position. Our analysis of GP referral data indicates that:
- IV. if any patients or GPs were to switch their elective urology referrals away from University Hospitals Bristol FT as a result of the quality of services falling, those referrals would be most likely to switch to North Bristol Trust; and,
 - V. if any patients or GPs were to switch their elective urology referrals away from North Bristol Trust as a result of the quality of services falling, those referrals would be most likely to switch to University Hospitals Bristol FT.

⁵⁸ This includes elective and non-elective activity and consists of 8,468 inpatient and 16,634 outpatient appointments.

⁵⁹ As noted above University Hospitals Bristol FT continued to provide andrology services and retroperitoneal work.

⁶⁰ This reflects the trend at a national level which is described in Kelly and Tetlow (2012): 'Choosing the place of care: The effect of patient choice on treatment location in England 2003-2011'; Institute for Fiscal Studies and Nuffield Trust.

134. We note that this analysis does not show how many referrals would in fact switch in response to such a reduction in service quality.⁶¹
135. We also reviewed changes in GP referral patterns over time (see Appendix 4).⁶² This analysis indicates that since 2008 North Bristol Trust has lost a significant proportion (20 per cent) of urology referrals that it received from Bristol, North Somerset and South Gloucestershire and Bath and North East Somerset areas. These appear to have largely diverted towards University Hospitals Bristol (which has gained 25 per cent during this period). However, we note that the analysis does not control for other factors that might drive changes in the proportion of referrals. North Bristol Trust submitted that many of these referrals switched to a private sector competitor, GP Care. However, we note that GP Care does not provide inpatient services, only community urology services. Therefore it cannot have received any of these referrals. In the absence of an alternative explanation, we interpret significant changes in the proportion of referrals that one provider receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

Competitive constraints from other providers of standard elective urology services

136. In this section we consider whether there is evidence that the merger parties will be constrained by other providers of standard elective urology services post-merger. This service-specific analysis is in addition to the evidence on the overall extent of competition from third parties that is discussed above.
137. X describes X, X, and X as weak competitors for standard elective urology referrals. X. It submits that X has a smaller medical team and provides weak competition due to its geographic location. It describes the constraint from X as limited owing to the limited urology service that they provide.
138. X submits that, other than X, it has two main competitors. It describes X. It also submits that X is a stronger competitor as a result of its location, but a weak rival due to traditional patient referral patterns. X added that X are weak NHS competitors due to their location. They also described X as weak competitors for urology services since they provide a limited range of services.
139. As noted above, our analysis of GP referral data indicates that if any patients and GPs were to switch their elective urology referrals as a result of the relative quality of services provided at either University Hospitals Bristol FT or North Bristol Trust falling, those referrals would have been likely to switch to the other merging party.⁶³ X the analysis indicates that only a small

⁶¹ We tested the robustness of these results using different assumptions on the referral preferences of the patient and GP. See appendix for details. These did not materially affect the results that we obtained.

⁶² We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution. We have considered possible alternative explanations of these changes, and would invite the parties to submit any further explanations of which we are unaware. However, in the absence of an alternative explanation, we would interpret significant changes in the proportion of referrals that one party receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

⁶³ However, we note that this analysis does not tell us whether any referrals would in fact switch in response to such a reduction.

proportion would be likely to switch to Weston Area Health NHS Trust, Royal United Hospital Bath NHS Trust or Gloucestershire Hospitals NHS Foundation Trust.⁶⁴

140. Similarly, our review of changes in GP referral patterns over time (see Appendix 4) suggested that University Hospitals Bristol FT had gained a significant proportion of referrals from North Bristol Trust since 2008.⁶⁵ The analysis suggested that Weston Area Health NHS Trust might have also made some gains at the expense of North Bristol Trust. The proportion of referrals to other providers did not change significantly during this period.

Conclusion on the impact of the merger on choice and competition for elective urology services

141. In conclusion, the analysis set out above, indicates that the merger is likely to reduce patient choice and competition by removing the strongest competitive constraint upon the standard elective urology services provided at University Hospitals Bristol FT (from the Bristol Royal Infirmary site) and North Bristol Trust (from the Southmead site). The analysis indicates that there would remain alternative providers that would offer some patient choice and competition following the merger, including Weston Area Health NHS Trust, Royal United Hospital Bath NHS Trust, and UK Specialist Hospitals. However, the analysis indicates that these providers are unlikely to impose a significant competitive constraint on the merger parties for standard elective urology services following the merger.

Standard elective symptomatic breast care services

142. As a result of the transaction, the part of University Hospitals Bristol FT providing elective symptomatic breast care was transferred to North Bristol Trust. North Bristol Trust will continue to provide symptomatic breast care services at its Southmead site but standard elective symptomatic breast care services will no longer be provided from the Bristol Royal Infirmary. In their submissions the merger parties classify symptomatic breast care inpatients as elective patients, including those referred by their GP under the two-week wait programme.⁶⁶
143. The total combined value of the symptomatic breast care services is £4.7 million (£2.8 million North Bristol Trust, £1.9 million University Hospitals Bristol FT prior to the merger).⁶⁷ We note that non-symptomatic breast screening services currently provided by University Hospitals Bristol FT are not in the scope of this transaction.

Competition between the merging parties standard elective symptomatic breast care services

⁶⁴ We tested the robustness of these results using different assumptions on the referral preferences of the patient and GP. See appendix 4 for details. These did not materially affect the results that we obtained. [appendix ?]

⁶⁵ We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution. We have considered possible alternative explanations of these changes, however, in the absence of an alternative explanation, we would interpret significant changes in the proportion of referrals that one party receives at the apparent expense of another provider as being consistent with a degree of substitutability between those providers.

⁶⁶ We note that referrals for cancer services subject to a two-week wait are expressly excluded from a patient's right to choice under the NHS Constitution. However, our analysis of GP referral > suggest that patients and their referring clinicians are exercising choice of symptomatic breast care provider.

⁶⁷ This includes elective and non-elective services and consists of 790 inpatient and 9,554 outpatient appointments.

144. In this section we present the evidence on the strength of competition between the merger parties in standard elective symptomatic breast care services before the transaction.
145. ✂.
146. North Bristol Trust ✂ report that in 2011 it moved provision of its symptomatic breast services from Frenchay Hospital to Southmead Hospital. It explains that in response to this some GPs switched their referrals to University Hospitals Bristol FT (illustrating their ability to choose the provider of symptomatic breast care services). North Bristol Trust suggested that this was because the GPs were under the impression that the North Bristol Trust service had closed (rather than services being provided from a different site). Whether this was the case, or whether the patients and GPs switched their referral as they preferred not to travel to Southmead, this episode supports the idea that these patients and GPs viewed University Hospitals Bristol FT as the best available substitute for North Bristol Trust for symptomatic breast services.⁶⁸
147. Our analysis of GP referral data indicates that:
- if any patients or GPs were to switch their symptomatic breast care referrals away from University Hospitals Bristol FT as a result of the quality of services provided falling, those referrals would be most likely to switch to North Bristol Trust.
 - if any patients or GPs were to switch their symptomatic breast care referrals away from North Bristol Trust as a result of the quality of services provided falling, those referrals would be most likely to switch to University Hospitals Bristol FT.
148. We note that this analysis does not tell us whether any referrals would in fact switch in response to such a reduction.
149. Our analysis of GP referral patterns over time (see Appendix 4) suggests that the merging parties' shares of activity in symptomatic breast care services have been stable in recent years. The data shows that there have not been any large changes in referral patterns for elective inpatient symptomatic breast services between 2006 and 2012. ✂.⁶⁹ ✂ Therefore, on balance, it appears that the changes in referral patterns are consistent with patients being able to switch between the providers.⁷⁰

Competitive constraints from other providers of standard elective symptomatic breast care services

150. In this section we assess whether there is evidence that the merger parties will be constrained by other providers of standard elective symptomatic breast care services following the merger.

⁶⁸ ✂.

⁶⁹ ✂

⁷⁰ We note that the analysis does not control for factors that might drive changes in the share of referrals. This analysis cannot therefore provide conclusive evidence on patterns of substitution.

151. X. X were also identified by the merger parties as competitors in the provision of symptomatic breast care services. However, X was perceived by the merger parties to be a weak competitor for standard elective symptomatic breast care referrals due to its case-mix, size, capability, and location (X). X was noted by the parties to be a strong competitor due to location, but weak due to the fact that X do not tend to use services provided in Bristol and vice-versa.⁷¹ X. University Hospitals Bristol FT told us that only a small number of patients travel between Bristol and Bath for breast care services.
152. As noted above, our analysis of GP referral data suggests that prior to the merger if any patients or GPs were to switch their symptomatic breast care referrals as a result of the quality of services provided at University Hospitals Bristol FT or North Bristol Trust falling, those referrals would be likely to switch to the other merger party.⁷² Consistent with the evidence above we find that only a small proportion would be likely to switch to Weston Area Health NHS Trust, Royal United Hospital Bath NHS Trust, or Gloucestershire Hospitals NHS Foundation Trust.⁷³

Conclusion on the impact of the merger on choice and competition for standard elective symptomatic breast care services

153. In conclusion, the analysis set out above indicates that the merger is likely to remove the strongest competitive constraint upon the symptomatic breast care services provided at University Hospitals Bristol FT (from the Bristol Royal Infirmary site) and North Bristol Trust (from the Southmead site). The analysis indicates that there would remain alternative providers that would offer some competition following the merger, including: Weston Area Health NHS Trust, Royal United Hospital Bath NHS Trust and Gloucestershire Hospitals NHS Foundation Trust. However, analysis indicates that these providers are unlikely to impose a significant competitive constraint on the merger parties following the merger.

Prospects of entry

154. In this section we consider the likelihood of providers entering into the provision of elective services in the Bristol and surrounding area in competition with the services provided by University Hospitals Bristol FT or North Bristol Trust.
155. Barriers to entry into the provision of elective services by new providers include the cost of building a new purpose-built facility with limited sell on value from which to provide elective services (in the order of tens of millions of pounds to set up an ISTC),⁷⁴ and the need to locate the facility near to a hospital with emergency back-up facilities. We note that there has been one new entrant into the provision of elective services in the area in recent years. This was Circle which opened its Bath hospital in 2010. This treats both private and NHS patients

⁷¹ X.

⁷² However, we note that this analysis does not tell us whether any referrals would in fact switch in response to such a reduction.

⁷³ We tested the robustness of these results using different assumptions on the referral preferences of the patient and GP. See appendix 4 for details. These did not materially affect the results that we obtained.

⁷⁴ See for example the figures cited in: <http://www.hsj.co.uk/news/acute-care/nhs-to-become-a-landlord-for-private-treatment-centres/5004595.article>

although it receives very small numbers of NHS referrals from the Bristol, North Somerset and South Gloucestershire area.

156. We also considered the likelihood of entry into the provision of the relevant services by existing providers of other services.⁷⁵ For example, we considered whether limited range providers (such as ISTCs) were likely to offer elective head and neck cancer services or symptomatic breast care services to NHS patients in future.
157. The parties told us that the opening of Circle Bath, the Emersons Green ISTC, and the increasing use of AQP contracts indicates that the local health market is open to entry. However, we note that the competitive constraint from each of Circle Bath and Emersons Green ISTC is considered within our competitive assessment. The parties did not identify any additional likely entrants and further entry in the near future does not appear likely. First, the entry of the Emersons Green ISTC was sponsored by the Department of Health and we do not expect that further sponsored entry is likely given the cost pressures that the NHS faces over the coming years. Second, each of the local private hospitals has already entered the market on an AQP contract. Third, we asked providers and commissioners in the area whether they expected any change in referral patterns other than as a result of the merger. Those that responded told us they did not expect any change as a result of new entrants or expansion of existing providers into new services. We therefore consider that there are significant barriers to entry into the supply of elective services in Bristol and the surrounding area and so there are unlikely to be any new competitive constraints that we need to reflect in our analysis.

Countervailing buyer power

158. In general, we consider it is unlikely that commissioners would be able to counter the reduction in competition that a merger might otherwise create by exercising countervailing buyer power.⁷⁶ For example, we expect that even a strong buyer would still find that a reduction in competition between providers reduces its bargaining strength (as its dependence on a single provider increases) and therefore reduces its ability to achieve its desired outcomes. Similarly, we note that local commissioners are unable to provide services in-house, and are unlikely to be in a position to sponsor entry given the cost pressures that the NHS faces over the coming years. Therefore, unless there are particular circumstances in a case that mean that countervailing buyer power might limit the effect of the reduction in the competitive constraints upon the merged provider, we consider that the countervailing buyer power will not limit the loss of competition that we identify above.
159. We have not been able to identify any particular circumstances in this case that might allow commissioners to exercise countervailing buyer power to limit the effect of the reduction in competitive constraints upon the merged activities. Accordingly, we consider that

⁷⁵ The existing providers each offered NHS patients urology, ENT and OMF services.

⁷⁶ We would expect that the commissioners may be able to exert buyer power if the merger parties are largely dependent on the volumes that the commissioner buys from them.

commissioners would not be in a position to counter any reduction in competition that the merger would otherwise be likely to create.

Conclusion on costs in provision of standard elective services

160. Our analysis of \times , submissions and other evidence provided by the merger parties and third parties (both providers and commissioners) and of GP referral patterns suggests that the merger parties are each other's strongest competitors in the provision of standard elective services. For the reasons outlined above we have found that the merger is likely to reduce patient choice and competition for elective head and neck, ENT, OMF, urology and symptomatic breast care services that the merger parties provide from their respective hospital sites in Bristol. While there are other providers of these services in Bristol and the surrounding area that patients can choose, the analysis indicates that these other providers exert a weak competitive constraint on the services provided by University Hospitals Bristol FT and North Bristol Trust. Our analysis did not indicate this is likely to change significantly in the foreseeable future. Our analysis also indicates that new entry is unlikely and that commissioners are unlikely to be in a position to counter the reduction in competition that is likely to arise from the merger.
161. We have therefore identified a loss of patient choice and a loss of competition between the merger parties as a result of this merger. As a consequence of this loss of patient choice and competition, the incentives for North Bristol Trust to continue to invest in maintaining or improving the quality or efficiency of the standard elective urology and symptomatic breast services previously provided from both North Bristol Trust's Southmead hospital and University Hospitals Bristol FT's Bristol Campus are reduced. Similarly, as a consequence of the loss of patient choice and a loss competition, the incentives on University Hospitals Bristol FT to continue to invest in maintaining or improving the quality or efficiency of the elective ENT, OMF, and head and neck cancer services previously provided from both North Bristol Trust's Southmead hospital and University Hospitals Bristol FT's Bristol Campus are also reduced.

COMPETITION FOR NON-ELECTIVE SERVICES IN BRISTOL AND THE SURROUNDING AREA

162. We next consider whether the merger would be likely to reduce the extent of competition between providers of non-elective services in Bristol and the surrounding area. In particular, we consider whether it would reduce the merger parties' incentive to maintain and improve the quality and/or efficiency of the following non-elective services: head and neck, ENT, OMF, urology and symptomatic breast care services. We consider whether, in the absence of the merger, the parties would have been expected to compete to be the provider chosen to provide one of the relevant services in the event the commissioners had decided to reduce the number of providers.
163. Non-elective services are those services that are provided to patients after an unscheduled admission. We note that both providers will continue to operate a full A&E service at their respective sites after the merger. Consultant cover for each of the activities that are transferred will be provided through an SLA with the acquiring service provider (e.g. North Bristol Trust for urology). However, the parties will cease to operate non-elective services in

these specialties independently of each other meaning that, for example, patients going into University Hospitals Bristol FT's A&E at Bristol Royal Infirmary who require admission for urology treatment will be transferred to North Bristol Trust (since University Hospitals Bristol FT no longer operates a urology department). Our analysis in this section therefore does not consider competition for A&E services since A&E activities do not form part of this merger. Instead we consider the impact of the reduction in the number of providers of the non-elective services in the specialties that are subject of the activity transfer.

164. Our analysis focuses on the effect of the merger on commissioner choice. As patients cannot choose a provider of non-elective care services, commissioners choose which hospital sites they want to provide these services for the local population.⁷⁷ Competition between providers of non-elective services arises if there is the possibility that commissioners may review and possibly change from whom, and in some cases from how many providers, they purchase these services in the future. For example, a commissioner could decide to run a tender to identify a suitable organisation to provide non-elective ophthalmology services in a given area.⁷⁸ Alternatively, a commissioner could decide to reduce the number of non-elective ophthalmology departments in a given locality and invite providers to bid to be the chosen provider(s).
165. For each of the sites on which it provides non-elective services, we expect that a provider of non-elective services will focus its expenditure on maintaining and improving the quality of its non-elective services with a view to securing a number of objectives: maximising patient welfare; maximising its surplus of revenue over costs (i.e. minimising costs); and maximising the probability that the commissioner would continue to purchase these services from it in the future. As more expenditure on particular services, or the time spent designing those services, is associated with higher quality services at a given hospital site, the provider faces a trade-off when setting its level of expenditure. On the one hand, it will want to increase expenditure to maximise patient welfare and increase the probability that the commissioner will continue to purchase these services from it on a given site. On the other hand, it will need to control expenditure in order to maximise the surplus of the trust and help keep the trust financially viable.⁷⁹
166. In the rest of this section we set out our analysis of the effect of the proposed merger on competition between providers of non-elective services.

Threat of switching non-elective services away from an existing provider

167. Commissioners may be able to create competitive pressure over their local non-elective provider if they have the option of switching the provider of an existing service to award that

⁷⁷ However, we note that patients who do not arrive by ambulance will have a choice as to which hospital they seek non-elective treatment.

⁷⁸ This might be a new site or an existing site. For example, Moorfields Eye Hospital NHS Foundation Trust provides both elective and non-elective ophthalmology at a number of hospitals, and Circle provides a range of non-elective services from Hinchingsbrooke Health Care NHS Trust.

⁷⁹ Trusts are under an obligation to ensure that they earn sufficient revenue to cover their costs, and in the case of foundation trusts, there is an incentive to earn surplus revenue as this can be retained and invested in new services.

contract to a new provider. However, this pressure will only exist if commissioners are likely to give consideration to the option.

168. In this case we have not been able to find any information from providers or commissioners (e.g. options appraisals, board minutes) that suggests the commissioners have considered or would consider entering into a new contract for non-elective services with a new provider. Therefore we do not think that the threat of commissioners switching non-elective services to a new provider was exerting competitive pressure on the merger parties prior to the merger.

Threat of discontinuing all or a subset of non-elective services from an existing site

169. A merger between providers of non-elective services may also reduce the merged organisation's incentive to invest to maintain and improve the quality of its non-elective services at each of its sites above CQC minimum standards. This is because before the merger, when making expenditure decisions, each provider would take account of the revenue it would lose if commissioners decided to reduce or stop purchasing non-elective services from it.
170. Following the merger, each provider will still take into account such considerations, but it will also consider the revenue it would retain, where volumes are diverted to other sites within the merged organisation. As a result, the merged organisation may not be prepared to incur the same level of expenditure on maintaining or improving the quality of non-elective services at its site as it did pre-merger.⁸⁰ We therefore expect that the greater the proportion of revenue that would be retained by the merged organisation in the event of a closure of capacity to provide non-elective services, the more likely it is that there will be a reduction in competition to provide non-elective services.
171. To assess the effect of the transactions on competition between providers of non-elective services in Bristol and the surrounding area we therefore analysed:
- whether there is a realistic possibility that in the future commissioners may change whether they commission all non-elective services from the sites operated by the merging parties; and
 - the proportion of revenue the merging parties could expect to retain in the event commissioners decided to stop commissioning some or all of the non-elective services at one of their hospital sites.

Risk to providers of commissioners changing how they commission standard non-elective services

172. Commissioners may seek to change how services are provided across an area. This can involve varying degrees of service change, from discontinuing a single non-elective service to the closure of all non-elective services on a site. We considered whether there was a risk of

⁸⁰ In some cases, it may choose to reduce investment to the point of ceasing to provide the service. We note that, on balance, the merged organisation may still prefer to retain non-elective services at each of its sites although its incentive to do so would be reduced.

commissioners in Bristol and the surrounding area changing the configuration of non-elective services in the absence of the merger. We noted that, prior to the merger, Bristol had two full-range providers of non-elective services located within three miles of one another. Given the accessibility of each non-elective site, it appeared that commissioners might, at some point, consider whether to reduce the number of non-elective sites in Bristol. Therefore, we consider that there was a reasonable prospect that commissioners would close or downgrade one of the non-elective service departments in Bristol. We therefore expect that North Bristol Trust and University Hospitals Bristol FT would likely have perceived there to be a realistic threat that commissioners would seek to change whether they continued to commission all non-elective services from either of their sites.

Revenue impact from commissioners changing how they commission standard non-elective services

173. In the following paragraphs we examine the closeness of competition between University Hospitals Bristol FT and North Bristol Trust in relation to the provision of non-elective services, as well as competitive constraints imposed on University Hospitals Bristol FT and North Bristol Trust by other providers.
174. We do this by examining the expected diversion of patients from University Hospitals Bristol FT to North Bristol Trust and from North Bristol Trust to University Hospitals Bristol FT in order to model what would happen to the merged service's revenue if commissioners were to stop commissioning non-elective services from the non-elective department at (a) Bristol Royal Infirmary, and (b) Southmead Hospital. This indicates the extent to which the parties placed a competitive constraint on each other pre-merger and therefore in the counterfactual to this merger. Accordingly, this identifies the constraint which would be removed by the merger.
175. Since patients using non-elective services require urgent treatment we assume that patients requiring non-elective services would attend their nearest hospital providing these services. Therefore, if commissioners were to stop commissioning a non-elective service at Bristol Royal Infirmary, we assume that patients would go to, or be transferred to, the next nearest hospital providing these services. Using the location and size of GP practices (in terms of registered patients) as a proxy for the local population, we first identified those patients that are closest to Bristol Royal Infirmary (University Hospitals Bristol FT) and Southmead Hospital (North Bristol Trust) and then identified which provider of non-elective services was the next closest.⁸¹
176. The analysis indicates that around 98 per cent of patients that are closest to North Bristol Trust would go to, or be transferred to, the non-elective department at University Hospitals Bristol FT if non-elective treatment at North Bristol Trust were no longer available.⁸² The revenue from treating those patients would also move with those patients. If the providers have an incentive to retain this revenue then this suggests that University Hospitals Bristol FT placed a very strong constraint on non-elective services at North Bristol Trust.

⁸¹ We measured this by drive time – see Appendix 1.

⁸² The remaining 2 per cent would be likely to go to Gloucestershire Hospitals NHS Foundation Trust.

177. We repeated this analysis for the University Hospitals Bristol FT. The analysis indicates that 96 per cent of the population which is closest to the University Hospitals Bristol FT would seek non-elective treatment at North Bristol Trust if non-elective services at University Hospitals Bristol FT were no longer available.⁸³ The revenue from treating those patients would also move with those patients. If the providers have an incentive to retain this revenue then this suggests that North Bristol Trust placed a strong competitive constraint on non-elective services at University Hospitals Bristol FT.

178. ✂.⁸⁴

Conclusion on costs in provision of non-elective services

179. The analysis set out above indicates that commissioners could have sought to change whether they commissioned all non-elective services operated by University Hospitals Bristol FT and North Bristol Trust prior to the merger, due to the close proximity of the provider's respective sites. The analysis also indicates that North Bristol Trust and University Hospitals Bristol FT are each other's closest competitors for the provision of non-elective services; between 96 and 98 per cent of one party's non-elective patients would be likely to switch to the other party for non-elective services. This patient and competitive constraint is likely to be removed following the merger and other providers of non-elective care in the area do not appear likely to place a similar competitive constraint on the merger parties.

180. As a consequence of the loss of competition suggested by the analysis, the merger is likely to remove an important incentive North Bristol Trust has to invest in maintaining or improving the quality or efficiency of the non-elective urology and symptomatic breast care services that it provides post-merger.⁸⁵ Similarly, the analysis indicates that the merger is likely to remove an important incentive University Hospitals Bristol FT has to invest in maintaining or improving the quality or efficiency of the non-elective ENT, OMF, and head and neck cancer services that it will provide post-merger.⁸⁶

⁸³ The remaining 4 per cent would be likely to go to Royal United Bath.

⁸⁴ They also explained that North Bristol Trust is being designated as a major trauma centre and expects that to result in growth in non-elective volume. It also notes that its market share of maternity activity follows the profile of its emergency admissions, however it expects that opening the new midwife led birth centre at Cossham Hospital will allow the trust to attract patients who would usually select University Hospitals Bristol FT or Royal United Hospital Bath NHS Trust University Hospitals Bristol.

