Monitor

Making the health sector work for patients

Report on the proposed merger of Brighton and Sussex University Hospitals NHS Trust and Surrey and Sussex Healthcare NHS Trust's pathology services

www.monitor.gov.uk

Contents

Executive summary

1. Monitor has reviewed the proposed merger of the pathology services of Brighton and Sussex University Hospitals NHS Trust and Surrey and Sussex Healthcare NHS Trust. We completed the review in order to advise the NHS Trust Development Authority (NHS TDA)[1] on the impact of the merger on choice or competition, both of which incentivise hospitals to provide high quality, efficient services.

2. To reach a conclusion, we considered the possible impact on patients by assessing the proposed merger's likely effect on choice and competition in the following service areas:

    - direct access cold pathology services (purchased on behalf of GPs by clinical commissioning groups)
    - cold and hot pathology services (purchased by healthcare providers to assist in diagnosis and treatment of patients)
    - specialist pathology services[2]
    - elective and non-elective services.

What we found

3. We found that the merger was **not** likely to reduce incentives for:

    - pathology providers to compete against one another to provide direct access cold pathology services
    - pathology providers to compete against one another to provide cold and hot pathology services
    - the merged organisation to compete with other providers to provide specialist pathology services
    - the two merger parties to continue improving their elective and non-elective healthcare services.

[1] As the merger involves two NHS trusts, Monitor's role is to provide advice to the NHS TDA.
[2] All pathology services are described in Annex 1 of the full document.

Our conclusion

4. In summary, Monitor's advice to the NHS TDA is that the merger is not likely to have a negative effect on patients and taxpayers as a result of a loss of choice or competition in any of the service areas listed above.

Introduction

5. On 16 January 2014, Monitor accepted for review a proposed merger between parts of Brighton and Sussex University Hospitals NHS Trust (BSUH) and Surrey and Sussex Healthcare NHS Trust (SASH). The merger relates to the organisations' pathology services.[3]

6. For mergers involving only NHS trusts (rather than NHS foundation trusts), Monitor's role is advisory. We review the proposal and advise the NHS Trust Development Authority (NHS TDA) on the impact that the merger may have on patients and taxpayers as a result of its effect on choice and competition.

7. Our partnership agreement[4] with NHS TDA sets out our review process.[5]

8. This report covers both our review and our advice.

How we assess mergers

9. When we review proposed mergers that involve only NHS trusts, we assess the effects they may have on choice and competition. If we find there is a realistic prospect that the merger may result in a material