⁸⁵ We note that BNSSG commissioners intended to close this service, and the service did in fact close following completion of the merger transaction. Commissioners told us this closure was only possible as a result of the merger. This is consistent with our analysis which suggests that the merger makes it more attractive for the North Bristol Trust to agree to close the non-elective service at the BRI (and that absent the merger University Hospitals Bristol FT would have been less likely to agree to the closure and would have had a larger incentive to continue to invest to maintain and improve the non-elective service at the Bristol Royal Infirmary). Therefore the closure is, at least partly, an effect of the merger (and would not have happened without the merger).

⁸⁶ We note that BNSSG commissioners intended to close this service, and the service did in fact close following completion of the merger transaction. Commissioners told us this closure was only possible as a result of the merger. This is consistent with our analysis which suggests that the merger makes it more attractive for the North Bristol Trust to agree to close the non-elective service at the BRI (and that absent the merger University Hospitals Bristol FT would have been less likely to agree to the closure and would have had a larger incentive to continue to invest to maintain and improve the non-elective service at the BRI). Therefore the closure is, at least partly, an effect of the merger (and would not have happened without the merger).

181. On the basis of the above analysis, we consider that the merger is likely to significantly change the incentives North Bristol Trust and University Hospitals Bristol FT have to invest in maintaining and improving the quality and efficiency of non-elective services.⁸⁷ The merger is therefore likely to give rise to material costs to patients and taxpayers due to a reduction in choice and competition for non-elective services in Bristol and the surrounding area.

COMPETITION FOR OUTPATIENT SERVICES

182. We analysed whether the merger would be likely to reduce choice and competition in outpatient services in Bristol and the surrounding area. There are two types of outpatient services: those which form part of a pathway for a specific admitted patient episode (i.e. first and follow-up appointments); and those standalone outpatient services which do not form part of a specific admitted patient pathway.⁸⁸ This second category reflects the growing demand from commissioners for medical care that can be provided on an outpatient basis in hospital and community settings (with no requirement to admit the patient for treatment).

183. The parties each provide a range of outpatient services. These services can be provided from a range of premises including GP practices, health centres and community hospitals.⁸⁹ Where outpatient appointments are provided in conjunction with an admitted service, the effect on competition for outpatient services was assessed in our analysis of the effects of the merger on standard elective services.

184. In general, we consider that the provision of stand-alone outpatient services is likely to have lower barriers to entry than the provision of hospital-based services and so a wider range of providers are likely to be able to start providing outpatient services.⁹⁰ Therefore, unless there are particular circumstances in a case that give rise to barriers to entry in the provision of stand-alone outpatient services, we consider that the threat of entry by new providers is likely to constrain existing providers and will enable patients to switch to an alternative provider in the event that the quality of the existing providers' stand-alone outpatient services deteriorates.

185. We have not been able to identify any particular circumstances in this case that might give rise to barriers to entry in the provision of stand-alone outpatient services in the areas in which the parties are active. For example, as part of service development plans the parties have each been able to set up outpatient clinics in the surrounding area. Accordingly, we consider that the merger is unlikely to give rise to material costs to patients and taxpayers due to a reduction in choice and competition for stand-alone outpatient services in Bristol and the surrounding area.

⁸⁷ As noted in footnote above, this may include ceasing to invest in providing the service.

⁸⁸ For example, University Hospitals Bristol FT provides a breast screening outpatient service.

⁸⁹ The location of these outpatient clinics can improve access for patients and can be used by providers to attract patients from an area where patients would otherwise be unwilling to travel to the main hospital site for both the admitted and associated outpatient appointments.

⁹⁰ Setting up these clinics requires a provider to rent space within existing health care facilities (e.g. a community hospital or a local GP) or rent alternative appropriate accommodation. The provider must also be able to provide consultants, nurses and administrative staff.

COMPETITION FOR COMMUNITY SERVICES

186. We assessed whether the merger would be likely to reduce patient choice and competition in community ENT, OMF and urology services in the Bristol, North Somerset and South Gloucestershire area. In order to assess the effect of the merger on community services we assessed the extent of competition between North Bristol Trust and University Hospitals Bristol FT in absence of the merger and post-merger. Next we assessed the likely bidders for relevant community services contracts following the merger and the extent to which they would be able to offer commissioners a credible alternative to the merging parties.
187. We found that both University Hospitals Bristol FT and North Bristol Trust have previously bid to provide community services, and have each been accredited as qualified providers to provide community audiology and endoscopy services. We therefore considered that, absent the merger, they would have been likely to be strong competitors in the provision of community services (see Appendix 5 for details).
188. Our analysis indicates that, post-merger, University Hospitals Bristol FT will continue to provide its existing community urology and ENT services, and North Bristol Trust is likely to continue to bid for a range of community services. We note, however, that the strength of the bids made by each provider may be affected by their loss of elective acute provision in the relevant service.
189. We considered the extent to which third parties in the Bristol, North Somerset and South Gloucestershire area have previously, and would in future provide a competitive constraint on the merging parties when bidding to provide community services under exclusive contracts, or under an AQP designation.
190. We found that there were a number of experienced local providers (e.g. Bristol Community Health, North Somerset Community Health and Sirona) which are likely to continue to bid to provide community ENT, OMF and urology services in the Bristol, North Somerset and South Gloucestershire area. We think it is also likely that local primary care provider groups and other independent sector providers that specialise in specific community services will increasingly monitor and bid for service that are tendered, or opened to AQP, in Bristol, North Somerset and South Gloucestershire.
191. Therefore, our analysis indicates that this merger is unlikely to give rise to material costs to patients and taxpayers due to a reduction in choice and competition for community ENT, OMF and urology services.

CO-ORDINATED EFFECTS

192. Co-ordinated effects may arise where, following a merger, providers independently recognise the mutual benefit in not competing with each other and decide to limit the effort placed in

competing.⁹¹ We consider that the merger is not likely to result in the creation or strengthening of coordinated effects. (Our analysis is set out in Appendix 6)

VERTICAL EFFECTS OF THE TRANSACTION

193. We next analyse whether the merger is likely to have an impact on the relationship between the parties and those providers who refer patients to them, or to whom they refer patients. In particular, we assess whether the merged organisation would have the ability and incentive to direct or otherwise influence patient referrals internally rather than to alternative providers and thus reduce competition for those referrals.

194. There are two main types of referrals which occur between the merger parties. The first is referrals between community service providers and acute providers. The second is referrals between acute providers and tertiary and/or specialist service providers. We consider changes to the merger parties' incentives for the two types of referrals below.

Effect of the proposed transaction on referrals between providers of community and hospital-based services

195. We consider the effect of the proposed merger on the flow of patients between community service providers and providers of hospital-based services. Patients of community service providers are currently able to choose their provider of hospital-based services. We assess whether the merged organisation would have the ability to direct (or otherwise influence) patients receiving community services into standard elective treatment provided from hospital sites of the merged organisation. We note that the parties already have this ability as North Bristol Trust already provides a range of community services and University Hospitals Bristol FT provides a number of community services, while both offer full range of hospital-based services. Gloucestershire Hospitals NHS Foundation Trust told us that it is registered, as are the merging parties, as a provider of community audiology services in Bristol and South Gloucestershire.⁹² ✕.

196. The merger is unlikely to have any additional impact on this existing ability and therefore we consider that the merger is unlikely to result in a loss of choice and competition or undermine the GP gatekeeper function (which is fulfilled in these cases by the community service provider).

197. We also assess the potential impact of the merger on patient choice and competition in terms of referrals from providers of hospital-based services to community service providers. We note that each of the parties already has the ability and incentive to refer patients to any community services that the parties choose to start providing under the AQP model. We consider that it is unlikely that the merger will change this existing incentive. Therefore, we consider that the merger transactions will have no additional impact and is unlikely to give rise

⁹¹ See CCP *Merger Guidelines*, paragraphs 6.68 to 6.73

⁹² These services can be provided by any qualified provider that is registered by the CQC and holds a standard acute contract with the commissioner.

to a reduction in choice and competition in relation to referrals from providers of hospital-based services to community service providers.

Effect of the proposed transaction on referrals between providers of standard and specialist hospital services

198. We assess whether the merger would have an effect on the flow of patients from providers of standard hospital-based services to specialist hospital-based services. Patients are not generally able to choose their provider at this stage of the patient pathway and so we focus on the impact on competition between providers for referrals from consultants.
199. North Bristol Trust and University Hospitals Bristol FT provide a number of specialist services in urology services, and in head and neck cancer services. Both parties provide head and neck cancer services and so the referrals that each provider generates for these services have been directed towards their own specialist services. This means there has been no competition for these referrals in the past, and the merger is unlikely to change this.
200. Within urology, University Hospitals Bristol FT provides andrology and retroperitoneal work and North Bristol Trust provides urological cancer surgery, complex kidney and urethral stones, neuro-urology, reconstruction and continence, urodynamics, and robotic urology. We therefore considered the impact of the merger upon tertiary referrals into these services.
201. If a provider has, prior to the merger, competed for a large proportion of its specialist referrals, and the merger is expected to remove the need to compete for these referrals, then the merger may reduce competition for tertiary referrals in that specialist service.
202. We therefore considered first whether the merger removes the need to compete for specialist referrals. We note that post-merger North Bristol Trust will be able to define referral pathways to ensure that all urology patients coming into the Bristol Royal Infirmary or Southmead Hospital that require a specialist tertiary urology referral, will be automatically referred to the trust's own specialist service. The trust will therefore not need to compete to attract these referrals since they will be automatic. Similarly, other specialist providers will not have an incentive to compete for these since these referrals will not be switched however much they invest in their service.
203. We then considered what proportion of referrals into these tertiary specialist services came from the parties.
204. The urology service at North Bristol Trust provided approximately 30 inpatient spells each year. Approximately 70 of these are patients that are transferred into the trust. These transfers are tertiary referrals and are therefore likely to show from which hospitals the trust attracts specialist referrals. University Hospitals Bristol FT sent approximately 20 per cent of its 30 urology transfers to North Bristol Trust (constituting 16 per cent of North Bristol Trust's total tertiary urology referrals). The remaining 10 per cent went to other providers. If the merged department switched all of these transfers to its own service this would provide a large proportion, 30 per cent of the department's total tertiary referrals for urological cancer

surgery, complex kidney and urethral stones, neuro-urology, reconstruction and continence, urodynamics, and robotic urology.

205. We were not able to determine how many patients transferred from North Bristol Trust to University Hospitals Bristol FT for specialist urology treatment. The urology service at University Hospitals Bristol FT provides approximately 3,000 inpatient spells each year. Approximately 20% of these are patients that are transferred into the trust. These transfers are tertiary referrals and are therefore likely to show from which hospitals the trust attracts specialist referrals. North Bristol Trust told us it sent 4 urology transfers to other providers in 2011/12. The parties were unable to identify how many of these transfers were to University Hospitals Bristol FT. If, post-merger the department switched all of its transfers to the merged service this would provide between 10% per cent of University Hospitals Bristol FT's total tertiary referrals for andrology and retroperitoneal work (depending on how many of the 4 transfers from North Bristol Trust went to University Hospitals Bristol FT).
206. It would therefore appear that the merger reduces the need for North Bristol Trust to compete for tertiary referrals, and similarly the ability of other providers to compete for these same referrals. The merger appears to remove the risk of up to 20% per cent of its tertiary referrals being switched to an alternative provider.⁹³ We recognise that at least 20% per cent of tertiary urology referrals into the merged organisation are likely to remain at risk of being switched to an alternative provider and that this will continue to provide an incentive for the merger parties to maintain and improve the quality of its tertiary urology services, following the merger. However, removing this risk for 20% per cent of referrals could weaken this incentive relative to the situation that would be likely to prevail absent the merger.

CONCLUSIONS ON COSTS

207. For the reasons outlined above, we concluded that the merger between North Bristol Trust and University Hospitals Bristol FT is likely to result in material costs to patients and taxpayers. In particular, we find that the merger is likely to remove strong competitive constraints on elective head and neck cancer, ENT, OMF, urology and symptomatic breast care services provided from the Bristol sites operated by each of the parties prior to the merger and is likely to significantly reduce patients choice of provider of these services within Bristol. We also find that the merger is likely to reduce competition for the non-elective head and neck cancer, ENT, OMF urology and symptomatic breast care services within Bristol. In the following section we consider whether there are benefits to patients and taxpayers arising from the merger, which would be likely to offset these costs.

ASSESSMENT OF MERGER BENEFITS

208. This section sets out our analysis of the potential benefits to patients and taxpayers arising from the merger. We first set out the framework that we use when assessing merger benefits

⁹³ If North Bristol Trust were to expand their capacity to provide these specialist services we might find that this created an incentive to compete for additional referrals to fill this additional capacity. However, the parties' urology reconfiguration plans do not propose to increase their capacity to provide these specialist tertiary services.

and then apply this framework to the merger between parts of University Hospitals Bristol FT and North Bristol Trust. As set out in paragraph 34, the transactions that affect head and neck cancer, ENT, OMF, urology, and symptomatic breast care services, were completed on 25 March 2013.

CCP ASSESSMENT FRAMEWORK

209. Patients may benefit from a merger through higher quality services, a greater choice of services, or greater innovation by the merged organisation in the provision of services. Taxpayers may also benefit from a merger if it leads to a lower cost (or price) for commissioners for services provided by the merged organisation.⁹⁴
210. In assessing whether a merger is likely to give rise to benefits to patients and taxpayers, we expect merger parties to identify the benefits that potentially arise from a merger and provide evidence in support of these claims. This approach reflects the position of the merging parties as the proponents of the transaction and the organisations responsible for ensuring that the intended benefits are realised. This approach is also taken by the OFT, the Competition Commission and other competition authorities.
211. In order for us to take a benefit into account in our assessment we will consider:⁹⁵
- whether the benefit attributed to the merger represents a real improvement in services to patients or value for money for taxpayers;
 - whether it is likely that the benefit will be realised in practice;
 - whether the benefit will be realised within a reasonable period following the merger; and
 - whether the benefit is dependent on the merger (i.e. whether or not it is merger specific).
212. For us to consider that a benefit attributed to a merger represents a real improvement in services to patients or value for money for taxpayers, the parties to the merger should – where relevant – be able to describe in sufficient detail the pre-existing situation which the merger will improve. For example, if it is suggested that a merger will improve staffing and provide better coverage of staff absences, then the extent to which existing services suffer from staffing problems should be set out. In the absence of this information, we will find it difficult to form a judgement as to the existence or size of the benefit in question.
213. In relation to clinical benefits arising from a merger, we will evaluate the extent to which the benefit in question results in an improvement in the health outcomes or experience of

⁹⁴ This could be a result of, for example: (i) a smaller number of referrals; (ii) reduced community health services utilisation; or (iii) lower cost of block contracts.

⁹⁵ In undertaking its analysis, Monitor will call on the expert opinion and the advice of its Clinical Reference Group as well as any other third party assistance that may be necessary.

patients. For example, if it is suggested that a merger will allow a particular type of care or treatment to be carried out at home rather than in hospital, then evidence from the parties would need to explain:

- why this is clinically better for patients;
- which outcomes this will positively affect;
- the number of patients this will affect (and which patient groups this improvement might not apply to); and
- the rationale for why this service improvement is not being delivered currently, but will be delivered as a result of the merger.

214. We will have greater confidence that a particular merger benefit is likely to be realised where the parties to a merger have a clear and detailed post-merger integration plan that sets out how the merging organisations' existing structures, processes and practices will be modified to realise the benefits in question. We are likely to place greater weight on the credibility of post-merger integration plans where these have been scrutinised by independent third party experts, and where these plans have not been developed specifically for the purpose of obtaining approval for the merger.
215. In assessing the credibility of any plans to realise merger benefits we will also look to the experience of the merging parties in previous transactions and their success in realising benefits from those mergers. We may also look at other similar transactions and consider whether the parties to those transactions have been successful in realising similar benefits. We will also consider the incentives that the merged organisation has to carry out the implementation plans that are presented to it.
216. In terms of timing, we will generally place greater weight on benefits that will be realised in the short rather than medium or long-term, particularly where a merger is expected to give rise to costs to patients and taxpayers in the short-term as a result of a diminution in patient choice and competition.
217. Finally, we will consider whether any particular benefit is more likely to be realised through the merger (i.e., is specific to this merger and will not be realised through any other merger) than would otherwise be the case. To some extent this requires us to consider the actions that might potentially have been taken in the absence of the merger.
218. Having assessed the benefits to patients and taxpayers that the parties ascribe to a merger, we will then reach a view on the scale of these benefits (and, ultimately, their size relative to the costs associated with the merger). While it may be possible to measure some benefits in terms of monetary values or, for example, improvements in quality adjusted life years for patients, it is unlikely that we will be in a position to place a specific overall value on benefits in either monetary or other terms. Rather, we will in most cases exercise our judgement in reaching a view as to the scale of benefits in either absolute terms or relative to the costs of the merger.

219. In some cases, it is possible that the costs and benefits of a merger may fall on different groups. For example, it may be that one group of patients is expected to benefit from a merger, while another group has been identified as likely to bear the expected costs. In these circumstances, we can recommend that conditions be placed on a merger, even where the overall benefits outweigh the costs, so as to ensure that the adverse consequences of a merger for any particular group of patients or taxpayers are minimised or that particular benefits are realised.

ANALYSIS OF BENEFITS

220. This section sets out our assessment of the benefits put forward by the merger parties in support of the transfer of head and neck cancer, ENT, OMF, urology and symptomatic breast care services.

Clinical benefits

221. For the purposes of our assessment of clinical benefits we have considered each of the services separately and assessed potential benefits from the information submitted by the merger parties. We have also considered the efficiencies and cost savings attributed to the merger as submitted by the merger parties in paragraphs 309- 325.

222. It should be noted that in assessing the clinical benefits we are not assessing the quality of the services provided by the organisations. The rationale for the merger is set out in paragraphs 36 – 41 and further explained below for each service. In particular we are assessing whether the merger has created an opportunity to secure benefits to patients that otherwise could not have been achieved.

Head and neck, ENT and OMF services

223. The merger parties submitted information relating to head and neck, ENT and OMF services and from this information we have identified a number of potential benefits for assessment as follows:

- Benefit to all head and neck cancer patients from treatment being provided using a model of care that includes: a head and neck, ENT and OMF ward; an increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres.
- Benefit to former North Bristol Trust head and neck cancer patients from improved experience due to the availability of supporting services (specifically, radiotherapy and specialist dentistry) at an adjacent location.
- Benefit to non-cancer ENT and OMF patients from treatment being provided using a model of care that includes a head and neck, ENT and OMF ward; an increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres.

224. Information submitted by the merger parties also suggested other potential benefits. We deal with these briefly at paragraph 326-328 below.

Background

225. Our understanding is that the majority of head and neck cancer services for the population of Bristol, North Somerset, South Gloucestershire and Bath and North East Somerset are provided in Bristol by University Hospitals Bristol FT and North Bristol Trust, with a smaller number of patients being treated at the Royal United Hospital Bath NHS Trust.⁹⁶

226. In 2009 a review of head and neck cancer services in the Bristol area was initiated as part of the Healthy Futures Programme by commissioners, providers and local authorities. In 2010 the review was expanded to include both cancer and non-cancer ENT and OMF services. This was because the clinicians leading the review considered that the staff, skills and equipment required to treat benign conditions are the same, in many cases, as those required to treat malignant conditions. On this basis it was decided that the clinical service model developed as part of the review process should be for all head and neck cancer, benign and malignant ENT, and benign and malignant OMF inpatient services. The review recommended bringing together specialists working in head and neck cancer, ENT and OMF services in one treatment centre from which all inpatient head and neck cancer, ENT and OMF services would be provided, with other hospital based and community-based sites used for the provision of diagnostic procedures, follow-up appointments and simple procedures.

227. As part of the review process an assessment of location options to deliver the preferred clinical service model was undertaken. An independently chaired advisory panel recommended that the Bristol Royal Infirmary site should provide head and neck cancer, ENT and OMF services for Bristol. The review document states their decision was based on several reasons including their consideration that it was the best location for providing a co-ordinated service with other specialist services that provide important inputs into the treatment of head and neck cancer patients, such as radiotherapy and specialist dentistry.⁹⁷

Benefit 1: Benefit to all head and neck cancer patients from treatment being provided using a model of care that includes: a head and neck, ENT and OMF ward; an increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres.

Description of benefit

228. The submissions from the merger parties setting out the benefits for head and neck cancer services are based on the potential benefits arising from head and neck cancer care being provided using a model of care that includes a head and neck, ENT and OMF ward; an increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres. The merger parties told us

⁹⁶ Final Recommendations of the ENT, OMF and Head and Neck Cancer Services Review, 19 November 2010, p3.

⁹⁷ Final Recommendations of the ENT, OMF and H&N Cancer Services Review, 19 November 2010, p1

that they wanted head and neck cancer services to be compliant with 'Guidance For Cancer Services: Improving Outcomes in Head and Neck Cancers' (IOG for head and neck) issued by the National Institute for Clinical Excellence (NICE) in 2004. The merger parties said that prior to the merger they each did not treat enough patients, or cover a large enough population size, to meet the recommendations in the IOG for head and neck.

229. Until April 2013 University Hospitals Bristol FT and North Bristol Trust were part of the Avon, Somerset and Wiltshire cancer network, along with Royal United Hospital Bath NHS Trust, Weston Area Health NHS Trust, and Yeovil District Hospital NHS Foundation Trust.⁹⁸ The network specialist multidisciplinary team for head and neck cancer was hosted by University Hospital Bristol FT with representation from all the above providers. The merger parties told us that the model of care for head and neck cancer patients established following the merger would include:

- *Creation of a head and neck cancer, ENT and OMF ward:* prior to the merger only North Bristol NHS Trust had all of the inpatient or hospital facilities that are desirable in supporting head and neck cancer treatment and care (those being an intensive treatment unit, high dependency unit, and a specialist treatment room), although we note these facilities and/or patients were located across both its hospital sites. We also note the St Michael's site operated by University Hospitals Bristol FT did not have an intensive treatment or high dependency unit, but it did have a treatment room. None of the sites operated a ward only for head and neck cancer, ENT and OMF patients. Following the merger, the clinical model at Bristol Royal Infirmary will provide all these facilities on a single site.
- *An increased number of clinical nurse specialists:* prior to the merger, each trust had retained a single head and neck cancer clinical nurse specialist. A peer review of University Hospitals Bristol FT's head and neck cancer service identified a single clinical nurse as insufficient.⁹⁹ Following the merger, both existing clinical nurse specialists will be on the same site and University Hospitals Bristol FT will recruit a third clinical nurse specialist. University Hospitals Bristol FT told us it will then meet the recommendations in the peer review.
- *Access to a treatment room available 24 hours a day, seven days a week:* prior to the merger there was no specialist treatment room for head and neck cancer, ENT and OMF patients at the Bristol Royal Infirmary. A treatment room will be made available and staffed appropriately by specialist medical and specialist nursing staff 24/7 at Bristol Royal Infirmary. We note there were specialist treatment rooms at both St Michael's and Southmead prior to the merger, but it is not clear whether they were able to be operated on a 24/7 basis.

⁹⁸ Following changes under the Health and Social Care Act 2012 the Avon, Somerset and Wiltshire cancer network (and other specialist networks) will be replaced by a Strategic Clinical Network for the South West

⁹⁹ Cancer Peer review Report 2011-2012, Avon, Somerset & Wiltshire Cancer Network, South Zone Peer Review Team, June 2012.

- *Consultants with different expertise operating in adjacent theatres:* The merger will also enable co-ordination of theatre lists and patients with complex needs being treated simultaneously by consultants with different specialist expertise in adjacent theatres, as the consultants will be on the same site and therefore better able to call upon each other's expert advice and help.
230. The IOG for head and neck refers to a study which describes improved outcomes in terms of less recurrent disease and longer survival rates for patients with oral cancer (a specialist subset of head and neck cancer) treated by a specialist team in comparison to patients managed in less specialised units. The IOG for head and neck identified a study which links patient outcomes with throughput and specialisation in head and neck cancer. The IOG for head and neck also states there is consistent evidence of volume-quality relationships in cancer treatment generally.
231. The IOG head and neck recommends that services for patients with head and neck cancers should be commissioned across a cancer network and further recommends that assessment and treatment services should become increasingly concentrated in cancer centres serving populations of over a million people. The guidance also recommends all patients with head and neck cancers should be managed by appropriate head and neck cancer multidisciplinary teams.¹⁰⁰ The IOG for head and neck recommends that a single head and neck cancer multidisciplinary team within each cancer network should see a minimum of 100 new cases¹⁰¹ of upper aerodigestive tract cancer¹⁰² per annum.¹⁰³ The IOG for head and neck recommends that where there is more than one provider in a network, for example in close geographical proximity, the providers should share a single multidisciplinary team.
232. The IOG for head and neck cancer also recommends all patients requiring radical surgery should be cared for in a specialist head and neck cancer ward, with ward staff who have had specific training in looking after patients who have undergone tracheostomy.¹⁰⁴
233. The IOG for head and neck states that clinical nurse specialists have a central role in providing and co-ordinating the care for individual patients, and that every patient should be offered the opportunity to be seen by the head and neck cancer clinical nurse specialist before a treatment decision is made. The IOG also noted that few trusts had adequate numbers of head and neck cancer clinical nurse specialists to fulfil the role as described in their guidance.

¹⁰⁰ A multidisciplinary team (MDT) is a group of doctors and other health professionals with expertise in a specific cancer, who together discuss and manage an individual patient's care.

¹⁰¹ The IOG for head and neck provides that 'MDTs should deal with [a] minimum of 100 new cases ... per annum ... which implies a population base of over a million'. This suggests the population base recommendation is a mechanism for ensuring MDTs receive sufficient throughput to maintain their specialist skills.

¹⁰² Upper aerodigestive tract cancers are cancers of the lip, tongue, major salivary glands, gums and adjacent oral cavity tissues, floor of the mouth, tonsils, oropharynx, nasopharynx, hypopharynx and other oral regions, nasal cavity, accessory sinuses, middle ear and larynx.

¹⁰³ We note also the Head and Neck Cancer Multidisciplinary Management Guidelines (produced in September 2011 by the British Association of Head and Neck Oncologists, the British Association of Oral & Maxillofacial Surgeons, ENTUK, the British Association of Endocrine & Thyroid Surgery & the British Association of Plastic, Reconstructive, and Aesthetic Surgeons). This guidance says that a figure of 250 new cases per MDT may be more appropriate as there is a belief that head and neck surgeons should be performing 30–40 cases per annum. The guidelines state this would provide the high volume and case mix experience to maintain quality and provide adequate training.

¹⁰⁴ A tracheostomy is a surgical procedure to create an opening in the neck at the front of the windpipe (trachea).

Analysis

234. Between November 2010 and October 2011 the merger parties saw 148 new cases of head and neck cancer: 96 patients at University Hospitals Bristol FT and 52 patients at North Bristol Trust¹⁰⁵, which when taken together meets the IOG recommendation that a single head and neck cancer multidisciplinary team within each cancer network should see a minimum of 100 new cases per annum. In addition to new cases, Dr Foster data indicates that there are 620 head and neck cancer inpatient cases per year across both services.
235. We have carefully considered the clinical merits of providing head and neck cancer treatment using the clinical service model developed by the parties, which we note is a highly regarded clinical model for head and neck cancer services. We also note that in comparison to other services, the number of patients requiring head and neck cancer treatment is small and that these patients have complex needs which require highly specialist and intensive care, and often require a range of expert inputs. We recognise that head and neck cancer patients may require care from consultants who specialise in ENT surgery and consultants who specialise in OMF surgery. We therefore considered whether this particular group of patients would benefit from being cared for using the model of care developed by the parties and by staff who are experienced and trained in caring for patients with complex needs, following surgery including airway management, communication, and eating and drinking difficulties.
236. We also considered whether an increased number of clinical nurse specialists would lead to a benefit to head and neck cancer patients. We think it would be reasonable to expect University Hospitals Bristol FT to remedy any deficiencies in its staffing as identified in the cancer network peer review, irrespective of a merger. However, our understanding is that as a result of this merger both the specialist consultant staff and clinical nurse specialist from North Bristol NHS Trust have been transferred to University Hospitals Bristol FT and an additional clinical nurse specialist has been funded and recruited for the combined service.
237. We have considered whether or not the model of care developed for head and neck cancer patients could have realistically been achieved without a merger, and specifically whether either merger party could have created this service model without the merger. It is possible that the model of care implemented through this merger could have been established at either service, or for the commissioners to have chosen to commission services from a single provider. However, it seems to us that if the implementation of this model had led to one of the existing services being closed, there is a risk that this could have resulted in a loss of specialist consultants and trained staff in the interim period between one service closing and one service expanding capacity and that there could have been a delay in establishing a specialist team if a recruitment process had been required to expand capacity.
238. We can therefore see advantages of establishing this model of care through a merger. There is an experienced specialist team of consultants and other clinical staff in place as a result of the merger, whereas there would have been a delay in establishing a specialist team if the organisation providing the service had been required to run a recruitment process. In

¹⁰⁵ National Head and Neck Cancer Audit, 2011, para 4.4.2 linked document.

addition, the merger parties told us that as part of the Healthy Futures Programme of head and neck cancer, ENT and OMF services, the costs of one service being closed were considered as an alternative to a merger, but this option was considered more costly because of redundancy and recruitment costs.

Conclusion

239. In this particular case, our view is that there are advantages in providing these highly specialist services to head and neck cancer patients using a model of care that includes: a head and neck cancer, ENT and OMF ward; increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres. While in our view it is likely that this model of care (and consequent improvements to patients) could have been achieved in the absence of the merger, we consider that given the particular nature of this highly complex and specialist service, the merger has enabled the model of care to be established more quickly than would otherwise be the case. In particular the merger enabled the timely and effective transfer of specialist consultants and removed the need for one or other provider to build up expertise independently and/or increase capacity through a recruitment process. The merger therefore reduces the time taken to deliver this model of care, and gives rise to a time limited benefit. Therefore, we took this benefit into consideration in our assessment.

Benefit 2: Benefit to former North Bristol NHS Trust head and neck cancer patients from improved experience due to the nearby availability of supporting services in relation to radiotherapy and specialist dentistry.

Description of benefit

240. The merger parties told us the provision of treatment using the model of care implemented at the Bristol Royal Infirmary following the merger means that all head and neck cancer patients will now have access to specialist dentistry and radiotherapy services on the same site. The merger parties told us that prior to the merger only those patients treated by University Hospitals Bristol FT would have access to specialist dentistry and radiotherapy treatment on the same site. These services are provided from the Bristol School of Dentistry and the University Hospitals Bristol FT oncology centre which are located on the University Hospitals Bristol FT's central Bristol campus, next to the Bristol Royal Infirmary. Head and neck cancer inpatients treated at North Bristol NHS Trust who needed radiotherapy treatment at the University Hospitals Bristol FT oncology centre would be transported for each treatment.

241. The IOG for head and neck highlights the importance for head and neck cancer patients of access to supporting clinical services, such as restorative dentistry and radiotherapy. It recommends that these should be co-ordinated with head and neck cancer care. The IOG for head and neck recommends that head and neck cancer network multidisciplinary teams should be responsible for ensuring specialist dentistry is available for all patients who require it. The complex needs of head and neck cancer patients are not generally met by primary care dentistry services, as a consultant experienced in certain highly specialised procedures is required to manage patients who need oral rehabilitation. In addition, a report highlighted in

the IOG for head and neck showed that a maxillofacial prosthodontist can alert the head and neck cancer network multidisciplinary team to the development of secondary malignancies. The IOG for head and neck also recommends that patients requiring surgery to their jaw or mouth should be examined by a specialist dentist before their cancer treatment begins.

Analysis

242. Dr Foster data shows that there were 187 head and neck cancer inpatient cases in 2012 at North Bristol Trust, and it seems likely that if these patients were being treated at either Frenchay or Southmead hospitals as an inpatient, a small number of these would have required radiotherapy treatment at University Hospitals Bristol FT. As noted previously, head and neck cancer patients have complex needs which require highly specialist and intensive care, including airways management. If some head and neck cancer inpatients being treated at North Bristol Trust required transfer to University Hospitals Bristol FT for radiotherapy treatment this could have a detrimental effect on a patients' experience of their treatment.
243. We recognise the importance of effectively coordinating head and neck cancer care with specialist dentistry and radiotherapy services for those patients who need those services. Successful co-ordination of care within or between different providers in order to deliver effective integrated care is important for all patients requiring more than one kind of health or health-related service or treatment. We note that the same requirement to transfer inpatients between different hospital sites was not present for patients requiring specialist dentistry treatment while an inpatient at North Bristol Trust as specialist dentistry services were available at the trust's service.

Conclusion

244. In our view the availability of radiotherapy services on an adjacent site in this particular case would be likely to give rise to a benefit by avoiding transfers of some head and neck cancer inpatients. This is likely to benefit a small number of head and neck cancer patients who were previously treated at North Bristol Trust and who may have required radiotherapy treatments while an inpatient by improving their experience. Therefore we took this benefit into consideration in our assessment.
245. We conclude that for North Bristol Trust inpatients who required specialist dentistry treatment there is no additional benefit of improved experience as a result of the merger because specialist dentistry treatment was available at North Bristol Trust prior to the merger.

Benefit 3: Benefit to non-cancer ENT and OMF patients from treatment using a model of care that includes a head and neck, ENT and OMF ward; an increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres.

Description of benefit

246. Following the merger, non-cancer ENT and OMF patients will be treated on the same ward together with head and neck cancer patients. The merger parties told us this means non-

cancer adult ENT and OMF inpatients requiring specialist expertise will be able to access this in a more timely way. The merger parties told us prior to the merger neither of the services operated a ward only for head and neck cancer, ENT and OMF patients.

247. The elements of the clinical model implemented for head and neck cancer, ENT and OMF patients are set out above at paragraph 229. The parties told us that treatment in this way would deliver certain benefits for all ENT and OMF patients resulting from being cared for by expertly trained ward nursing staff with the relevant skills and competence, for example the ability to care for airway complications, should these develop. Without specially trained nursing staff, a more generally trained nurse may not have the skills and experience required to deal with complications, should they arise.
248. The Royal College of Surgeons of England (RCS) guidance for emergency surgery¹⁰⁶ recommends that patients requiring emergency admission for ENT and OMF be treated on a specialist head and neck ward. The RCS guidance states that care of inpatient and post operative patients is best managed by senior qualified doctors and consultants on specific head and neck wards; and, that there are daily morning and evening ward rounds (one of which should be consultant led), including weekends. The guidance states this best practice is expected to minimise delays in relation to inpatient care, shorten inpatient length of stay, reduce 28-day unplanned re-admission rates and improve outcomes for patients.

Analysis

249. We understand from Dr Foster data that 1512 complex and major ENT and OMF procedures and treatments were carried out across University Hospitals Bristol FT and North Bristol Trust in 2012. Dr Foster data also shows there were a total of 2549 intermediate and minor inpatients ENT and OMF cases across both services in 2012. We identified three cohorts of patients who potentially stand to benefit from treatment at a specialist treatment centre: (1) patients undergoing complex and major (non-cancer) ENT and OMF procedures; (2) standard elective patients who develop complications; and, (3) emergency ENT and OMF patients requiring admission. We recognise that the ENT and OMF consultants that provide specialist care to head and neck cancer patients are likely to be the same consultants that treat patients requiring complex and major ENT and OMF procedures. The benefit for head and neck cancer patients of being treated using the clinical model implemented following the merger also apply to non-cancer ENT and OMF patients undergoing complex and major procedures as these patients require the same degree of specialist, complex and intensive care as head and neck cancer patients.
250. We note that the benefit for intermediate and minor inpatient cases is likely to be limited, as this group of patients would be unlikely to require the same level of specialist care unless they were to develop complications following routine procedures. We recognise that if some standard elective patients developed complications they would be likely to benefit from treatment at a specialist treatment centre with care from staff experienced in looking after

¹⁰⁶ Reference TBC

patients with complex needs. We also recognise that there is likely to be a benefit to non-elective ENT and OMF inpatients where these patients require complex or major procedures.

251. We have considered whether or not the clinical service model developed could have realistically been achieved without a merger, and specifically whether either provider could have created this model of care without the merger. It is possible that this model of care could have been established at either organisation prior to the merger, or for the commissioners to have chosen to commission services from a single provider. However, as set out in paragraph 237, it seems to us that if the implementation of the clinical service model had led to one of the services being closed, this could have resulted in a loss of specialist consultants and trained staff in the interim period between one service closing and one service expanding capacity and it is likely there would have been a delay in establishing a specialist team if a recruitment process had been required to expand capacity.

Conclusion

252. Our view is in this particular case there are advantages to providing these highly specialist services to ENT and OMF patients requiring complex and major procedures using a model of care that includes a head and neck, ENT and OMF ward, an increased number of clinical nurse specialists, a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres. While in our view it is likely that this model of care (and consequent improvements to patients) could have been achieved in the absence of the merger, we consider that given the particular nature of this highly complex and specialist service, the merger has enabled the model of care to be established more quickly than would otherwise be the case. In particular, the merger enabled the timely and effective transfer of specialist consultants and removed the need for one or other provider to build up expertise independently and/or increase capacity through a recruitment process. The merger therefore reduces the time taken to deliver this model of care, and gives rise to a time limited benefit. Therefore, we took this benefit into consideration in our assessment.
253. We conclude that there is no additional benefit as a result of the merger for elective non-cancer ENT and OMF patients who do not develop complications or require complex care, and for non-elective patients who do not undergo complex and major procedures.

Urology services

254. The merger parties submitted information relating to urology services and from this information we have identified a number of potential benefits for assessment as follows:
- Benefits to former University Hospitals Bristol FT urology inpatients by increased contact with expert and skilled urology care.
 - Benefits to former University Hospitals Bristol FT urology inpatients by increased contact with specialist urology consultants.
 - Benefit to all urology inpatients by improved specialist urology consultant-led ward rounds.

255. Information submitted by the merger parties also suggested other potential benefits. We deal with these briefly at paragraph 326-328 below.

Background

256. From 2006 onwards all major pelvic oncology (including kidney, prostate and bladder cancer), complex urodynamics and the treatment of kidney stones, were consolidated at North Bristol Trust's Southmead Hospital. The rationale for the consolidation of the cancer urology services was for local health care services to achieve compliance with the 2002 NICE guidance 'Improving Outcomes for Urological Cancers' (IOG for urological cancer). Thereafter, inpatient surgical elements of cancer and complex urology care were carried out at Southmead. Urology non-cancer services remained at both trusts, and an SLA¹⁰⁷ was agreed between the two providers to enable University Hospitals Bristol FT specialist urology consultants to operate on their urology cancer and complex patients using North Bristol Trust's equipment and facilities at Southmead. Less complex and emergency urology inpatient and day case services have continued to be provided by both University Hospitals Bristol FT and North Bristol Trust at the Bristol Royal Infirmary and Southmead Hospital.

257. As part of the Health Futures Programme (as previously described in paragraphs 36 to 41) a 'Urology Reconfiguration Project' was initiated to consider the possible consolidation and centralisation of all urology inpatient services that were being delivered by University Hospitals Bristol FT and North Bristol Trust. The project documents set out the rationale for configuring services as better outcomes for patients and improved patient experience, standardisation of methods and sharing of best practice, delivery of more productive and efficient services, and encouraging research and innovation. The intention was to create a single centre of excellence for urology services which the parties told us would unify clinical teams across Bristol.

Benefit 1: Benefits to former University Hospitals Bristol FT urology inpatients by increased contact with expert and skilled urology care.

Description of benefit

258. The merger parties told us that all former inpatients previously treated at the Bristol Royal Infirmary by University Hospitals Bristol FT will benefit from being on a urology ward at Southmead by North Bristol Trust. A urology ward will provide patients with access to specially trained nurses (having training such as specialist urology nursing courses, the enhanced recovery programme course, Transurethral Resection of the Prostate (TURP)¹⁰⁸ post-operative course and urodynamics course).

¹⁰⁷ A SLA is a document that sets out an agreement between two or more parties, describing the expectations and requirements of each party, in this case, regarding the care of University Hospitals Bristol FT patients being treated at North Bristol Trust by University Hospitals Bristol FT's urology consultants.

¹⁰⁸ Transurethral resection of the prostate (TURP) is surgical procedure that involves cutting away a section of the prostate gland.

259. The merger parties told us that prior to the merger University Hospitals Bristol FT urology inpatients were cared for on a ward that was shared with non-urology patients and staffed by general ward nurses who were not specially trained in urology care. The merger parties told us those patients who developed complications requiring specialist urology care did not get immediately seen by a specialist nurse experienced in caring for complex urology patients, and would be required to wait for treatment by specialist clinical staff. The parties told us that patients who suffer complications following non-complex elective or non-elective urology care will now have increased contact with specialist care more quickly in a urology ward staffed with clinical nurse specialists and ward nurses experienced in complex as well as standard urology care.

Analysis

260. From Doctor Foster data we understand that University Hospitals Bristol FT treated 612 and 631 urology inpatients in 2011 and 2012, respectively. In our view, the benefit of former University Hospital Bristol FT patients being treated on a urology ward is likely to be limited to those patients that would have developed complications and required specialist urology care above the level of care they could have expected to receive from staff on a general ward. The information provided by the merger parties did not quantify the number of patients who are likely to develop complications such that specialist care is required whilst in a non-specialist ward. Therefore, we do not have an understanding of how many of those patients may have required specialist urology care, or how many patients might have developed complications requiring the skills and expertise of staff specifically trained in specialist or complex urology care.

261. Also, the information provided by the merger parties did not suggest that a lack of specialist urology nurses at University Hospitals Bristol FT prior to the merger had resulted in any adverse effect on the care received by urology inpatients at the Bristol Royal Infirmary. If a lack of specialist nursing care was affecting the quality of care received by urology inpatients treated at University Hospitals Bristol FT, we think it would be reasonable to expect this to be addressed without a merger.

Conclusion

262. Improved access to specially trained urology nurses and urology clinicians could improve the quality of the urology services provided. In this case it seems to us that for routine elective urology patients previously treated at University Hospital Bristol FT the benefit of being treated in a specialist urology treatment centre at North Bristol Trust is likely to be limited to those patients that develop complications and require specialist urology care. However, the information provided by the parties did not suggest a lack of access to specialist nursing care was adversely affecting the quality of care provided to urology inpatients prior to the merger. If timely access to specialist nursing care was affecting the quality of care provided to University Hospitals Bristol FT inpatients, we think it would be reasonable to expect this to be addressed in the absence of the merger. Therefore, in our view, the merger is not likely to give rise to a benefit to all former University Hospitals FT patients that could not have been achieved in absence of the merger.

Benefit 2: Benefit to former University Hospital Bristol FT urology inpatients by increased contact with specialist urology consultants.

263. The merger parties told us that, by having all their inpatient urology patients based on the Southmead site, there would be a reduction in the time specialist urology consultants are required to spend travelling between Bristol Royal Infirmary and Southmead. This will release the specialist urology consultants' capacity, therefore increasing their availability to see their ward-based patients. Prior to the transaction, University Hospitals Bristol FT urology consultants treated cancer and complex urology patients at Southmead (under the SLA) and non-complex and emergency urology patients at the Bristol Royal Infirmary. The merger parties told us that the need for the University Hospitals Bristol FT urology consultants to travel between sites meant that patients at Bristol Royal Infirmary may have to wait until late in the day for their urology consultant to review their care or treatment.
264. Therefore, the parties submit that following the merger, former University Hospitals Bristol FT inpatients, and any cancer or complex inpatients being treated by University Hospitals Bristol FT consultants at Southmead will benefit from having increased contact with their specialist urology consultant.

Analysis

265. We understand that the urology consultants employed by University Hospitals Bristol FT were providing a service to patients across both the University Hospitals Bristol FT service and the North Bristol Trust service. However, the information provided by the merger parties did not set out how many patients would have been affected by this arrangement. A proportion of urology inpatients treated at University Hospital Bristol FT will have been cared for by one of the specialist urology consultants working across both services, but we do not know how many of these patients, if any, were adversely affected by this arrangement. In addition, we do not know whether or how many of the cancer and complex inpatients being treated at Southmead were adversely affected by any limited availability of consultants as a result of them also working at University Hospitals Bristol FT.
266. Based on the information provided by the merger parties it is not clear whether and how many University Hospitals Bristol FT patients suffered a delay in contact with their specialist urology consultant at the Bristol Royal Infirmary, or whether or not some complex and cancer patients at North Bristol Trust had access to an alternative specialist urology consultant if their University Hospitals Bristol FT specialist urology consultant was unavailable.
267. We note that different models of service delivery and care in the NHS can deliver high-quality care and which require clinicians to work across multiple different health care settings and providers, with specialists sometimes required to travel significant distances. We accept it is for local commissioners and providers to consider which models are best placed to deliver high-quality care to their local population. We note that following the merger some urology consultants will continue to work across two or more sites and providers, for example providing day case care at South Bristol Community Hospital and covering emergency urology care at the Bristol Royal Infirmary.

268. In our view, if delayed contact with specialist urology consultants was affecting the quality of care received by urology inpatients treated at University Hospitals Bristol FT, we think it would be reasonable to expect this to be addressed without a merger. For example, University Hospitals Bristol FT could have modified the SLA with North Bristol Trust to ensure that its specialist urology consultants were available to treat University Hospitals Bristol FT inpatients at Bristol Royal Infirmary.
269. Alternatively, it seems to us that the SLA between University Hospitals Bristol FT and North Bristol Trust and consultant work plans could have been rearranged if the parties and clinicians involved considered the arrangements were not working well enough for them to meet the needs of their patients.

Conclusion

270. In our view, providers should ensure that patients have timely access to an appropriate specialist consultant when needed. Increased contact for patients with their specialist consultant could improve the quality of services delivered. If issues with timely access to a specialist urology consultant were adversely affecting the quality of care provided to University Hospitals Bristol FT inpatients having standard urology treatment, we think it would be reasonable to expect University Hospitals Bristol FT to address this in the absence of the merger. This could have been achieved, for example, through its arrangements with consultants, the terms of its SLA with North Bristol Trust or other arrangements. Therefore, in our view, the merger is not likely to give rise to a benefit to all former University Hospitals FT patients that could not have been achieved in absence of the merger.

Benefit 3: Benefit to all urology inpatients by improved specialist urology consultant-led ward rounds.

271. The merger parties told us that the merger will lead to urology patients within particular treatment groups (oncology, stones, functional, and emergency patients) now being seen simultaneously, by specialist clinical teams led by an appropriate sub-speciality urology consultant every day. The parties submit that, since the merger, all urology inpatients are seen at an earlier point in their stay, more frequently, and by the specialist urology team appropriate for their condition.
272. The merger parties told us improved ward rounds as described above was not possible to achieve for either service prior to the merger due to the medical workforce available.¹⁰⁹ The merger parties described the timing of urology ward rounds at both services prior to the merger as ad hoc. The merger parties told us the frequency of ward rounds was dictated by the clinical priorities of the specialist urology consultants and their junior staff, for example University Hospitals Bristol FT specialist urology consultants could not always provide a urology ward round at the Bristol Royal Infirmary because they were operating on patients at Southmead. The merger parties also told us North Bristol Trust's specialist urology consultants

¹⁰⁹ North Bristol Trust Response June 2013.

could not consistently provide a daily urology ward round at Southmead, due to the size of the consultant team.¹¹⁰

273. In addition, the merger parties also told us the release of specialist urology consultant capacity as a result of an increase in urology consultant numbers working on the Southmead site has enabled a specialist urology consultant-led ward round to be implemented every Saturday and Sunday. The merger parties told us that prior to the merger neither organisation had enough consultant capacity to provide specialist urology consultant-led ward rounds at the weekend.

Analysis

274. We note evidence that suggests there are better outcomes for patients where consultant-led ward rounds and consultant-led care at weekends is provided. A report published by the Academy of Medical Royal Colleges in January 2012¹¹¹ describes a review of the evidence on consultant-led care, which demonstrated that increased consultant cover improved care for patients by enabling rapid and appropriate decision making.¹¹²
275. In addition, guidance from the RCS relating to emergency surgery provides that best practice in the care of urology patients includes a ward round performed each day by a senior doctor and/or a consultant.¹¹³
276. We therefore consider that the introduction of a daily urology ward round is likely to improve the care received by both former University Hospitals Bristol FT and North Bristol Trust urology patients, particularly if they were recovering from cancer or other complex surgery. We next considered whether this improvement for patients resulting from changes to consultant led urology ward rounds could have been achieved in the absence of the merger.
277. We note that there were three urology consultants at University Hospitals Bristol FT, including two who worked at North Bristol Trust, and a further seven urology consultants based at North Bristol Trust.¹¹⁴ In our view it is possible that the specialist urology consultants and their teams could have jointly organised their time and rotas differently to provide daily ward rounds by urology speciality and to provide specialist urology consultant-led ward round at weekends. We note that it is unclear whether urology consultant cover was adequately funded at either service prior to the merger.
278. The merger parties told us combined urology consultant levels following the merger will increase specialist urology consultant capacity, for example the merger parties told us that multidisciplinary team arrangements have changed thereby releasing specialist urology consultant time. However, the information provided by the merger parties did not show how rotas and work plans were organised at both services prior to the merger and did not

¹¹⁰ North Bristol Trust response dated 15 May 2013, p5.

¹¹¹ *The Benefits of Consultant Delivered Care*, Academy of Medical Royal Colleges, 2012.

¹¹² Aylin P, Yunas A, Bottle et al, Weekend mortality for emergency admissions: A large multicentre study (2010); NHS London, Adult emergency services: acute medicine and emergency general surgery, case for change summary.

¹¹³ <http://www.rcseng.ac.uk/publications/docs/emergency-surgery-standards-for-unscheduled-care>

¹¹⁴ Ref source: <http://www.drfoosterhealth.co.uk/>

demonstrate that the only way of achieving daily and weekend consultant-led ward rounds was to merge parts of their organisations.

Conclusion

279. In our view, the introduction of a daily urology ward round is likely to improve the quality of services delivered to urology inpatients at North Bristol Trust following the merger. However, we think it would be reasonable to expect University Hospitals Bristol FT and North Bristol Trust to have implemented daily and weekend specialist urology consultant-led ward rounds in the absence of the merger. Therefore, in our view, the merger is not likely to give rise to a benefit that could not have been achieved in absence of the merger.

Symptomatic breast care services

Clinical benefits

280. The merger parties submitted information relating to symptomatic breast care and from this information we have identified a number of potential benefits for assessment as follows:

- Benefit to former University Hospitals Bristol FT patients from all symptomatic breast care diagnostic outpatient services being provided in one department (one-stop model of care).¹¹⁵
- Benefit to all symptomatic breast care patients by increased availability of clinical nurse specialist staff.
- Benefit to all symptomatic breast care patients from increased availability of mammography equipment.
- Benefit to all symptomatic breast care patients from adoption of best practice techniques.

Background

281. As part of the Healthy Futures Programme, which is described in paragraphs 36-41 the Breast Care Services Review considered both symptomatic breast care and breast screening services across Bristol, North Somerset and South Gloucestershire.

282. The review recommended that symptomatic breast care services should be provided in a single place and that these should be provided by North Bristol Trust at its Southmead site. The review also recommended that some symptomatic breast care services should be provided by Weston General Hospital in Weston-Super-Mare. The review stated that patients referred to North Bristol Trust's Southmead site for symptomatic breast care would be able to use a number of related services from that site for their convenience. Those services include

¹¹⁵ A one-stop model of care provides outpatient services in one department to enable continuity of care and improved patient experience.

diagnostic tests, pathology, oncology, surgery and psychological support services from a breast care nurse.

283. Prior to the merger, symptomatic breast care services were provided by both North Bristol Trust and University Hospitals Bristol FT. A breast screening service is currently managed by University Hospitals Bristol FT and is due to be transferred to North Bristol Trust under phase two of the merger. This aspect is not being considered as part of this assessment due to the later timing of the phase two plans and because detail around implementation and delivery plans have not been finalised.

Benefit 1: Benefits to former University Hospitals Bristol FT symptomatic breast care patients from breast care diagnostic outpatient services being provided in one department (one-stop model).

284. The merger parties told us that all former University Hospital Bristol FT symptomatic breast care patients will benefit from diagnostic breast care services being provided using a model of care that delivers all the elements of diagnostic breast care services in one department at the breast care centre operated by North Bristol Trust. Under this model of care all relevant clinicians, outpatient rooms, specialist nurses and medical secretaries are located together, alongside support services such as counselling. The breast care centre at North Bristol Trust enables diagnostic breast cancer services to be carried out in one place, ideally on the same day, with staff specially trained in supporting women throughout diagnosis and treatment. The aim of this model of care is to offer consistency of care and minimise any delays during the different steps leading to diagnosis.
285. The merger parties told us that prior to the merger University Hospitals Bristol FT's symptomatic breast care outpatients were required to access services in different departments across the Bristol Royal Infirmary site. For example, this meant that patients were required to move between floors for biopsy, ultrasound and mammogram before returning to a consultant for diagnosis. The merger parties told us this could result in delays through using shared services such as ultrasound, and patients getting lost whilst moving between different departments. The merger parties told us that patients therefore experienced fragmented care at University Hospitals Bristol FT.
286. The merger parties told us there will be an improvement in the experience of all University Hospitals Bristol FT patients who would have accessed their symptomatic breast care services at Bristol Royal Infirmary or St Michael's Hospital, and who will now be treated at the North Bristol Trust breast care centre at Southmead.

Analysis

287. We have not assessed whether one symptomatic breast care service was of a higher quality than the other prior to the merger. We understand that patient outcomes at both organisations were comparable prior to the merger and we note that it did not appear that patients and their referring clinicians preferred one service over the other. Analysis of GP referral patterns as set out in paragraphs 142-149 of the costs section of this report suggest that patients and their referring clinicians were exercising choice, with referrals for elective

symptomatic breast care relatively evenly split between the two services, indicating that they were close substitutes for one another.

288. The merger parties told us that the provision of symptomatic breast care services using the model described above improves patient experience. North Bristol Trust suggested that diagnosis at a clinic using this approach can improve waiting times and provide same day diagnosis. While we could not quantify the incremental improvement following the merger, in our view it appears likely that breast care patients' experiences would improve to some extent by having all their diagnostic treatments based in one unit, with access to private rooms and named nursing staff who were specially trained in breast care.
289. We next considered whether this improvement to patients' experience that arises from having all their diagnostic tests and outpatient treatments provided in one department could be realised without the merger. In our view, patients and their referring clinicians were able to choose North Bristol Trust if that was their preferred option. As noted above at paragraph 287, information from the merger parties and GP referral patterns suggest that choice of symptomatic breast care service provider was being exercised, and that patients and their referring clinicians could have chosen to attend the breast care centre at North Bristol Trust prior to the merger.¹¹⁶ Also, it is not clear to us why the services at University Hospitals Bristol FT could not have been organised to provide all the relevant diagnostic services and outpatient treatments for symptomatic breast care services in one place within the hospital, if their existing approach and layout of services was adversely affecting patient experience.

Conclusion

290. A model of care for symptomatic breast services that provides diagnostic services in one outpatient department could improve the experience for patients who are undergoing diagnosis and treatment, relative to a more fragmented model of care. However, if the model previously used by University Hospitals Bristol FT was having an adverse impact on patient experience we would have expected patients and their referring clinicians to have exercised choice and shown a preference for the service provided by North Bristol Trust, but we did not find this was the case. It is also not clear to us why a similar model of care could not have been adopted at University Hospitals Bristol FT in the absence of the merger if this was likely to deliver significant improvements to patient's experience. Therefore, in our view, the merger was unlikely to be required to achieve a model of care under which a number of related diagnostic tests and treatments were provided in one outpatient department.

Benefit 2: Benefit to all symptomatic breast care patients by increased availability of clinical nurse specialist staff.

291. The merger parties told us that former symptomatic breast care patients from University Hospitals Bristol FT and North Bristol Trust will benefit from a greater ability to see specialist

¹¹⁶ We note that referrals for symptomatic breast care are subject to a two week wait and are expressly excluded from a patients right to choice under the NHS Constitution. However, our analysis of GP referral patterns and evidence from the merger parties own documents suggest that patients and their referring clinicians are exercising choice of symptomatic breast care provider.

breast care nursing staff following the merger. Specifically, they told us that following the merger there is now improved contact with clinical nurse specialists for patients being treated in the breast care centre at North Bristol Trust, as the clinical nurse specialists from both organisations will be working together at that site.

292. Prior to the merger, symptomatic breast care services of both North Bristol Trust and University Hospitals Bristol FT employed one clinical nurse specialist each. The parties told us that having the two clinical nurse specialists based in the breast care centre would provide greater availability of specialist breast care nursing for patients at critical points in their care, such as receiving diagnosis. The parties also told us that there is a specialist breast reconstruction nurse based at North Bristol Trust's Frenchay site and that both clinical nurse specialists are now working more closely with this specialist nurse following the new working arrangements.
293. The merger parties told us bringing both breast care clinical nurse specialists together to work on one site means they are able to share their different knowledge, and expertise. For example, they explained that now all specialist breast care nurses will be able to offer and perform tattooing of the nipple areolar complex¹¹⁷ within the breast care centre, which will allow patients to receive this service in a private room by a specialist breast care nurse at the breast care centre. Previously, University Hospitals Bristol FT patients were provided with a tattooing service performed by breast surgeons within a surgical theatre.

Analysis

294. The information provided to us by the merger parties did not suggest that the quality of symptomatic breast care services at either of the merger parties was adversely affected because patients did not have access to a breast care clinical nurse specialist when they needed it.
295. To the extent that contact with breast care clinical nurse specialists was limited prior to the merger, it is not clear how the merger will improve the situation, unless further clinical nurse specialists are recruited. This is because the volumes of patients attending the breast care centre at North Bristol Trust is likely to have increased to absorb patients previously treated at University Hospitals Bristol FT, so it is not clear how additional capacity has been released given the number of clinical nurse specialists has not increased. We note that the number of clinical nurse specialists was low prior to the merger. If contact with clinical nurse specialists was affecting the quality of care received by symptomatic breast care patients at either organisation we would have expected this to be addressed in the absence of the merger. In our view if the overall number of clinical nurse specialists was inadequate across both organisations additional clinical nurse specialist resources could have been shared between the merger parties or recruited at either organisation prior to the merger.

Conclusion

¹¹⁷ Reconstruction of a pigmented nipple-areola complex (NAC) is one of the final steps in rehabilitating patients following mastectomy

296. Clinical nurse specialists working together, sharing knowledge and experience could improve the quality of services delivered to patients. However, in this case, it is not clear how patient contact with clinical nurse specialists would be improved as a result of the merger, particularly as the overall volume of patients would be likely to remain the same.
297. To the extent any improvements in patient contact with clinical nurse specialists will occur it is likely this could have been realised without the merger because additional clinical nurse specialist resources could have been shared or an additional nurse specialist could have been recruited by either organisation.

Benefit 3: Benefit to all symptomatic breast care patients from increased availability of mammography equipment.

298. The merger parties told us that, following the merger, all symptomatic breast care patients attending the breast care centre at Southmead would benefit from increased availability of mammography equipment¹¹⁸ because following the merger the mammography equipment previously utilised at University Hospital Bristol FT has been transferred to the breast care centre at Southmead.
299. Previously each provider had a single machine for its symptomatic breast care services. North Bristol Trust told us that using a single mammography machine for diagnostics and surveillance of cancer survivors often caused delays or prevented the ability to ensure a same-day mammography service for patients in the breast care centre. The merger parties told us having both machines in one place has provided additional capacity and flexibility in the service because, although one machine is now used mainly for surveillance of breast cancer survivors, it can also be used for clinic patients when needed.

Analysis

300. We note that a mammography machine is an expensive piece of equipment and North Bristol Trust may not have had sufficient volumes of patients to justify the investment in additional equipment. However, the evidence provided by the merger parties did not demonstrate that capacity and equipment utilisation at either service prior to the merger was having an adverse impact on the quality of care received by patients. In addition, the merger parties have not provided information about how the two mammography machines in the breast care centre will be staffed, and it is our understanding that in order to release additional capacity from having both mammography machines in the same place appropriate clinical staff would be required to operate the equipment and interpret results.
301. In our view, if mammography capacity at either of the services was an issue this could likely have been addressed through sharing of equipment and arrangements to utilise spare capacity at the other service. We note the overall volume of patients who may require mammograms following the merger is likely to remain the same, and therefore any

¹¹⁸ Mammography is the process of using low energy x-rays to examine the human breast and is used as a diagnostic and screening tool.

improvement is likely to be limited. As the overall number of mammography machines will not change following the merger it is not clear how much of an improvement the merger could achieve for patients that a sharing arrangement could not.

Conclusion

302. We recognise that increased availability of key equipment such as mammography machines could result in improved service quality. In this case, having two mammography machines operating in the same place might give greater flexibility for the provision of diagnosis and surveillance of symptomatic breast care patients provided there was appropriate radiologist cover and available capacity on the equipment (if only through improved management of downtime). However, in our view, this is likely to be a limited improvement to the quality of services delivered to patients. If either of the merger parties had needed additional capacity, we expect they would have been able to reach an appropriate sharing arrangement or make the necessary investments in the absence of the merger.

Benefit 4: Benefit to all symptomatic breast care patients from adoption of best practice techniques.

303. The merger parties told us that the merger will allow breast care consultants from each service to share best practice techniques and different approaches to delivering clinical care for symptomatic breast care patients, which they have each separately developed.
304. The merger parties told us that prior to the merger each breast care clinical team had developed over time different techniques, areas of expertise and clinical service models. For example, University Hospital Bristol FT had adopted new diagnostic techniques and imaging services, such as using the One Step Nucleic Amplification (OSNA) technique¹¹⁹ and the use of dual blue dye and isotope for diagnosis. North Bristol Trust had developed an imaging service provided by consultant breast surgeons and their breast care clinical nurse specialist had led their involvement in the national cancer survivorship programme. We were also told that each surgical team had a different approach in breast surgical reconstruction techniques.
305. The merger parties told us that the merger will allow the breast care consultants from each service to share the respective practices they had developed and to learn diagnostic and surgical techniques from each other.

Analysis

306. We have not assessed whether one symptomatic breast care service was of a higher quality than the other prior to the merger. We understand that patient outcomes at both organisations were comparable prior to the merger and we note that it did not appear that patients and their referring clinicians preferred one service over the other. We note that techniques such as the OSNA technique and dual blue dye and isotope for diagnosis are

¹¹⁹ One Step Nucleic Amplification (OSNA) is a new technique based on molecular, biological, testing method. The test is diagnosed to detect lymph node metastases during breast cancer surgery, and helps avoid the need for a second operation.

considered best practice and are being adopted by many providers and clinicians across England.¹²⁰

307. We expect providers to adopt nationally recognised and proven best practice techniques in order to improve the care and treatment they provide to their patients without the need to merge. We note in this case, the parties told us North Bristol Trust consultants had started to adopt the OSNA technique prior to completion of the merger. In addition, we consider any potential benefit that results from the adoption of different approaches and models of care delivery, will also require the different clinical teams to work closely together to successfully adopt the best of each. Our view is that merging the relevant parts of these organisations does not necessarily ensure that this will happen and this may be particularly relevant for very different consultant-led approaches to clinical practice and care, such as consultant-led imaging.

Conclusion

308. The introduction of best practice techniques could improve the quality of services delivered. However, in our view, the breast care techniques described by the merger parties in this case are not unique to them such that their adoption by the other party could only have been achieved through the merger. We therefore consider that the merger was not necessary to implement these best practice techniques.

EFFICIENCIES AND COST SAVINGS

309. For the purposes of our assessment of efficiencies and cost savings we have considered each of the services separately and identified specific potential efficiencies and cost savings from the information submitted by the merger parties.

310. For each of the potential efficiencies and cost savings described below we have considered:

- whether the benefit attributed to the merger can be achieved without a corresponding reduction in the quality of services for patients, or value for money for taxpayers;
- whether it is likely that the benefit will be realised in practice;
- whether the benefit will be realised within a reasonable period following the merger; and
- whether the benefit is dependent on the merger (i.e., whether or not it is merger specific).

Head and neck cancer, ENT and OMF services

Financial savings due to changes in staffing

¹²⁰ NICE Intraoperative tests (RD-100i OSNA system and Metasin test) for detecting sentinel lymph node metastases in breast cancer <http://guidance.nice.org.uk/DG8>

311. University Hospitals Bristol FT submitted that the transfer of activities would enable the combined ENT/OMF department to make annual savings of £X per year through a combination of reduced staffing and changes to the grades of other staff members. University Hospitals Bristol FT also confirmed that the changes to staffing have taken place and the relevant savings will be realised; thus they are both quantifiable and deliverable in a timely fashion. Specific savings are as follows:

- An annual saving of £X through a reduction in duplicated senior administrative positions with a corresponding increase in lower grade positions resulting in a net increase in administrative staff numbers (X whole time equivalent).
- An annual saving of £X through reduction in senior audiologists (X), and replacement with a single X audiologist and an increase of X whole time equivalent deputy heads of audiology (X).
- Reduction in the number of nurses in ENT (X) and the reduction of a single dental nurse (X); saving £X in total.
- Reduction in five junior and training doctors with a saving of £X.
- A reduction in orthodontic technicians (X) previously employed by North Bristol Trust with the work being taken on by the existing University Hospitals Bristol orthodontic resources with an associated saving of £X.

312. In relation to these reductions in staff the information provided by the parties did not explain why these savings could not be achieved by the providers absent the merger, either unilaterally or co-operatively in a way that does not reduce competition (for example, through SLAs). We also note that, following a merger that reduces the competitive constraints upon the merging providers, we would expect those providers to have an incentive to reduce their investment in staff numbers in a way that could impact the quality of care received by patients. Therefore it is not clear that these reductions in staff are likely to be beneficial.

Savings from increased buyer power

313. University Hospitals Bristol FT told us that the increased size of the new organisation would increase its buyer power with respect to the purchase of consumable items such as sutures and implants. The merger parties told us that by increasing the volume of purchases a lower unit price can be achieved. We recognise that buyers which account for a large proportion of a supplier's revenue may be able to exert pressure on suppliers through a stronger threat to switch those purchases to another supplier. However, such increased buying power could be achieved through a joint purchasing arrangement and would not ordinarily require a merger. Therefore, we did not take this potential benefit into consideration in our assessment.

Savings from consolidation of theatre lists

314. University Hospitals Bristol FT told us that the merger has enabled them to reduce the number of theatre lists from X through better utilisation rates and the use of clinicians in parallel

theatre sessions. University Hospitals Bristol FT also stated that there has been a reduction in the staff costs from centralisation of theatre list management. University Hospitals Bristol FT has told us that this will result in a recurring annual saving of £3.5m.

315. In our view, the information provided by the parties did not sufficiently demonstrate that improvements to theatre list management could not be achieved in the absence of the merger. Therefore we did not take this potential benefit into consideration in our assessment.

Cost savings to commissioners

316. University Hospitals Bristol FT told us that following the merger it proposes to carry out dental inpatient day case procedures as dental outpatient appointments; and explained that this will reduce the cost to commissioners since outpatient dental appointments carry a lower tariff than inpatient day case procedures. However, both University Hospitals Bristol FT and North Bristol Trust had access to dental facilities and could have reconfigured services pre-merger. Therefore, we did not take this potential benefit into consideration in our assessment.

Urology services

Reduced costs associated with on-call rotas

317. North Bristol Trust FT submitted that the transfer of activities will enable a reduction in costs associated with on-call rotas by:
- reducing the number of on-call rotas from two to one, providing an annual saving of approximately £3.5m in on-call banding payments¹²¹; and
 - reduce the average cost of the on-call rota through reduced reliance on locum doctors.
318. Prior to the merger both trusts provided an emergency on-call rota for urology inpatients. We understand that, post-merger, North Bristol Trust will provide a single emergency on-call rota for patients at the A&E of both North Bristol Trust and University Hospitals Bristol FT through an SLA between the parties. Given the proposed post-merger arrangements, the parties have not demonstrated how these savings would not be possible absent the merger through a similar SLA. Therefore, we did not take this potential benefit into consideration in our assessment.
319. North Bristol Trust told us that £3.5m. The merger parties have not provided evidence on the rate of staff turnover prior to the merger, or explained the extent to which they expect the merger to reduce the turnover of staff. Therefore, we did not take this potential benefit into consideration in our assessment.

Reducing staff numbers

¹²¹ Banding payments are top-up payments made to consultants for performing on-call duties.

320. North Bristol Trust told us that the merger and co-location of urology at Southmead will result in the need for one less clinical fellow as a result of the co-location of junior doctors. This reduction will result in an annual salary saving of £38.¹²²
321. In relation to the removal of this post the information provided by the parties did not explain why the savings could not be achieved by the providers absent the merger, either unilaterally or co-operatively in a way that does not reduce competition (for example through SLAs). We also note that, following a merger that reduces the competitive constraints upon the merging providers, we would expect those providers to have an incentive to reduce their investment in staff numbers in way that could impact the quality of care received by patients. Therefore, it is not clear that the removal of this post is likely to be beneficial.

Savings from increased buyer power

322. University Hospitals Bristol FT told us that the increased size of the new organisation would increase its buyer power with respect to the purchase of inputs for urology services. The merger parties told us that by increasing the volume of purchases a lower unit price can be achieved. North Bristol Trust stated that it had already saved £38 since May 2013 as a result of this increased buyer power. We recognise that buyers which account for a large proportion of a supplier's revenue may be able to exert pressure on suppliers through a stronger threat to switch those purchases to another supplier. However, such increased buying power could be achieved through a joint purchasing arrangement and would not ordinarily require a merger. Therefore, we did not take this potential benefit into consideration in our assessment.

Symptomatic breast care services

Reduced staff numbers

323. The merger parties told us that they will be able to reduce workforce costs through the reduction of one junior doctor post (1 whole time equivalent).¹²³
324. We note that, following a merger that reduces the competitive constraints upon the merging providers, we would expect those providers to have an incentive to reduce their investment in staff numbers in way that could impact the quality of care received by patients. We therefore require where parties propose that savings from staff reductions will benefit patients or taxpayers, that the parties explain (with evidence) how the quality of patient care will be maintained. Neither of the merger parties provided this information, therefore it is not clear that the removal of this post is likely to be beneficial.

Improved utilisation of equipment

¹²² We note that reduced investment in staff is an expected adverse effect on patients resulting from reduced competition following a merger.

¹²³ We note that reduced investment in staff is an expected adverse effect on patients resulting from reduced competition following a merger.

325. North Bristol Trust submitted that having two mammography machines operated by a single trust will enable more efficient use of the equipment, than having two machines operated by separate trusts. The merger parties did not, however, provide any detail on the current capacity or utilisation rates of the machines, or the likely monetary saving or increased patient throughput. Therefore, we cannot consider the improved utilisation of equipment to be a relevant merger benefit.

Other potential benefits not taken into consideration

326. There were further potential benefits submitted by the merger parties which we discounted in our benefits assessment and are not described in this report. This was because there was a lack of detailed information about these aspects of the improvements described by the merger parties to enable us to make an assessment or it appeared likely that they could have been achieved absent the merger. We note two examples briefly below.

327. The merger parties told us that prior to the merger both organisations already shared multidisciplinary teams, research programmes and staff, but had separate governance guidelines and protocols. The merger parties told us that the merger will result in standardisation of policies and protocols as the parties will be better able to conduct peer reviews and improve attendance at multidisciplinary teams. We did not consider it likely that these improvements could not have been achieved absent the merger and we did not take this potential benefit into consideration in our assessment.

328. The merger parties also told us that the merger would improve urology research due to increased scale, and that the increased number of patients from the merger would enable funding of a specialist research nurse. However, the merger parties did not provide detailed information about the improvement to research opportunities, and we note that many research collaborations have been advanced in the absence of a merger of parts or whole organisations. We therefore have not taken this potential benefit into consideration in our assessment.

SUMMARY OF CONCLUSIONS ON MERGER BENEFITS

329. The merger parties told us that the merger results in a number of benefits. Following our analysis we have concluded that the merger is likely to give rise to some relevant benefits under Principle 10 of the Principles and Rules.

330. We concluded that there is likely to be a benefit arising from the timely and effective transfer of specialist consultants required to deliver a model of care that includes a head and neck cancer, ENT and OMF ward; an increased number of clinical nurse specialists; a treatment room available 24 hours a day; and, consultants with different expertise operating in adjacent theatres. While it is likely that the model of care described above (and consequent improvements for patients) could have been achieved in the absence of the merger, we consider that given the particular nature of this highly complex and specialist service, the merger is likely to facilitate the delivery of care in this way more quickly. In particular, the merger enabled the timely and effective transfer of specialist consultants and removed the

need for one or other provider to build up expertise independently and increase capacity through a recruitment process. The merger therefore reduces the time taken to deliver this model of care, and gives rise to a time limited benefit. We concluded that inpatients requiring complex and major non-cancer ENT and OMF care and treatment would also benefit from this model of care being implemented more quickly because the specialist expertise and inputs required for these patients are likely to be the same as for head and neck cancer patients.

331. We also concluded there was likely to be an additional benefit of having radiotherapy treatment provided at a location nearby to the extent that transfer of head and neck cancer inpatients can be avoided.

CONCLUSION ON COSTS AND BENEFITS

332. In this section we weigh the above benefits against the costs to patients and taxpayers identified in our assessment of merger costs. The CCP's merger guidelines explain that weighing of costs and benefits is not a mathematical exercise, but rather an assessment to which the panel brings its expert judgement.¹²⁴
333. We found that the merger would be likely to give rise to costs to patients and taxpayers due to a reduction in patient choice and competition for the relevant elective services provided by University Hospitals Bristol FT and North Bristol Trust. We concluded that University Hospitals Bristol FT and North Bristol Trust are each other's closest competitor for elective services and that the merger removes important competitive constraints for elective head and neck, ENT, OMF, urology and symptomatic breast care services in the absence of other competitors. Therefore, the merger significantly reduces choice of hospital provider in respect of the relevant elective services for patients living in the Bristol area.
334. We also found that the merger would be likely to give rise to costs to patients and taxpayers due to a reduction in choice and competition in the provision of the relevant non-elective services provided by University Hospitals Bristol FT and North Bristol Trust. We concluded that University Hospitals Bristol FT and North Bristol Trust are each other's closest competitor for non-elective services and that the merger removes important competitive constraints for non-elective head and neck, ENT, OMF, urology and symptomatic breast care services in the absence of other competitors. Therefore, the merger significantly reduces choice of hospital provider in respect of the relevant non-elective services for patients living in the Bristol area.
335. Against these costs we weighed the benefits relating to head and neck cancer, and ENT and OMF services summarised above in paragraph 329-331. In this particular case we think it is appropriate to weigh the costs and benefits across all three transactions constituting the merger as a whole rather than weighing the costs and benefits relating to each set of services separately, as we understand the transactions to be interdependent.
336. As noted above, in our view while it is likely that the model of care described above (and consequent improvements for patients) could have been achieved in the absence of the merger, we consider that given the particular nature of this highly complex and specialist

¹²⁴ See paragraph 6.111 of the CCP's merger guidelines.

service, the merger is likely to facilitate the delivery of this model of care more quickly. In particular, the merger enabled the timely and effective transfer of specialist consultants and removed the need for one or other provider to build up expertise independently and increase capacity through a recruitment process. The merger therefore reduces the time taken to establish the expertise required to deliver this model of care, and this gives rise to a time limited benefit.

337. We also note the merger is likely to give rise to a benefit by avoiding transfers of some head and neck cancer inpatients who require radiotherapy treatment. This is likely to benefit a small number of head and neck cancer patients who were previously treated at North Bristol Trust and who may have required radiotherapy treatments while an inpatient by improving their experience.
338. In conclusion, we think the removal of the closest competitor for each of the relevant elective and non-elective services and the consequent reduction in patient choice and competition reduces the incentives to maintain quality and is likely to have a significant impact on a substantial number of patients (including those who do not require cancer or complex care) in the Bristol area on a long-term basis. Accordingly, we conclude that the benefits of this merger do not outweigh the costs to patients and taxpayers that are likely to result.

ADVICE AND RECOMMENDATIONS

339. We have found that the merger is likely to give rise to net costs for patients and taxpayers as a result of loss of patient choice and competition in respect of elective and non-elective head and neck, ENT, OMF, urology and symptomatic breast care services. Therefore, in our view, the merger is not consistent with Principle 10 of the Principles and Rules.
340. We note that in this case the merger was completed on 25 March 2013, and that the models of care were implemented following proposals arising from the Health Futures Programme (see paragraphs 36-41). We also note that this case is unusual in that it is being considered under the Principles and Rules,¹²⁵ which have been superseded following the Health and Social Care Act 2012 coming into force in April 2013. Therefore, although we are not making specific proposals with regard to this case, Monitor will send a copy of these conclusions and advice to the merger parties, local commissioners and NHS England, the Secretary of State for Health and NHS TDA (as North Bristol NHS Trust is not an NHS foundation trust). Monitor's advice is that the merger is not consistent with Principle 10 of the Principles and Rules.
341. We expect the merger parties, commissioners and NHS TDA to have regard to the costs identified and take steps to ensure that the reductions in choice and competition do not manifest in reductions in the quality of care received by patients or the efficiency of service provision. This report also contains important considerations for the merger parties and commissioners in Bristol, as well as for the wider health system in thinking about service reconfiguration generally.

¹²⁵ The Principles and Rules are available at: <https://www.gov.uk/government/publications/principles-and-rules-for-cooperation-and-competition>

342. Whenever commissioners are considering proposals which would reduce the number of providers they should consider the impact that might have for patients. For some services there will be clear clinical evidence to support limiting the number of providers. In other circumstances there may be advantages to having a number of providers. Where the number of providers is limited the process for choosing the providers should be designed to achieve the highest quality and most efficient services for patients and taxpayers, and should ensure that the incentives for improving quality and efficiency are maintained in the longer term.
343. Generally when considering service reconfigurations commissioners should have regard to their obligations under The National Health Service (Procurement Patient Choice and Competition) (No. 2) Regulations 2013. These include the obligation when procuring services to consider ways of improving quality and efficiency through: care being more integrated; enabling providers to compete; and, allowing patients a choice of provider.
344. Where any proposals give rise to a merger (whether of all or part of an organisation) commissioners and providers should consider the effects of that merger on patient choice and competition in the local area before implementing the transaction. Where there is an impact on incentives to maintain quality, parties should consider carefully and be ready to explain what benefits to patients the merger will secure that could not be achieved in another way.
345. In our view, new models of care can often be implemented through processes that enable providers to compete to provide services. In some cases a competitive process can be used to generate greater improvements in the quality of care to patients than might otherwise be achieved.

Cooperation and Competition Panel

20 September 2013

APPENDIX 1: TRAVEL TIMES BETWEEN HOSPITALS

1. This appendix sets out typical travel times from Southmead Hospital and Central Bristol Campus (including Bristol Royal Infirmary) to various hospital sites in Bristol and the surrounding areas. These estimates represent a typical journey time and actual journey times will vary depending on the time of travel and extent of any disruptions on the networks.

Table 1: Travel times to hospitals from Southmead Hospital (North Bristol Trust)

<i>Hospital/Service</i>	<i>Drive time (minutes)</i>
Spire Bristol	8
Frenchay Hospital (Bristol)	12
Central Bristol Campus	13
Nuffield Bristol	14
UKSH Emerson's Green (Bristol)	15
Royal United Hospital (Bath)	37
Weston General Hospital	38
BMI Bath	41
Nuffield Cheltenham	42
Gloucestershire Royal Hospital	43
Circle Bath	45
Great Western Hospital	48
Cheltenham General Hospital	49
UKSH Shepton Mallet	54
Musgrove Park Hospital (Taunton)	58
Nuffield Taunton	59
Hereford County Hospital	80
Yeovil District Hospital	84
Salisbury District Hospital	99

Source: Google Maps

Table 2: Travel times to hospitals from Central Bristol Campus

<i>Hospital/Service</i>	<i>Drive time (minutes)</i>
Nuffield Bristol	5
Spire Bristol	8
Frenchay Hospital (Bristol)	13
Southmead Hospital (Bristol)	13
UKSH Emersons Green (Bristol)	15
Royal United Hospital (Bath)	32
BMI Bath	38
Circle Bath	40
Weston General Hospital	42
Nuffield Cheltenham	45
Gloucestershire Royal Hospital	46
Great Western Hospital (Swindon)	48
UKSH Shepton Mallet	48
Cheltenham General Hospital	52
Musgrove Park Hospital (Taunton)	61
Nuffield Taunton	62
Yeovil District Hospital	77
Hereford County Hospital	83
Salisbury District Hospital	99

Source: Google Maps

APPENDIX 2: MARKET DEFINITION

2. In this appendix we consider the appropriate market definition(s) to adopt in order to analyse the competitive effects of the merger. The outcome from a market definition exercise is an identification of those other services that constrain the ability of the merged entity to increase its prices or reduce the quality of its services following a merger. This can then provide a framework for analysing the competitive effects of a merger through identifying providers of competing services and, for example, examining the market shares of different providers of those services.
3. Whether other services constrain the ability of a merged entity to increase prices or reduce quality (and should thus be considered as belonging to the same market as services provided by the merging organisations) depends on whether they represent an effective alternative to which patients and/or commissioners could switch. The methodology that we use to define a market is the hypothetical monopolist test (see below).
4. There are two dimensions to a market: a product dimension (which may, for example, correspond to a service (for example, hip replacement surgery) or a group of services (for example, acute inpatient services), and a geographic dimension (which may correspond to a specific area).

THE HYPOTHETICAL MONOPOLIST TEST

5. In line with best practice, and consistent with our guidelines, we use the hypothetical monopolist test wherever feasible as the basis for identifying and defining the markets affected by a merger.¹²⁶
6. The test begins by considering the narrowest set of products or services supplied by the merging organisations. The following question is then asked: if there were only one supplier (a hypothetical monopolist) of the service in question, could the hypothetical monopolist raise prices or reduce service quality profitably, by a small but significant non-transitory amount?¹²⁷ If this would not be profitable, because customers would switch to other services (demand-side substitution), or new providers would start to supply the service (supply-side substitution), then the closest substitute products or services are added to the group and the process is repeated. The product market is defined at the point at which a hypothetical monopolist is able to increase prices (or reduce quality) profitably for those services.

¹²⁶ This approach is consistent with the Office of Fair Trading and Competition Commission approach. See section 5.2 of the joint merger assessment guidelines available at www.competition-commission.org.uk/our_role/ms_and_fm/cc2_review.htm. It is also consistent with the approach of the FTC/DOJ in their horizontal merger guidelines available at www.justice.gov/atr/public/guidelines/hmg-2010.pdf. Section 4.1 of those guidelines explains that the test requires that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products ("hypothetical monopolist") likely would impose at least a small but significant and non-transitory increase in price ("SSNIP") on at least one product in the market, including at least one product provided by one of the merging firms. Notably in the NHS providers are subject to price regulation. As such it is notable that the merger guidelines explain that this SSNIP methodology is used because normally it is possible to quantify "small but significant" adverse price effects on customers and analyse their likely reactions, not because price effects are more important than non-price effects. In the NHS we therefore focus on the likely reactions of patients to changes in quality (rather than to changes in prices since these are in any case regulated).

¹²⁷ We assume that it is costly to increase or maintain quality and so a hypothetical monopolist might be able to increase net revenue if it can cut costs without losing too many patients. The loss of patients (and therefore of profitability) due to cutting costs will depend on both the availability of alternatives (in product and geographic space) to patients and/or commissioners, and their propensity to switch in response to a fall in quality. The threat of patients switching in response to a change in quality is consistent with the conclusions reached by Propper, Gaynor, and Moreno-Serra in 'Death by Market Power: Reform, Competition and Patient Outcomes in the National Health Service' July 2010.

7. Similarly, in relation to the geographic market, the hypothetical monopolist test begins by considering the smallest geographic area where the merging organisations both supply products or services. The question is then asked: if there were only one supplier in the area in question, could the hypothetical monopolist increase profit by raising prices or reducing service quality by a small but significant amount? If this would not increase profits, because customers would switch to services provided in other areas, then the area is widened accordingly. The relevant geographic market is defined as the set of services in the smallest area that could, hypothetically be monopolised profitably. The scope of geographic markets often depends on willingness to travel and they are usually defined based on providers' locations. By 'profitably' we mean surplus generating, and the key issue is whether the loss of sales as a result of customers switching would be sufficient to offset the increased profits that will be made from retained sales.
8. We note that there is not always an obvious starting point for the test. The competitive constraints between providers of different sizes, providing different services in different locations are likely to differ. Further, any two providers may not necessarily each impose an equal competitive constraint on the other. As such, the starting point for the test can affect the outcome and so we begin the test at different starting points to check for asymmetric constraints. Wherever the test starts it must begin by using the smallest possible candidate market and only expand to larger markets where these smaller markets have failed to satisfy the test.

Health care Specific Considerations

9. On the demand side, health care is different to some other sectors as a result of the role played by both patients and commissioners, both of whom can be viewed as purchasers of health care services. We need to consider the responses of both when thinking about alternative service providers for the purposes of identifying a market affected by a merger.
10. The ability of patients or commissioners to access alternative service providers will be affected by whether, for example, patient choice or competitive tendering is used to select the provider that supplies services to patients. Our assessment of the product market definition will deal with these two areas of competitive interaction.

PRODUCT MARKET

11. In order to define the relevant product market we need to consider substitution possibilities on both the demand side (i.e. substitution by patients/commissioner) and the supply side (i.e. substitution by providers) of the market. In addition, because the consumers (patients with advice from clinicians) and the purchaser of health care (commissioners) are split into two groups, we will also consider these two groups' behaviour separately when addressing demand side substitution.
12. We begin by considering which services are affected by the merger and therefore what would be an appropriate starting point for market definition. We then look at demand side substitution, that is, whether patients/commissioners would choose to switch provider if the quality of the service declines.¹²⁸ We then consider the supply side, that is, whether other providers would choose to switch to providing the service if quality of services declines.

¹²⁸ We refer to patients choosing a provider though we recognise that when a patient is offered a choice of provider their decision taken in consultation with their GP.

Services affected by the merger

13. As stated above, hypothetical monopolist test begins by considering the smallest set of products in provision of which the merger parties overlap.
14. In this case the merger parties are merging the parts of their organisations that provide the relevant services, rather than their entire organisations. We identified the types of service within each of the relevant service specialties that have been provided by the parties and the extent to which the services provided by each trust overlap. For urology, symptomatic breast care, head and neck cancer, ENT, and OMF services the parties overlap in the supply of standard elective inpatient, non-elective inpatient, and outpatient services. In ENT and urology they also overlap in the supply of community services.¹²⁹
15. In line with the smallest market principle we begin by considering whether each individual service constitutes a relevant market.¹³⁰

Demand side substitution in the product market

16. An analysis of the demand side should consider whether consumers (patients with advice from clinicians) or purchasers (commissioners) would choose to switch product or service if the quality of the product or service provided by the hypothetical monopolist declined.
17. From the patient's and hence the commissioner's perspective there may be a degree of substitutability between different procedures which are used to treat certain conditions. For example, large kidney stones can be treated using lithotripsy (which uses ultrasound to break a stone into smaller pieces to be passed in urine) or percutaneous nephrolithotomy (which involves making an incision in the kidney to extract the stone). Where equally effective treatments for a specific condition exist, patients, with the help of their clinician, will be able to choose between those options if the quality of either treatment were to deteriorate. As a result a hypothetical monopolist of one treatment would be unable to reduce investment in its service without losing revenue (as patients switch into the other treatment). We would therefore expand the product market to include both treatments.
18. However, generally, there will be a recommended treatment for a given diagnosis, and therefore patients will not have the option to switch between equally effective treatments for the same diagnosis. For example, a patient is unable to opt to have a replacement knee if they are unsatisfied with the quality of the replacement hip surgery offered by the hypothetical monopolist provider.
19. Similarly on the purchaser side, the commissioner, in fulfilling its duties to commission the health services that the local population needs, will not choose to commission more knee surgery as a result of a hypothetical monopolist provider of hip surgery providing a poor service.¹³¹

¹²⁹ Though the specialist urology services that each trust offers are not the same. For example University Hospitals Bristol FT provides retroperitoneal work while North Bristol provides urodynamic services.

¹³⁰ The smallest market principle is described in the merger guidelines of the US Department of Justice: http://www.justice.gov/atr/public/guidelines/horiz_book/11.html

¹³¹ If the quality of the hip service provided by the hypothetical monopolist were to decline significantly the commissioner may choose to stop commissioning the service altogether (and may use these funds to commission other services). For a commissioner to refuse to fund a procedure is possible, however it is unlikely to result from a small reduction in quality, as postulated in the hypothetical monopolist test.

20. Therefore overall there is little scope for demand side substitution for different services. In other words, from the patients' as well as from the Commissioners' perspective, each service provided by a hospital constitutes a separate relevant product market on the demand side.

Supply side substitution in the product market

21. In this case the merger parties are merging the parts of their organisations that provide the relevant services, rather than their entire organisations. We identified the types of service within each of the relevant service specialties that have been provided by the parties and the extent to which the services provided by each trust overlap. For urology, symptomatic breast care, ENT, and OMF services the parties overlap in the supply of standard elective inpatient, non-elective inpatient, and outpatient services. In ENT and urology they also overlap in the supply of community services. In ENT, OMF, and urology services they also both provide specialist tertiary inpatient services.¹³²
22. The analysis of the supply side considers whether an alternative supplier (a hospital) would have the ability and incentive to switch easily and in a timely fashion into the provision of a service or procedure in the event of a small but significant reduction in the quality of provision of the service in question by a hypothetical monopolist supplier.
23. As consultants are trained and registered within a particular specialty (e.g. ENT) we expect that providers that offer a specialty will be able to use their resources to provide any standard treatment within that specialty.¹³³ We therefore expect that supply-side substitution possibilities are likely to exist within each specialty.¹³⁴ In this case this would suggest that there are four relevant standard specialty product markets in this case: Symptomatic Breast Care, ENT, OMF, and Urology.
24. However we note that within each specialty there are also a number of sub-specialties that require additional experience and specific training. Providers with staff that are trained within a specialty, but not within a given sub-specialty, are therefore likely to be more restricted in their ability to switch capacity into the sub-specialty. For example we note that both ENT and OMF services have cancer services as a sub-specialty (e.g. ENT cancer services are a sub-specialty of ENT).¹³⁵ These ENT and OMF cancer services are provided by both North Bristol NHS Trust and University Hospitals Bristol FT within their head and neck cancer departments.
25. Given the specialist training and equipment required to deliver these services, our view is that a provider of standard ENT services would not be able to switch quickly to using its assets and

¹³² Though the specialist urology services that each trust offers are not the same. For example University Hospitals Bristol FT provides retroperitoneal work while North Bristol provides urodynamic services.

¹³³ In order to be confident that supply side substitution was likely to occur in a particular case we would need to consider whether a particular provider had the available spare capacity (e.g. beds, operating theatre slots) and the incentive (e.g. the ability to earn a higher margin than was possible from its current services) to substitute into providing a specific product.

The precise role of supply side substitution is therefore likely to vary on a case by case basis. Nevertheless, in general, we consider that there are likely to be supply side substitution possibilities that mean that the relevant product market extends to include a range of standard procedures within each specialty.

¹³⁴ However, it is our view that supply-side substitution possibilities are less likely to occur between specialties, as a provider of one specialty may not necessarily be able to use its existing capacity to provide another specialty.

¹³⁵ We also understand that small volume cancer services such as ENT and OMF cancer services are provided by fewer providers than large volume cancer services (e.g. breast cancer services) and may therefore be considered rare or specialist services.

staff to providing ENT cancer services.¹³⁶ For the same reason we did not consider that a provider of standard OMF services would be able to switch quickly to providing OMF cancer services. We therefore defined two sub-specialty markets: ENT cancer services; and OMF cancer services. However, since each of the local providers of ENT cancer services also provides OMF cancer services, for the purpose of this analysis we have assessed these together as a cluster of separate markets, under the heading ‘head and neck cancer services’.

26. For each specialty we also distinguished between the ability of different types of provider to switch capacity into the different types of service: standard elective inpatient services; non-elective inpatient services; outpatient services; and community services:¹³⁷
- I. Standard elective inpatient services. These services are provided by a wide range of providers in England that are able to admit patients into hospital).¹³⁸ Potential elective service competitors therefore include providers of elective and non-elective services;
 - II. Non-elective services (i.e. accident and emergency and maternity services). These services are mainly provided by NHS trusts and NHS foundation trusts with emergency back-up facilities. Potential non-elective services competitors therefore include providers of non-elective services;
 - III. Outpatient services. These services are provided by providers with trained staff.¹³⁹ Potential outpatient service competitors therefore include providers of standard elective, non-elective, and community services; and,
 - IV. Community based services. These services are provided around England by NHS, independent and third sector providers with backgrounds in different areas of health and social care. Potential community based service competitors therefore include all providers of community, primary, outpatient, elective and non-elective services.
27. As part of our analysis, we also considered the relevant product market for each of the specialist tertiary services provided by the trusts that are to merge.
28. We note that both ENT and OMF services have cancer services as a sub-speciality (e.g. ENT cancer services are a sub-specialty of ENT).¹⁴⁰ These specialist ENT and OMF cancer services

¹³⁶ The supply-side possibilities between different types of service within each specialty tend to be asymmetric ones. For example, specialist/tertiary providers of a given specialty have the highly trained staff and necessary technology/equipment to also provide standard services, even if doing so would be comfortably within their capability. In contrast, the opposite does not necessarily hold. Providers only supplying standard services are unlikely to have the necessary staff and technology/equipment to be capable of quickly providing more specialist/tertiary services.

¹³⁷ In some cases a provider of a range of procedures within a specialty may not face similar constraints and the same set of competitors across all of its specialties. Some of its procedures may face greater or lesser constraints, for example as a result of the additional Independent Sector capacity funded by commissioners in certain procedures (e.g. endoscopy). In that case we will examine the differences within the competitive effects analysis.

¹³⁸ These services can also be provided by centrally contracted independent sector treatment centres (ISTCs) although many of these contracts have now expired, with the providers now holding NHS Standard Acute contracts. The nearby Emerson’s Green ITC, operated by UKSH has a contract that runs until November 2014.

¹³⁹ These only include outpatient services which are not linked to an inpatient patient episode e.g. dermatology. Outpatient services which are provided in conjunction with an admitted patient episode (i.e. pre-operative assessments and follow up appointments) are considered as part of the elective and non-elective service clusters and each individual specialist service.

¹⁴⁰ We understand that small volume cancer services such as ENT and OMF cancer services are provided by fewer providers than large volume cancer services (e.g. breast cancer services) and may therefore be considered specialist rather than standard services.

are provided by both North Bristol NHS Trust and University Hospitals Bristol FT within their head and neck cancer departments. Given the specialist training, experience and equipment required to deliver these services, we consider that a provider of ENT cancer services would not be able to switch quickly to using its assets and staff to providing OMF cancer services. For the same reason we did not consider that a provider of OMF services would be able to switch quickly to providing ENT cancer services. We therefore consider that these form at least two separate specialist product markets: ENT cancer services; and OMF cancer services. However, because each provider of ENT cancer services in the present case also provides OMF cancer services, for the purpose of this analysis we have assessed these together as a cluster of separate markets, under the heading 'head and neck cancer services'.

29. We also found that each of the parties offers a number of highly specialist, though entirely different, urology services (e.g. University Hospitals Bristol FT provides retroperitoneal work while North Bristol provides urodynamic services). We considered that each of these individual services was a relevant product market in light of the inability of, patients to switch service, or providers to switch capacity, in response to a small but significant deterioration in quality.
30. We therefore consider that there are separate product markets within each service:
 - I. standard elective urology services; non-elective urology services; outpatient urology services; community urology services, and a series of specialist urology services;
 - II. standard elective breast care services; non-elective breast care services; outpatient breast care services;¹⁴¹
 - III. standard elective ENT services; non-elective ENT services; outpatient ENT services; community ENT services, and a series of specialist ENT services ; and,
 - IV. standard elective OMF services; non-elective OMF services; outpatient OMF services; and community OMF services, and a series of specialist OMF services.

GEOGRAPHIC MARKET

31. We have not precisely defined the relevant geographic market as it is not material to our findings. This is because we have within our competitive effects analysis considered the strength of the competitive constraints posed by all relevant potential rival providers as defined by geographical proximity.^[1]
32. While we consider that nearby providers are potentially within the relevant geographic market for at least some of the services provided by the merging parties we note that the location of a provider is important to patients (and GPs) and so those providers providing the same services in different locations will not be perfect substitutes for one another, and providers that are near

¹⁴¹ We understand that neither the parties nor other providers in the area offer community breast care services

^[1] Given the nature of the identified product markets and the importance of convenience to patients we are able in this case to identify the potentially relevant rival providers based on the proximity of the facilities of those rivals. We have also considered the possibility of a competitive threat from more distant rivals moving into the area, and we treat these as potential new entrants to the market.

Appendix 2

one another will tend to be more important competitors than those that are not.^[2] To this effect we have considered the role of providers located in a variety of directions which are likely to be rivals for referrals originating from that area; these include providers to the North (e.g. Gloucestershire Hospitals NHS Foundation Trust), to the South (e.g. Royal United Hospital Bath NHS Trust), to the West (e.g. Taunton and Somerset NHS Foundation Trust) and to the East (e.g. Great Western Hospitals NHS Foundation Trust).

^[2] For the purposes of our analysis we do not distinguish between whether the choice of provider is made by a GP or a patient.

APPENDIX 3: GP REFERRAL ANALYSIS

33. This appendix explains the GP referral analysis that forms one element of the competitive effects assessment in the main report. In the competitive effects assessment we seek to understand what would happen if the relative quality of service provided by North Bristol were to decline. There are two elements to this question. Firstly, if the relative quality of service declined, how many referrals would switch to a different provider? Secondly, if they were to switch, which providers would those referrals be likely to switch to?
34. Our GP referral analysis is not able to address the first question. That is, it does not tell us how *likely* it is that a patient or GP will switch to another provider in response to a change in relative quality: in order to do that we would need to have estimates of the cross elasticity of demand with respect to quality. This in turn would require an estimated demand model with a well specified demand function for GPs for the hospitals and services in question.
35. However, we know from recent research on data from English hospitals that, in general, if the relative quality of a hospital provider's service decreases, this is associated with a decrease in demand (since some patients and GPs switch away from that provider).¹⁴² For example, one finding suggests that a ten per cent increase in mortality rates is associated with an 11 per cent decrease in demand¹⁴³. This is in line with much of the literature looking at how patients choose a hospital provider^{144,145}. As noted above, in each case we also consider the specific evidence on the likelihood of patients switching to particular providers.
36. Given the academic evidence suggests that patients are likely to switch in response to changes in relative quality we use the GP referral analysis to investigate the second question: if patients were to switch, to which provider would they be likely to switch to¹⁴⁶.
37. Our analysis uses observed GP referral patterns to understand the provider referrals would switch to, if switching were to occur. It seeks to identify those providers that appear likely to pose a threat to the largest proportion of the trust's volume of elective activity. In this respect our analysis reflects the internal analysis that we have observed providers conducting in order to understand their competitive position.
38. We undertake the analysis using two different methodologies. We consider that each method acts as a useful robustness test of the results that are generated and so it is useful to use them in tandem (i.e. using one as a sensitivity test to the other).

¹⁴² Gaynor M, Propper C and Siedler S (2011): 'Free to choose: reform and demand response in the British National Health Service', mimeo, London School of Economics; Beckert W, Christensen M and Collyer K (2012): 'Choice of NHS-funded hospital services in England', *The Economic Journal*, Vol. 122, Issue 560, pp. 400-417.

¹⁴³ Beckert W, Christensen M and Collyer K (2012): 'Choice of NHS-funded hospital services in England', *The Economic Journal*, Vol. 122, Issue 560, pp. 400-417.

¹⁴⁴ For example: Gaynor and Propper (elective heart bypass); Gravelle and Propper (GPs); Sivey (cataracts); and Rand/Kings Fund/City University discrete choice experiment [add citations]

¹⁴⁵ We also note that patients in England have only recently been allowed to exercise the right to choose between providers. Patients' sensitivity to changes in relative quality of provider might therefore be expected to increase over time as patients become more familiar and more aware of their ability to choose, and more informed on changes in relative quality that occur. This would suggest that the degree of substitutability that we observe is likely to increase in future (if the option to switch remains at that time).

¹⁴⁶ We note that in the case of the Bournemouth/Poole merger, the Competition Commission has carried out survey analysis to understand the potential switching behaviour of patients. The survey analysis may also enable them to estimate the scale of potential switching behaviour.

Methodology 1: Ordinal Approach

39. This methodology uses GP practice-level data.¹⁴⁷ The data reflects the choices made by different pairs of GPs and patients within each GP practice at an aggregated level. We assume that each choice that is made reflects the preference of the pair that made the decision. That is, the patient and GP made the choice which best reflected their preference at that time. We also assume that the preferences of the different pairs of GPs and patients within a practice that make the decisions are likely to be relatively homogeneous, given their common location and their need for the same set of treatments. Therefore, we expect that if the relative quality of the first choice provider were to decline, the most likely alternative provider for a GP/patient, if they were to switch, would be likely to be the provider (other than their selected provider) that had the highest number of preferences from other GP/patient pairs within the same practice.¹⁴⁸
40. In our ordinal analysis we rank providers by the number of preferences that they receive from GP/patient pairs within each GP practice in an area for a given procedure. Then, using these rankings, we make the assumption that the most commonly preferred provider (i.e. the provider a GP practice referred to the most often for the set of services reviewed during the period of analysis) is the preferred provider for that GP practice (for the specified services), and that the next most commonly preferred provider (i.e. the provider a GP practice referred to the second most often for the set of services reviewed during in the period of analysis) was, for that GP practice, the second preference.
41. Next, we assumed that following a change in the quality of service at its preferred provider (and assuming that all else remains equal), if GP/patient pairs within a GP practice were to switch away from that provider, they would instead refer those patients to the practice's second ranked provider.^{149,150}

¹⁴⁷ The data that we analyse is often at HRG chapter level or individual procedure level as appropriate. This data is provided by Dr Foster Intelligence, an information firm that provide the same data to providers and commissioners. The data is cleaned and updated each month which enables us to conduct analysis that takes account of the impact of even the most recent changes in the market.

¹⁴⁸ Similarly, following a change in the quality of service at a GP practices' second most common provider, if the GP practice were to switch some patients away from that provider, they would instead refer to those patients to the first ranked provider. Note that the set of treatments that we analyse differs in each version of the analysis. Although preferences will differ between individual GPs and between individual patients, evidence suggests that: distance to each available hospital; patient age; and the degree of health and income deprivation in the local area are all important factors for determining choice of hospital. These characteristics will tend to be very similar for GPs working in the same practice (see Beckert W, Christensen M and Collyer K (2012): 'Choice of NHS-funded hospital services in England', *The Economic Journal*, Vol. 122, Issue 560, pp. 400-417).

¹⁴⁹ As noted in paragraph # above, we have not observed which provider these patients chose when they could not chose Provider X, nor have we asked the patients which provider they would use if they did not choose Provider X. Instead we have used the choices of patients and GPs within the same practice, which we expect will be relatively homogenous, to inform a sensible view of the likely destination of these patients, if they were to switch away from using Provider X.

¹⁵⁰ It is also possible to extend this analysis by adopting an assumption that the GP practice's referrals to its second preferred provider would switch to both the first and the third preferences of the GP practice. We have used this variation of the analysis in for example the analysis of the merger of Barts and the London with Newham and Whipps Cross hospitals.

For example we might observe that at a particular GP practice: 60 patients chose Provider X; 30 chose Provider Y, and 10 chose Provide Z.

If the 60 patients that had chosen Provider X were to switch away in response to a reduction in relative quality, under this assumption they would choose Provider Y.

42. We considered it reasonable to assume that GPs and patients, if they switch, would be likely to switch referrals to hospitals to which they already refer for two reasons. First, because patients and GPs cannot perfectly observe the quality of the service that they select but instead need to use the experience they and others have had in order to inform the choice of provider. Therefore, GPs are more likely to have experience on which to base their decision if they have previously referred patients to a given hospital (e.g. they may know the consultants and have observed their clinical outcomes). Secondly, we expect that the choices made by patients and GPs at a particular GP practice in the past will reveal something about the providers that they would choose in the future.¹⁵¹
43. The results for all GP practices that refer patients to the hospital for the service in question are collected and collated, resulting in a list of providers and the numbers of patients for whom each provider was the most likely alternative: an effective ranking of alternative providers.

Methodology 2: Proportional Approach

44. As with the ordinal approach this methodology uses GP practice-level data. This data reflects the choices made by different pairs of GPs and patients within each GP practice at an aggregated level. We assume that each choice that is made reveals the first preference of the pair that made the decision.
45. We assume that following a change in the quality of service at their preferred provider X (and assuming that all else remains equal), if a GP and patient pair were to decide against referring to their preferred provider (X), they would instead refer to the other providers that patients at the same practice have previously used.¹⁵² In particular, we assume that the proportion that would be referred to each provider would reflect the proportion of patients at the practice that had previously been referred to that provider. This is explained in more detail in the text box below.

¹⁵¹ Consistent with this assumption, evidence suggests that the higher is the GP's referral frequency to a particular hospital, the more likely the patient is to go to that hospital (see Beckert, W., Christensen, M. And Collyer, K. (2012): 'Choice of NHS-funded hospital services in England', The Economic Journal, Vol. 122, Issue 560, pp. 400-417).

¹⁵² As noted in paragraph # above, we have not observed which provider these patients chose when they could not chose Provider X, nor have we asked the patients which provider they would use if they did not choose Provider X. Instead we have used the choices of patients and GPs within the same practice, which we expect will be relatively homogenous (though less so than under the ordinal approach), to inform a sensible view of the likely destination of these patients, if they were to switch away from using Provider X.

For example we might observe that at a particular GP practice: 60 patients chose Provider X; 30 chose Provider Y, and 10 chose Provider Z.

In this case, of the patients that didn't choose Provider X, 75% chose Provider Y (i.e. $30/(30+10)$) and 25% chose Provider Z (i.e. $10/(30+10)$).

If we assume that the 60 patients that had chosen Provider X as their first choice were to switch away in response to a reduction in relative quality we assume that 75% of them would then choose Provider Y and 25% of them would choose Provider Z. 75% of 60 referrals is 45 referrals.

Therefore, if the 60 referrals from this GP practice were to switch to another provider, then under this approach, we expect 45 would switch to provider Y and the other 15 would switch to Provider Z.

46. As in the ordinal methodology we considered it reasonable to assume that GPs would switch to hospitals to which they already refer.

North Bristol NHS Trust

47. The following paragraphs describe the likely alternative providers for those patients who were referred to North Bristol for treatment in the services that are being merged. The alternatives are ranked according to the estimated share of North Bristol's referrals that, if they were to switch anywhere, would be likely to switch to the rival in question. As explained above, this analysis does not tell us which referrals are more likely to be switched than others (that is, which referrals are more marginal than others).¹⁵³ However we expect that the higher the percentage reported in the table, the more likely it is that any marginal referrals that do exist, will be marginal in the sense that they choose between the provider and the rival in question. We therefore report firstly which provider appears to be the most important rival for the largest share of referrals, and, secondly, the share of referrals for which that provider is the best alternative, which indicates the confidence with which we can identify that rival as the closest competitor.¹⁵⁴

*Symptomatic Breast Services*¹⁵⁵

48. Table 1 below indicates that University Hospitals Bristol FT is the most important alternative provider for patients referred to North Bristol NHS Trust for symptomatic breast services. That is, our GP referral analysis (using the ordinal method) suggests that 78 per cent of those referrals to North Bristol Trust which would switch provider might switch to University Hospitals Bristol FT in the event of a reduction in quality of provision at North Bristol Trust. Royal United Hospital Bath, Gloucestershire Hospitals, and Weston Area Health Trust, are then the best alternative for between 4 and 6 per cent of the referrals to North Bristol. The results from the proportional methodology are consistent with those from the ordinal methodology.

¹⁵³ We do not consider for example that a GP practice with a 90/10 referral split is more marginal than one with a 50/50 split.

¹⁵⁴ Again we note that a rival may be the closest competitor without there being any providers that are particular strong competitors (the closest of a weak group of rivals).

¹⁵⁵ Including all inpatient elective procedures under HRG chapter JA

Table 1. Elective symptomatic breast services at North Bristol NHS Trust, January 2010 – December 2011¹⁵⁶

Hospital	Ordinal Method (%)	Proportional Method (%)
University Hospitals Bristol NHS FT	78.2	76.7
Gloucestershire Hospitals Trust	5.9	6.3
Weston Area Health Trust	5.2	5.5
Royal United Hospital Bath Trust	4.2	6.5
Taunton & Somerset NHS FT	0.3	1.6
Yeovil District Hospital NHS FT	0.1	0.8
Great Western Hospitals NHS FT (Swindon)	0.1	0.8
Salisbury NHS FT	-	0.1
UKSH	0.1	0.0
BMI Healthcare	-	0.0
Others	0.7	1.1
Referring only to North Bristol Trust ¹⁵⁷	0.7	0.7
North Bristol Trust not in top 2 ¹⁵⁸	5.7	-
Duplicates ¹⁵⁹	-1.1	-
Total	100	100

Source: CCP Analysis

Ear, Nose & Throat services (ENT)¹⁶⁰

49. Table 2 below suggests that UKSH and University Hospitals Bristol FT are the two most important alternative providers for patients referred to North Bristol for ENT services. However, as referred to in the main report, we note that the current pattern of referrals has been encouraged by other providers and commissioners and so may exaggerate the importance of UKSH as an option for patients and GPs in future.
50. The ordinal methodology suggests that Weston Area Health NHS Trust is a more important alternative than the proportional methodology would suggest. In contrast the proportional methodology suggests that Spire is the best alternative for 8 per cent of referrals. This suggests Spire is often ranked third or fourth within a GP practice whilst Weston Area Health NHS Trust and UKSH tend to be ranked first or second.

¹⁵⁶ We take a period of two years in order to increase the number of referrals upon which the analysis is based.

¹⁵⁷ This suggests that 0.6 per cent of referrals to hospital X came from GP practices that referred only to hospital X. The data therefore does not allow us to make any inferences about the likely alternative for these referrals.

¹⁵⁸ This suggests that 5.3 per cent of referrals to hospital X come from GP practices that do not have hospital X in their top 2 referral destinations.

¹⁵⁹ Duplicates arise where two providers receive the same number of referrals from a GP practice. In this case those referrals are allocated to both providers.

¹⁶⁰ Including all procedures under the Ear, Nose & Throat Inpatient Specialty

Table 2. Elective ENT services at North Bristol NHS Trust, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
UKSH	43.4	35.8
University Hospitals Bristol NHS FT	32.7	34.9
Weston Area Health Trust	12.9	7.9
Taunton & Somerset NHS FT	1.3	3.4
Spire Healthcare	0.8	8.2
Royal United Hospitals Bath Trust	0.6	3.3
Gloucestershire Hospitals Trust	0.3	1.1
Yeovil District Hospital NHS FT	-	0.4
Great Western Hospitals NHS FT (Swindon)	-	0.3
Salisbury NHS FT	-	0.1
Circle Healthcare	-	0.0
BMI Healthcare	-	0.0
Others	0.7	4.5
Referring only to North Bristol Trust	0.1	0.1
North Bristol Trust not in top 2	10.3	-
Duplicates	-3.0	-
Total	100	100

Source: CCP Analysis

Head & Neck Cancer services¹⁶¹

51. Table 3 below suggests that University Hospitals Bristol FT is the most important alternative provider for patients referred to North Bristol for Head & Neck cancer services. A further 7 per cent of referrals originate at GP practices which only refer to North Bristol. The remaining local providers are each the best alternative provider for fewer than 3 per cent of North Bristol patients. The results from the proportional methodology are consistent with those from the ordinal methodology.

Table3. Elective head & neck cancer services at North Bristol NHS Trust, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
University Hospitals Bristol NHS FT	78.3	75.8
Taunton & Somerset NHS FT	2.9	4.1
Royal United Hospitals Bath Trust	2.6	2.5
Weston Area Health Trust	1.3	2.5
UKSH	1.3	0.6
Gloucestershire Hospitals Trust	0.6	0.6
Yeovil District Hospital NHS FT	0.3	0.3
Salisbury NHS FT	-	0.2
Great Western Hospitals NHS FT (Swindon)	-	0.1
Others	5.1	6.3

¹⁶¹ Including all procedures under diagnosis group 'Cancer of Head and Neck'

Appendix 3

Referring only to North Bristol Trust	7.0	7.0
North Bristol Trust not in top 2	4.8	-
Duplicates	-4.1	-
Total	100	100

Source: CCP Analysis

*Maxillofacial Surgery*¹⁶²

52. Table 4 below suggests that University Hospitals Bristol FT is the most important alternative provider for patients referred to North Bristol Trust for maxillofacial services. The results from the proportional methodology are consistent with those from the ordinal methodology.
53. We note that the relatively high proportion of GP practices referring only to North Bristol Trust (26 per cent), appears to be a result of the small number of referrals for maxillofacial surgery to North Bristol Trust.

Table 4. Elective Maxillofacial surgery at North Bristol NHS Trust, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
University Hospitals Bristol NHS FT	63.1	58.1
Royal United Hospitals Bath Trust	4.4	3.5
Weston Area Health Trust	3.7	3.3
Gloucestershire Hospitals Trust	3.7	2.8
Taunton & Somerset NHS FT	2.0	2.1
Great Western Hospitals NHS FT (Swindon)	0.3	0.1
Salisbury NHS FT	-	0.2
Yeovil District Hospital NHS FT	-	0.0
Others	6.4	4.1
Referring only to North Bristol Trust	25.8	25.8
North Bristol Trust not in top 2	2.0	-
Duplicates	-11.5	-
Total	100	100

Source: CCP Analysis

*Oral Surgery*¹⁶³

54. Table 5, below, suggests that University Hospitals Bristol FT is the most important alternative provider for patients referred to North Bristol Trust for oral surgery. The ordinal analysis suggests that UKSH is the best alternative for less than 1 per cent of referrals. However the proportional analysis suggests that it is the best alternative for 10 per cent of referrals. This result suggests that UKSH is very rarely the first or second most common provider for a GP practice. In contrast the relative importance of Gloucestershire Hospitals is more stable and it is the best alternative for around 6% under both methodologies.

¹⁶² Including HRG codes CZ16, CZ17, CZ18

¹⁶³ Including all procedures under Oral Surgery Inpatient Specialties

Table 5. Elective Oral Surgery services at North Bristol NHS Trust, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
University Hospitals Bristol NHS FT	88.1	77.8
Gloucestershire Hospitals Trust	5.6	6.1
Taunton & Somerset NHS FT	0.5	0.8
UKSH	0.2	10.5
Great Western Hospitals NHS FT (Swindon)	0.2	0.3
Royal United Hospitals Bath Trust	0.0	2.5
Weston Area Health Trust	-	0.2
Yeovil District Hospital NHS FT	-	0.1
Salisbury NHS FT	-	0.1
BMI Healthcare	-	0.0
Spire Healthcare	-	0.0
Others	0.2	1.5
Referring only to North Bristol Trust	0.2	0.2
North Bristol Trust not in top 2	6.2	-
Duplicates	-1.1	-
Total	100	100

Source: CCP Analysis

*Urology Services*¹⁶⁴

55. Table 6, below, suggests that UHB is the most important alternative provider for patients referred to North Bristol Trust for elective urology services. Weston is the best alternative for approximately 8 per cent of referrals. The proportional results suggest that UKSH is the best alternative for nearly 5 per cent over referrals under this methodology, and may therefore be slightly more important than the ordinal methodology would suggest.

Table 6. Elective Urology services at North Bristol NHS Trust, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
University Hospitals Bristol NHS FT	80.6	71.8
Weston Area Health Trust	8.1	8.8
Gloucestershire Hospitals Trust	2.3	3.3
Royal United Hospitals Bath Trust	1.8	3.4
Yeovil District Hospital NHS FT	1.0	1.3
Taunton & Somerset NHS FT	0.4	1.6
Great Western Hospitals NHS FT (Swindon)	0.3	1.3
UKSH	0.1	4.9
Salisbury NHS FT	0.0	0.8
BMI Healthcare	0.0	0.2

¹⁶⁴ Including all inpatient elective procedures under HRG sub-chapter LB - Urological & Male Reproductive System Procedures & Disorders

Appendix 3

Circle Healthcare	-	0.2
Spire Healthcare	-	0.0
Others	0.4	2.0
Referring only to North Bristol Trust	0.6	0.6
North Bristol Trust not in top 2	5.3	-
Duplicates	-0.8	-
Total	100	100

Source: CCP Analysis

University Hospitals Bristol NHS FT

56. In this section we repeat the analysis but looking at the most important alternative providers for patients who were referred to University Hospitals Bristol FT for treatment in the merging service areas. The analysis takes place over the same time period as that used above. University Hospitals Bristol FT will run the merged head and neck cancer, ENT, and OMF services.

Symptomatic Breast Services

57. Table 7 suggests that North Bristol Trust is the most important alternative provider for those patients referred to UHB for symptomatic breast services (as University Hospitals Bristol FT was to North Bristol). Weston would be the best alternative for approximately 7 per cent of referrals to UHB. The results from the proportional methodology are consistent with those from the ordinal methodology.

Table 7. Elective breast services at University Hospitals Bristol NHS FT, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
North Bristol Trust	79.7	79.2
Weston Area Health Trust	6.9	6.4
Royal United Hospitals Bath Trust	1.3	3.0
Gloucestershire Hospitals Trust	1.1	1.8
Taunton & Somerset NHS FT	-	0.9
Yeovil District Hospital NHS FT	-	0.1
Great Western Hospitals NHS FT (Swindon)	-	0.1
UKSH	-	0.1
Salisbury NHS FT	-	0.0
BMI Healthcare	-	0.0
Others	0.1	1.1
Referring only to University Hospitals Bristol NHS FT	7.2	7.2
University Hospitals Bristol NHS FT not in top 2	5.5	-
Duplicates	-1.9	-
Total	100	100

Source: CCP Analysis

Ear, Nose and Throat (ENT)

58. Table 8 below indicates that North Bristol is the most important alternative provider for patients referred to University Hospitals Bristol FT for ENT procedures. It also suggests that UKSH is an important alternative provider and is the best alternative for 30 per cent of the ENT referrals to University Hospitals Bristol FT. However we again caution that the current pattern of referrals has been encouraged by providers and commissioners and so may exaggerate the importance of UKSH as an option for patients and GPs in future.
59. We note the high proportion of referrals that come from GPs for whom University Hospitals Bristol FT is not one of their top two most commonly preferred providers. This might be due to University Hospitals Bristol FT attracting referrals from a wide catchment. Under the proportional analysis Spire is the best alternative for 8 per cent of referrals but the results are broadly consistent with the ordinal analysis. This suggests the distribution of the referrals in the “University Hospitals Bristol Ft not in top 2” category of the ordinal analysis is broadly the same as the distribution of referrals between providers in the ordinal analysis. This lack of a systematic difference therefore strengthens our confidence in the results obtained from the ordinal analysis.

Table 8. Elective ENT services at University Hospitals Bristol NHS FT, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
North Bristol Trust	55.9	47.8
UKSH	30.0	31.5
Spire Healthcare	3.7	8.1
Royal United Hospitals Bath Trust	1.1	4.0
Taunton & Somerset NHS FT	0.2	1.8
Gloucestershire Hospitals Trust	0.2	0.7
Weston Area Health Trust	-	2.0
Great Western Hospitals NHS FT (Swindon)	-	0.2
Circle Healthcare	-	0.1
Yeovil District Hospital NHS FT	-	0.1
Salisbury NHS FT	-	0.0
BMI Healthcare	-	0.0
Others	1.4	3.9
Referring only to University Hospitals Bristol NHS FT	0.1	0.1
University Hospitals Bristol NHS FT not in top 2	20.8	-
Duplicates	-13.3	-
Total	100	100

Source: CCP Analysis

Head & Neck Cancer services

60. Table 9 below suggests that North Bristol is the most important alternative provider for patients referred to University Hospitals Bristol FT for head & neck cancer services and also that 21 per cent of UHB's referrals come from GP practices which only refer to University Hospitals Bristol FT for Head & Neck cancer services. Taunton and Royal United Hospitals Bath are each the best alternative for approximately 10 per cent of University Hospitals Bristol's referrals. The results from the proportional methodology are consistent with those from the ordinal methodology.

Table 9. Head and Neck Cancer services at University Hospitals Bristol NHS FT, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
North Bristol Trust	54.5	52.0
Royal United Hospitals Bath Trust	10.4	8.9
Taunton & Somerset NHS FT	10.2	9.4
Weston Area Health Trust	0.8	1.4
Gloucestershire Hospitals Trust	0.6	0.6
Great Western Hospitals NHS FT (Swindon)	0.1	0.1
UKSH	0.1	0.0
Salisbury NHS FT	-	0.4
Yeovil District Hospital NHS FT	-	0.2
Others	6.5	6.4
Referring only to University Hospitals Bristol NHS FT	20.6	20.6
University Hospitals Bristol NHS FT not in top 2	0.5	-
Duplicates	-4.1	-
Total	100	100

Maxillofacial Surgery

61. Table 10, below, indicates that North Bristol is the most important alternative provider for patients referred to UHB for maxillofacial services and also that 10 per cent of University Hospitals Bristol FT's referrals come from GP practices which only refer to UHB these services. Royal United Hospitals Bath is the best alternative for approximately 10 per cent of referrals to UHB. The results from the proportional methodology are consistent with those from the ordinal methodology.

Table 10. Maxillo-Facial services at University Hospitals Bristol NHS FT, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
North Bristol Trust	72.4	64.7
Royal United Hospitals Bath Trust	10.2	9.4
Taunton & Somerset NHS FT	5.3	4.1
Weston Area Health Trust	3.6	2.4
Gloucestershire Hospitals Trust	3.6	3.4
Salisbury NHS FT	0.9	0.4
Great Western Hospitals NHS FT (Swindon)	-	0.2

Appendix 3

Yeovil District Hospital NHS FT	-	0.1
Others	8.0	5.1
Referring only to University Hospitals Bristol NHS FT	10.2	10.2
University Hospitals Bristol NHS FT not in top 2	2.7	-
Duplicates	-16.9	-
Total	100	100

Source: CCP Analysis

Oral Surgery

62. Table 11, below, suggests that North Bristol is the most important alternative provider for those patients referred to UHB for oral surgery. UKSH is the best alternative for 12 per cent of referrals under the ordinal methodology however this rises to 22 per cent under the proportional methodology; as noted above this suggests that in GP practices that refer to UHB for oral surgery, UKSH often receives the third or fourth most referrals.

Table 11. Elective Oral Surgery services at University Hospitals Bristol NHS FT, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
North Bristol Trust	75	62.0
UKSH	12.1	21.8
Weston Area Health Trust	3.3	4.5
Royal United Hospitals Bath Trust	2.5	4.8
Taunton & Somerset NHS FT	2.1	1.7
Gloucestershire Hospitals Trust	1.0	1.8
Great Western Hospitals NHS FT (Swindon)	0.1	0.5
Salisbury NHS FT	0.1	0.3
Yeovil District Hospital NHS FT	-	0.4
BMI Healthcare	-	0.1
Spire Healthcare	-	0.0
Others	0.2	1.9
Referring only to University Hospitals Bristol NHS FT	0.2	0.2
University Hospitals Bristol NHS FT not in top 2	5.6	-
Duplicates	-2.2	-
Total	100	100

Source: CCP Analysis

Urology Services

63. Table 12 suggests that North Bristol is the most important alternative provider for those patients that are referred to UHB for elective urology services. Royal United Hospitals Bath is the best alternative for approximately 3 per cent of referrals. The results from the proportional methodology are consistent with the ordinal methodology.

Table 12. Elective Urology services at University Hospitals Bristol NHS FT, January 2010 – December 2011

Hospital	Ordinal Method (%)	Proportional Method (%)
North Bristol Trust	92.9	87.2
Royal United Hospitals Bath Trust	2.9	3.5
Taunton & Somerset NHS FT	0.0	0.5
Weston Area Health Trust	-	3.4
UKSH	-	2.7
Gloucestershire Hospitals Trust	-	0.4
Yeovil District Hospital NHS FT	-	0.4
Salisbury NHS FT	-	0.4
Circle Healthcare	-	0.4
Great Western Hospitals NHS FT (Swindon)	-	0.1
BMI Healthcare	-	0.1
Spire Healthcare	-	0.0
Others	-	1.0
Referring only to University Hospitals Bristol NHS FT	0	0
University Hospitals Bristol NHS FT not in top 2	5.8	-
Duplicates	-1.6	-
Total	100	100

Source: CCP Analysis

Conclusion on the analysis

64. The analysis suggests that across the merging services the parties are, for a large proportion of the referrals that they receive, consistently the most important alternative provider to one other. On the basis of the data it would appear that UKSH are also an important alternative for ENT services. However, as noted in the main text, the context in which these referrals were received means that we do not place the same interpretation upon the results of UKSH that we would have if the referrals were achieved through free patient choice and were paid for at a marginal price equal to the national tariff.

APPENDIX 4: TIME TREND ANALYSIS

1. This appendix explains the time trend analysis that forms one element of the analysis of the competitive effects set out in the body of this paper. In this appendix we review how the share of elective inpatient referrals had changed over the past six years. We consider that these changes in share may provide an insight into the substitutability of the services offered by the parties (i.e. referrals switching between providers). We examined the share of referrals from a wide area that includes GP practices located in the former PCTs of Bristol, North Somerset, South Gloucestershire, and, Bath and North East Somerset. We note that these should not be interpreted as market shares.¹⁶⁵ Rather these are the share of referrals received within an administrative area. This means the shares themselves do not provide insight into the competitive constraints exerted by different providers. However changes in the shares may indicate that referrals are being switched between providers and may therefore give some insight into the substitutability of the services offered by the parties.
2. We examined the referrals that were made to: ENT, Oral, maxillo-facial, Head & Neck Cancer, Urology, and Breast services. We did not distinguish between standard and more specialist procedures in this analysis. We would expect that when one provider offers specialist services that others do not, this will be reflected in the share of referrals that they receive within that service. However we would not expect the provision of specialist services to drive changes in the share of referrals since referrals to these specialist services are likely to be small in number and stable over time. Therefore we focus on significant changes in shares, and at which providers' expense these changes appear to occur, rather than drawing conclusions on the size of the share itself.
3. As a caveat to this analysis we note that the analysis does not control for factors other than substitution that might also drive changes in the share of referrals. We have considered whether there are possible alternative explanations of these changes, and invite the parties to submit any further explanations of which we are unaware. However, in the absence of an alternative explanation, we interpret one provider gaining share at the expense of another as being consistent with a degree of substitutability between those providers.
4. We note however that this is a one-way test in the sense that the absence of changes in shares should not be interpreted as suggesting a lack of substitutability. For example if patients and GPs consider two providers to be good substitutes but do not switch between them (for example if they are satisfied with the quality of the service) then the referral pattern will remain stable despite the providers being substitutable.

Ear, Nose and Throat Services (ENT)

5. In ENT services we note that the data suggests that for 2008/09 when North Bristol Trust increased its share of inpatient elective ENT referrals, this came at the expense of University Hospitals Bristol FT, and vice-versa. However the most significant trend is the increase in the share of "others" from 2009 onwards. As set out in the body of this paper and illustrated in

¹⁶⁵ We have not precisely defined the scope of the geographic market

figure 2 this was attributed to the entry of UK Specialist Hospitals. However, as noted in the body of this paper at paragraph [x], the context in which this increase in share took place means that we have not placed the same interpretation upon the results of UK Specialist Hospitals that we would have if the increase in the share of referrals had been achieved through free patient choice and had been paid for at a marginal price equal to the national tariff. As a result we expect that the competitive constraint exerted by UK Specialist Hospitals is in fact weaker than that which is suggested by the rapid growth of referrals to UK Specialist Hospitals. This rapid growth between 2009 and 2012 is therefore better seen as sponsored entry. We note for example that since summer 2012 the share of referrals to UK Specialist Hospitals may have begun to decline (see figure 3). This supports a cautious interpretation of the strength of constraint offered by UK Specialist Hospitals when it ceases to receive directed (rather than competed for) referrals.

Figure 1. Elective inpatient ENT referrals in Bristol, North Somerset, South Gloucestershire, and, Bath and North East Somerset

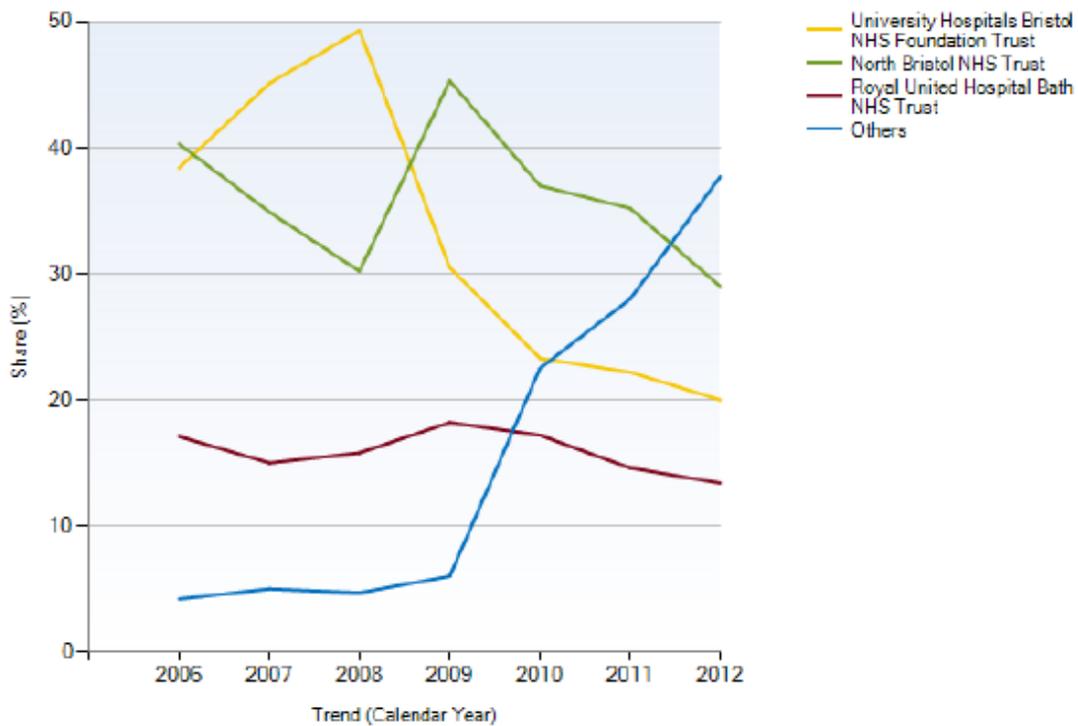


Figure 2. Elective inpatient ENT referrals in Bristol, North Somerset, and, South Gloucestershire

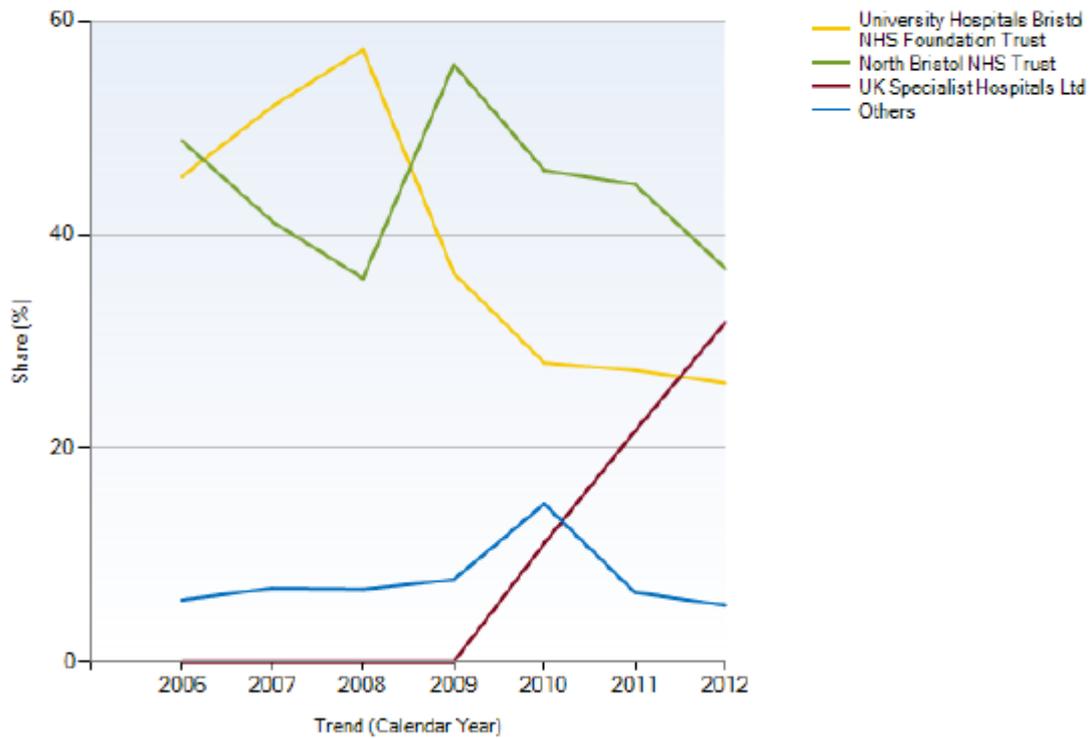
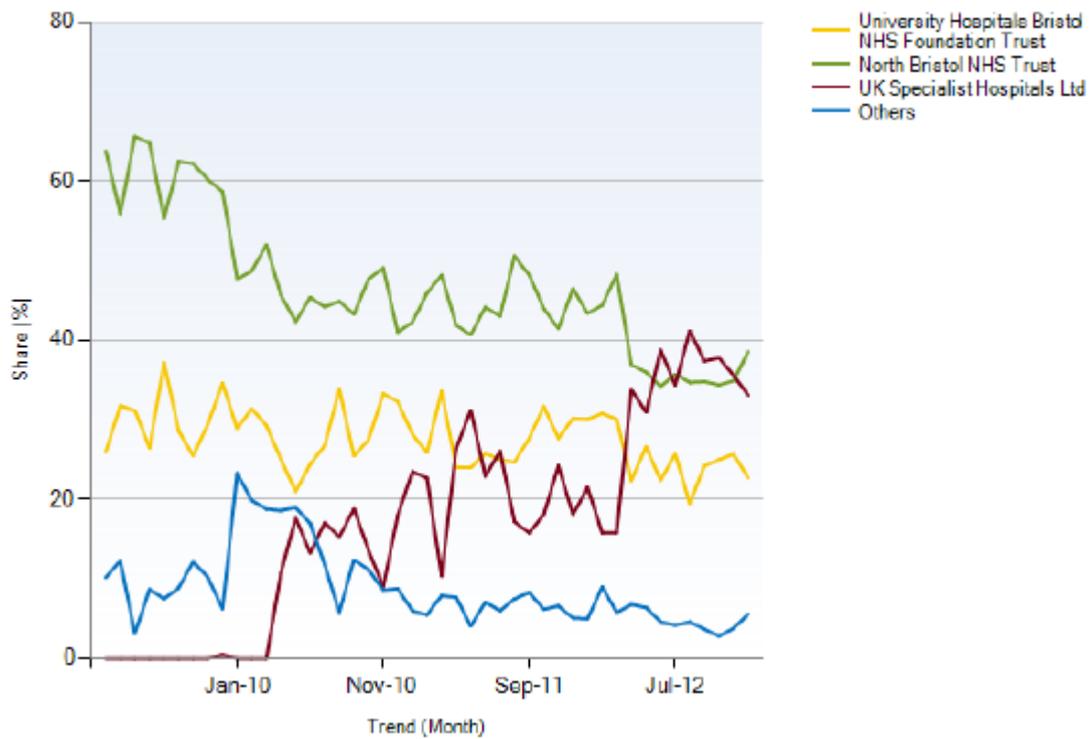


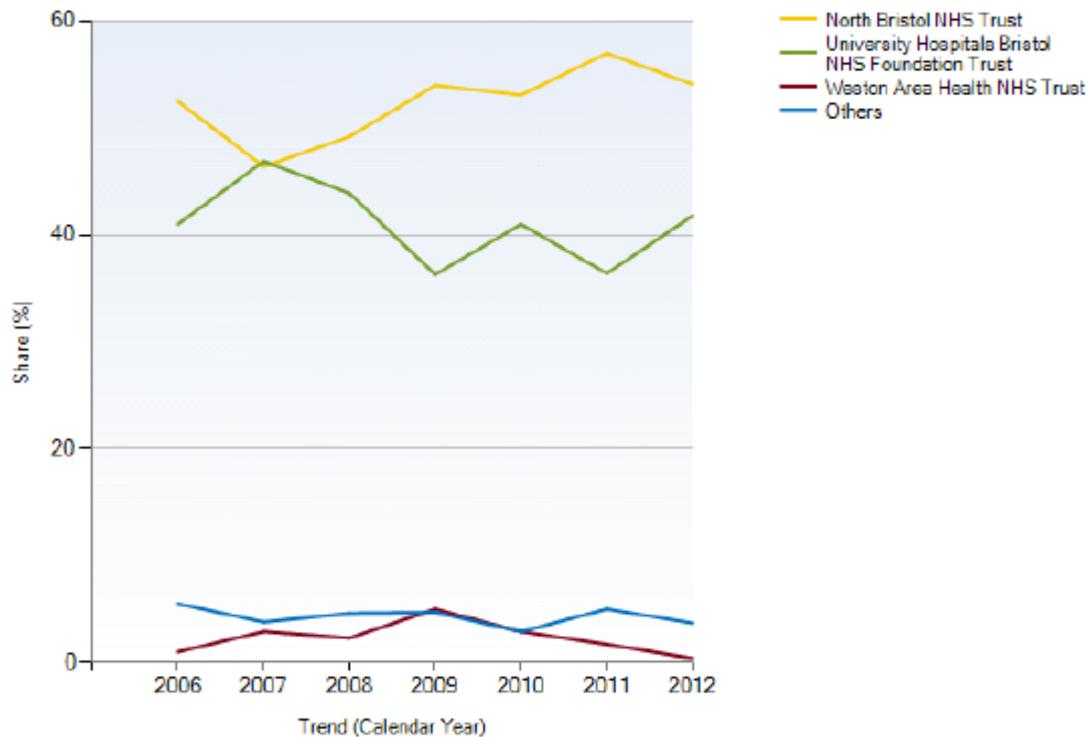
Figure 3. Elective inpatient ENT referrals in Bristol, North Somerset, and, South Gloucestershire



Maxillo-facial surgery services¹⁶⁶

- Figure 4 suggests that when North Bristol Trust increases its share of inpatient elective referrals, this comes at the expense of University Hospitals Bristol FT, and vice-versa. This suggests a degree of substitutability between University Hospitals Bristol FT and North Bristol Trust.

Figure 4. Elective inpatient maxillo-facial surgery referrals in Bristol, North Somerset, South Gloucestershire and, Bath and North East Somerset



Oral surgery services

- In oral surgery we can see in figure 5 that University Hospitals Bristol FT lost a significant share of referrals in 2009/10 to “others”. Notably North Bristol Trust was not affected in the same way. Figure 6 suggests this reflected the growth of UK Specialist Hospitals. As in ENT services this would suggest that UK Specialist Hospitals play an important role in at least some oral surgery services. However the same caveats regarding the interpretation of the ENT results apply here (i.e. the change in shares was to some degree artificially inflated).

¹⁶⁶ In order to analyse maxillo-facial surgery we used HRG codes to define the relevant referrals since the inpatient specialty codes suggested that North Bristol Trust did not provide maxillo-facial services, while the HRG codes suggested it was being paid for providing maxillo-facial services.

Figure 5. Elective inpatient oral surgery referrals in Bristol, North Somerset, South Gloucestershire and, Bath and North East Somerset

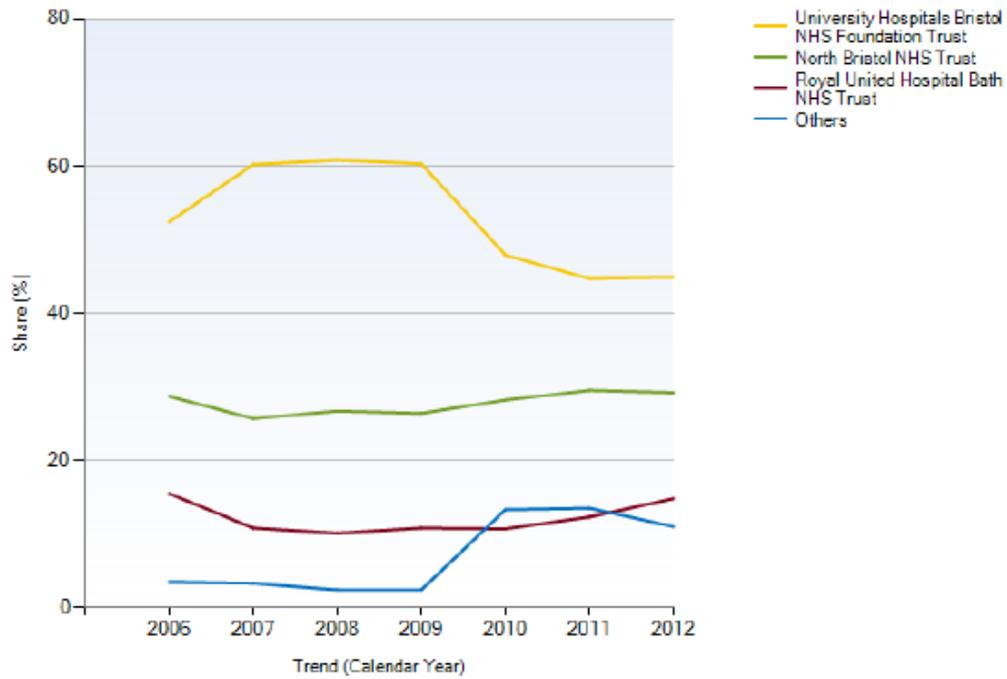
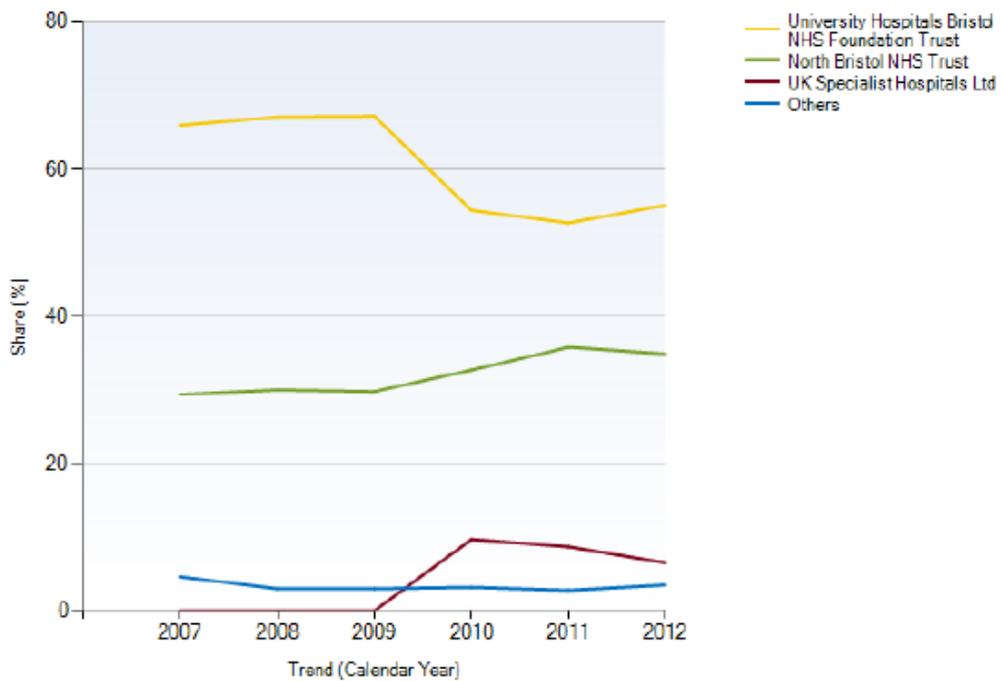


Figure 6. Elective inpatient oral surgery referrals in Bristol, North Somerset, and, South Gloucestershire



Head and Neck Cancer services

8. In head and neck cancer services figure 7 suggests that when University Hospitals Bristol FT increases its share of inpatient elective referrals, this comes at the expense of North Bristol Trust, and vice-versa. This suggests a degree of substitutability between University Hospitals Bristol FT and North Bristol Trust.

9. Since this head and neck cancer services are a specialist service we also checked whether the share of patterns across a wider area had changed. Figure 8 suggests that when University Hospitals Bristol FT increases its share of inpatient elective referrals, this comes at the expense of both North Bristol Trust and Royal United Hospital Bath NHS Trust, and vice-versa. This suggests a degree of substitutability between University Hospitals Bristol FT and Royal United Hospital Bath NHS Trust (as well as between University Hospitals Bristol FT and North Bristol Trust).

Figure 7. Elective inpatient head and neck cancer referrals in Bristol, North Somerset, and South Gloucestershire

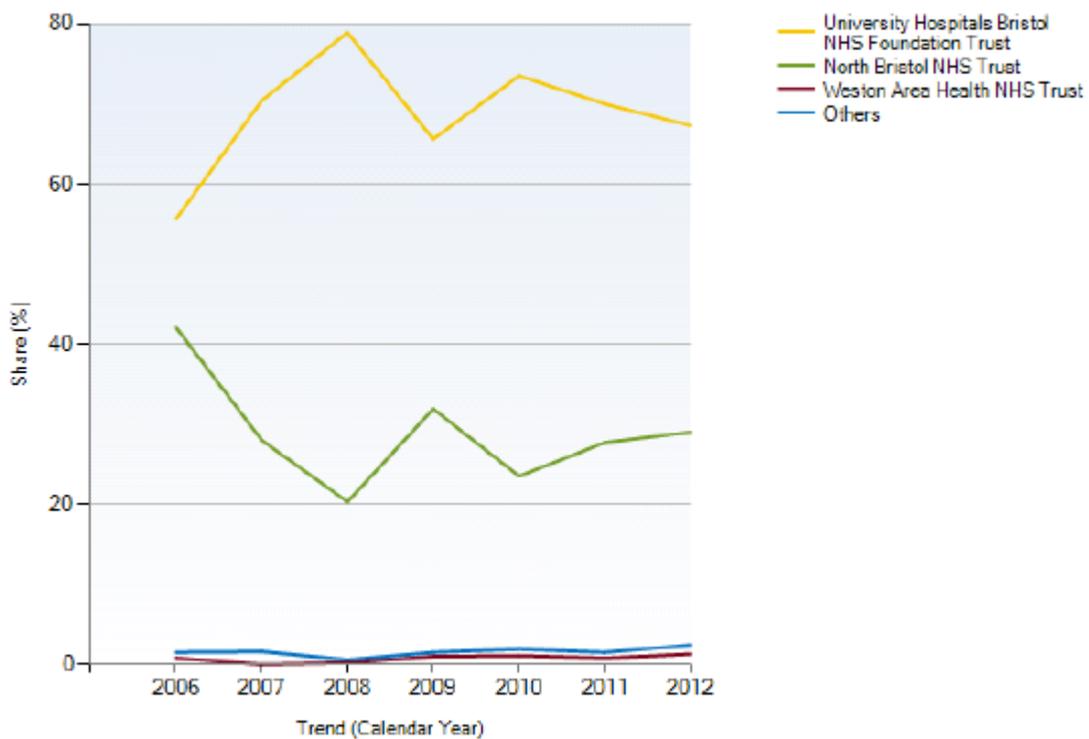
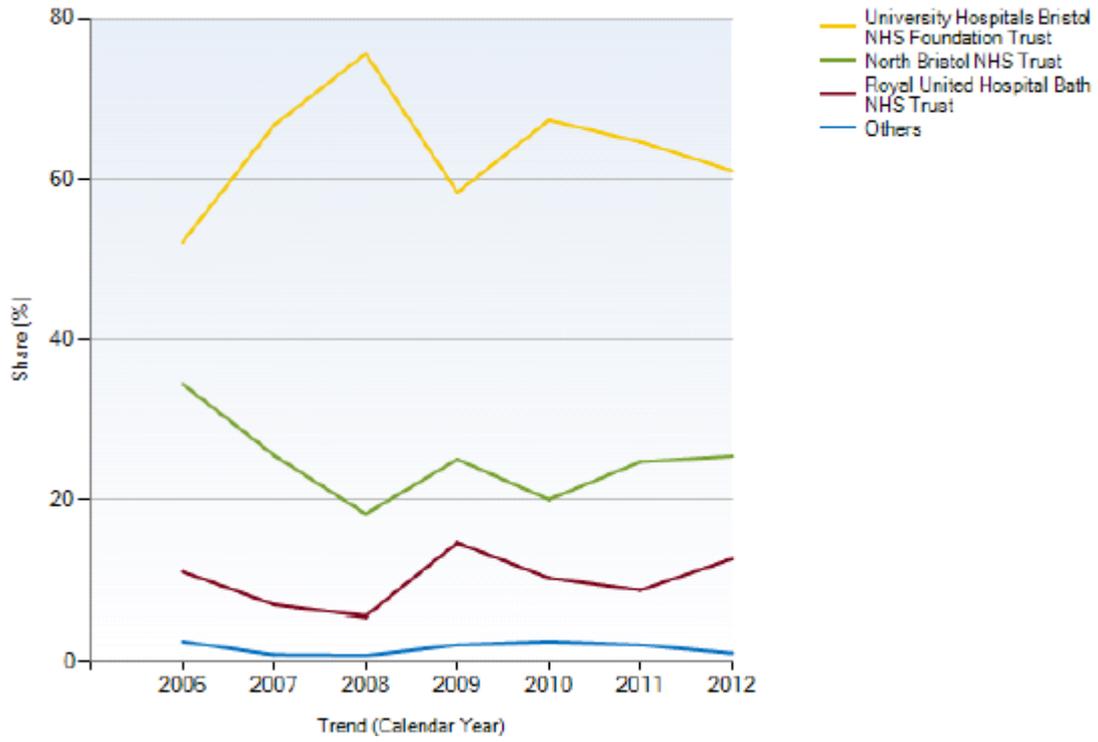


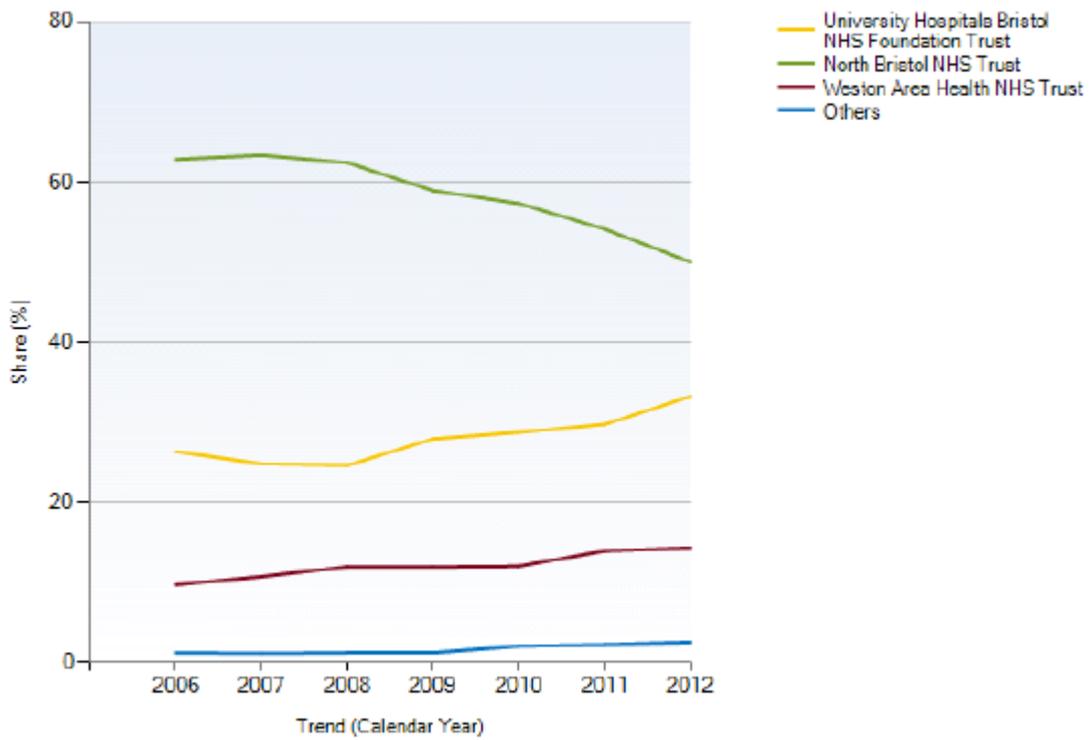
Figure 8. Elective inpatient head and neck cancer referrals in Bristol, North Somerset, South Gloucestershire, and, Bath and North East Somerset



Urology services

10. We know that complex urological cancer services and kidney stone services were consolidated at North Bristol Trust in 2006. Since 2008 we can see from figure 9 that North Bristol Trust has lost a significant proportion of its referrals. These appear to have largely diverted towards University Hospitals Bristol FT.

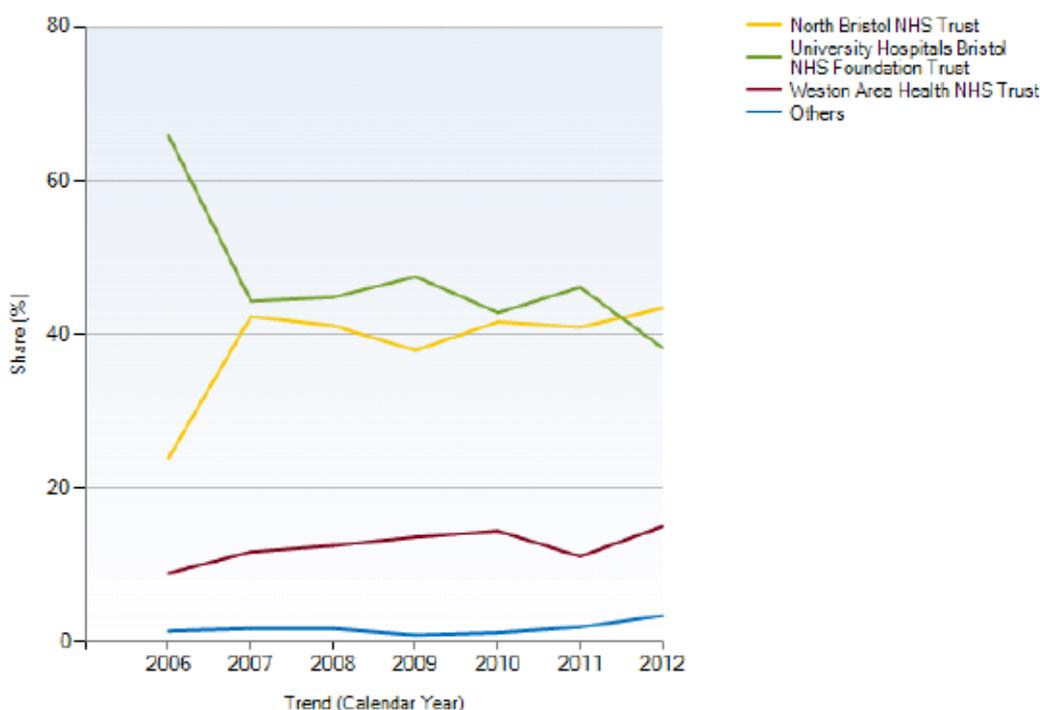
Figure 9. Elective inpatient urology referrals in Bristol, North Somerset, and South Gloucestershire



Breast Services¹⁶⁷

11. In breast services there do not appear to have been large changes in referral patterns since 2007 (see figure 10). However in 2007 North Bristol Trust gained a large share of referrals. These appear to have been achieved at the expense of University Hospitals Bristol FT which would suggest a degree of substitutability between the two providers.

Figure 10. Elective inpatient breast service referrals in Bristol, North Somerset, and South Gloucestershire



Implications of analysis

12. The evidence reviewed here on changes in referral patterns over time provides a number of useful insights. Firstly UK Specialist Hospitals has made significant gains in ENT services and Oral surgery services. This suggests that patients and GPs are willing to switch to UK Specialist Hospitals for treatment in those services that it provides within ENT and Oral surgery. However, as noted in the body of this paper, the context in which these referrals were achieved means that we do not place the same interpretation upon the results of UK Specialist Hospitals that we would have if the referrals were achieved through free patient choice and were paid for at a marginal price equal to the national tariff.
13. Secondly in each service we observe that when University Hospitals Bristol FT increases its share of inpatient elective referrals, this tends to come at the expense of North Bristol Trust, and vice-versa. This is consistent with referrals being switched between the two providers and suggests a degree of substitutability between University Hospitals Bristol FT and North Bristol Trust.¹⁶⁸ Similarly in head and neck cancer services it appears that when University Hospitals Bristol FT

¹⁶⁷ In order to analyse symptomatic breast services we used HRG codes to define the relevant.

¹⁶⁸ This is also consistent with the results of other analysis and evidence that we have reviewed.

Appendix 4

increases its share of inpatient elective referrals, this comes at the expense of both North Bristol Trust and Royal United Hospital Bath NHS Trust, and vice-versa, which suggests a degree of substitutability between University Hospitals Bristol FT and Royal United Hospital Bath NHS Trust in this specialist service.

APPENDIX 5: COMPETITION FOR COMMUNITY SERVICES

1. We analysed whether the merger would be likely to reduce patient choice and competition in community ENT, OMF and urology services in the Bristol, North Somerset and South Gloucestershire area. In order to assess the effect of the merger on community services we first assess the extent of competition between North Bristol Trust and University Hospitals Bristol FT in absence of the merger and post-merger. Next we assess the likely pool of bidders for relevant community services contracts following the merger and the extent to which they would be able to offer commissioners a credible alternative to the merging parties.

The extent of competition between the parties in absence of the merger

2. For a merger to reduce competition it must be likely that the parties would compete with each other in the relevant services if the merger does not proceed. This section therefore discusses the likely extent of competition in provision of relevant community services between the parties in absence of the merger.¹⁶⁹
3. For each of the relevant services, our assessment of the likely extent of competition between the parties for services provided in the community is informed by two factors:
 - i. The degree of competition between the parties prior to the merger; and
 - ii. An assessment of how this is likely to have developed in the future if the merger did not take place.

Degree of competition between the parties prior to the merger

4. North Bristol Trust is the primary provider of a wide range of community health services in South Gloucestershire having acquired the portfolio of services previously provided by South Gloucestershire PCT. North Bristol Trust's recent community bidding activity has been focused on Bristol, North Somerset and South Gloucestershire, but has also included a successful application for AQP accreditation to provide community weight management in Wiltshire. North Bristol Trust has also collaborated with specialist community providers to bid for services. In the ENT and OMF specialties, North Bristol Trust successfully applied for AQP accreditation to provide adult hearing services in the Bristol, North Somerset and South Gloucestershire area. North Bristol Trust does not provide any further ENT or OMF services as part of its community contract in South Gloucestershire. In the urology specialty North Bristol Trust provides continence services to South Gloucestershire as part of its portfolio of community services.
5. University Hospitals Bristol FT has competed for tenders and applied for AQP accreditation to provide a number of services since 2009; most of this activity has been focused in Bristol, North Somerset and South Gloucestershire. However University Hospitals Bristol FT has also applied for AQP accreditation to provide community MRI scanning in Bath and North East Somerset. In the ENT and OMF specialties, University Hospitals Bristol FT has successfully applied for AQP accreditation to provide adult hearing services in the Bristol, North Somerset and South

¹⁶⁹ In our discussion of the counterfactual staff assessment is that it is appropriate to compare the merger's effect on competition with the situation that both merging parties continues to independently provide the relevant services.

Gloucestershire area. University Hospitals Bristol FT also jointly provides community urology in Bristol, North Somerset and South Gloucestershire area with a firm called GP Care under a contract which runs until 2014.

6. University Hospitals Bristol FT and North Bristol Trust also directly compete against each other to provide: Adult Hearing Services and community endoscopy services in Bristol, North Somerset and South Gloucestershire under AQP contracts. University Hospitals Bristol FT and North Bristol Trust also bid against each other to provide Children's' Community Health in Bristol, North Somerset and South Gloucestershire (won by North Bristol Trust).

How the degree of competition between the parties is likely to have developed in future

7. The intensity of competition between all NHS (and other) organisations for business with commissioners can be expected to increase in the coming years. This is because commissioners will need to seek better value for money for services in a more tightly constrained financial environment. This can be expected to lead to more robust negotiations with service providers and a more active assessment by commissioners of switching opportunities.
8. Further, NHS service providers will have stronger incentives to compete with other service providers for business in response to the greater pressure for financial sustainability. The stronger incentives include moving to foundation trust status, the greater possibility of financial failure, and the threat to their existing business that stems from commissioners looking for better value for money.
9. For these reasons staff's view is that both the number of opportunities to bid to provide relevant community services under exclusive or AQP contracts is likely to increase, and moreover that both University Hospitals Bristol FT and North Bristol Trust would likely have continued to compete to provide these services.

Degree of competition from third parties

10. We consider the extent to which third parties in the Bristol, North Somerset and South Gloucestershire area have previously, and would in future, provide a competitive constraint on the merging parties when bidding to provide community services under exclusive contract, or under an AQP designation. We set out below our analysis based on publicly available information and information received from the merger parties.
11. In Bristol and North Somerset the primary providers of a wide range of community health services are, respectively, Bristol Community Health and North Somerset Community Health. These organisations took over the portfolios of community services previously provided by the respective PCTs.
12. The services previously provided by PCTs in the areas surrounding Bristol and North Somerset are provided by Somerset Partnership, Gloucestershire Care Services, Sirona, and Great Western Hospitals (in Wiltshire). Sirona provide ENT and Urology services in Bath and North East Somerset and also in neighbouring areas. Our analysis indicates that there are also a number of

other providers that have, or would likely be willing to, bid for particular community health services in competition with the merging parties.

13. After the merger, it is therefore likely that a number of experienced providers will continue to bid to provide community ENT, OMF and urology services in the Bristol, North Somerset and South Gloucestershire area. It is also likely that local primary care provider groups and other independent sector providers that specialise in specific community services will increasingly monitor and bid for service that are tendered, or opened to AQP, in Bristol, North Somerset and South Gloucestershire.

Impact of analysis on costs in provision of community services

14. University Hospitals Bristol FT and North Bristol Trust both provide, and are active bidders for, community contracts in Bristol, North Somerset and South Gloucestershire and the surrounding areas. Staff's assessment is that absent the merger both would continue to compete to provide community ENT, OMF services in these areas.
15. Our analysis indicates that post-merger University Hospitals Bristol FT will continue to provide its existing community urology and ENT services, and North Bristol Trust is likely to continue to bid for a range of community services. We note, however, that the strength of the bids made by each provider may be affected by their loss of elective acute provision in the relevant service.
16. However our analysis indicates that there is likely to remain a range of experienced alternative providers that are likely to be willing and able to provide strong competitive bids for community service contracts in Bristol, North Somerset and South Gloucestershire. Therefore, our analysis indicates that this merger is unlikely to give rise to material costs due to a reduction in choice and competition for community ENT, OMF and urology services.

APPENDIX 6: COORDINATED EFFECTS

1. The analysis examined whether the merger could create or strengthen provider's incentive and/or ability to coordinate on the level of quality of and investment into their services (those at by the merger).
2. The standard analysis of coordinated effects involves the assessment of the following conditions. All three conditions must generally be satisfied for coordination to occur:¹⁷⁰
 - providers must be able to reach and monitor the terms of coordination;
 - coordination needs to be internally sustainable among the coordinating group – providers have to find it in their individual interests to adhere to the coordinated outcome; and
 - coordination needs to be externally sustainable in that there is little likelihood of coordination being undermined by competition from third parties.
3. We assess whether these conditions held for providers in the area prior to the merger.¹⁷¹ We then assess whether the merger might make any pre-existing coordination between the providers more stable or effective or, in the absence of pre-existing coordination, might create the conditions where such coordination was likely.

Scope for coordination between providers on those activities that are being merged

4. We proceeded by assessing each of the three conditions set out above in turn.

Ability to reach and monitor the terms of coordination

5. We consider that the first condition (the ability to reach and monitor the terms of coordination) was likely to be satisfied to some extent before the proposed merger. There are a small number of providers in the Bristol, North Somerset and South Gloucestershire area and they each have access to a range of information on their competitors' activities, outcomes, and costs.¹⁷² This makes it relatively easy for providers to observe an outcome on which they might agree, and then to detect when a provider deviates from the coordinated agreement. In the health sector there are also significant links between providers such as SLAs and Multidisciplinary team working. These links are likely to deliver substantial benefits for patients and taxpayers. However, these links can also be used to share strategic information and increase transparency between providers.
6. Given the existing levels of transparency we do not think it is likely that the merger would further increase the ability of providers to reach and monitor the terms of coordination.

¹⁷⁰ This approach is consistent with the Office of Fair Trading and Competition Commission approach. See paragraph 5.5.9 of the joint merger assessment guidelines available at www.competition-commission.org.uk/our_role/ms_and_fm/cc2_review.htm. This is also the approach used by the CCP in its *Merger Guidelines*.

¹⁷¹ This approach is consistent with the Office of Fair Trading and Competition Commission approach. See section 5.5.5 of the joint merger assessment guidelines available at www.competition-commission.org.uk/our_role/ms_and_fm/cc2_review.htm.

¹⁷² We also note that the programme board for reconfigurations in Bristol includes all providers in the area. This may therefore also facilitate the sharing of information that allows the providers to reach and monitor the terms of coordination that works against the interests of patients and taxpayers.

Internal sustainability

7. Coordination is more likely to be internally sustainable when providers do not have a significant incentive to deviate from the coordinated outcome (i.e. when payoffs from coordination are sufficiently high), and when other providers are able to discipline a deviation (via an effective punishment mechanism) to get back the coordinated outcome quickly.
8. We consider that this condition (internal sustainability of coordination) was unlikely to be satisfied before the proposed merger. While the links between the small number of providers could be used to incentivise compliance with a coordinated outcome (for example by providing a means to punish deviation through the link), we considered that asymmetry in service provision between the merged service and its remaining rivals and occasional shocks to demand would be likely to destabilise coordination:
9. Symmetry in service provision can help to align the incentives of the different providers. The more similar the range of services from each provider, the easier it is likely to be for providers to find common ground and to reach a tacit agreement on what constitutes a good outcome for each of the parties. Therefore it is less likely that the providers would deviate from the agreed outcome. However, in this case University Hospitals Bristol FT (for head and neck cancer, ENT, and OMF services) and North Bristol Trust (for urology and breast surgery services) provide a wider range and also more specialised set of services than most other providers in the area. As a result, agreeing upon a mutually beneficial outcome would be likely to be difficult. Furthermore, this may provide an incentive to deviate from a coordinated outcome for some providers.
10. While overall demand for healthcare is likely to be relatively stable and probably rising due to an ageing population, demand for services from individual providers can change sharply. This may serve to destabilise any coordination agreements. An example of where demand for services can vary sharply is when service reconfigurations occur. We note that there are plans for reconfiguration of health services in Bristol through the Healthy Futures Programme commissioned by Bristol, North Somerset and South Gloucestershire CCGs. The programme's aim is to improve local health services by developing new models for delivery of care. The changes resulting from the programme are expected to take place within the next three years (e.g. pathology).
11. While the merger reduces the number of providers and may therefore help the internal sustainability of coordination, we do not think the merger is likely to help the parties and their remaining local rivals to overcome the factors described above.

External sustainability

12. We consider that the third condition (external sustainability) was likely to be satisfied before the proposed merger. This is because while the ability of new providers to enter the market is likely to destabilise any coordination, barriers to entry in the area are likely to be significant.
13. Given the existing barriers to entry we do not think it is likely that the merger would further increase the external sustainability of coordination.

Scope for coordination between the parties on those activities that are not being merged

14. We also considered whether the merger might create or strengthen the providers' incentive and/or ability to coordinate to reduce their duplication in other services.
15. We are aware that further service reconfigurations are planned under the Bristol's Healthy Futures Programme (such as in pathology) and that post-merger, the parties will continue to provide community AQP services independently of one another. We therefore considered whether the merger is likely to have any impact on the parties' incentives or ability to coordinate to remove the duplication of services between them.
16. We consider that the parties already have the ability to monitor which services they are each providing and that the merger will not change that ability.
17. We considered the external stability of coordination between the parties to reduce duplication. As noted in paragraph [151] the significant barriers to entry into providing inpatient services mean that coordination is likely to be externally stable in relation to those services. However in relation to community AQP services these barriers do not apply and hence coordination to reduce duplication is likely to incentivise new entrants that can be expected to undermine the payoff from coordination. We would not expect the merger to alter these barriers to entry in either case.
18. The internal stability of co-ordination between the parties to reduce duplication depends on whether any additional surplus that the remaining provider earns as a result of coordinating outweighs the surplus that the exiting provider would have earned by continuing to provide the service. This condition is unlikely to be affected by whether other services have previously been consolidated (i.e. through this merger), unless there are cost or clinical advantages to them being consolidated at the same location as the services that are transferring. We could not rule out the possibility that there may be clinical advantages to consolidating services that are expected to be reconfigured in future, such as pathology, at the same location as the activities that are transferring under this merger. However, these clinical advantages apply to both the activities being consolidated at University Hospitals Bristol FT and those being consolidated at North Bristol Trust, therefore the merger would not appear likely to increase the internal stability to reduce duplication in service provision.
19. Therefore the merger is unlikely to enhance the existing incentives or ability of the merger parties to consolidate further services in the future.¹⁷³

Conclusion on coordinated effects

20. The analysis described above indicates that, prior to the proposed merger there were aspects of the local market for inpatient services that were not consistent with pre-existing coordination between providers. The analysis also indicates that the merger was unlikely to create conditions

¹⁷³ We note however that any services that are consolidated in future should be notified to the OFT as potential mergers prior to transfer.

where such coordination was likely. Therefore the analysis suggests that the merger is unlikely to materially affect the likelihood of the merged organisation and other providers reaching and sustaining a coordinated agreement to reduce the quality and investment in inpatient services. The analysis also suggests that the merger is unlikely to enhance the likelihood of the merger parties reaching and sustaining a coordinated agreement to further reduce their duplication of those activities that are not being merged.

Monitor, Wellington House, 133-155 Waterloo Road,
London SE1 8UG

Telephone: 020 3747 0000

Email: enquiries@monitor.gov.uk

Website: www.monitor.gov.uk

© Monitor (September 2013)

Publication code: IRREP 19/13

This publication can be made available in a number of other formats on request. Application for reproduction of any material in this publication should be made in writing to enquiries@monitor.gov.uk or to the address above.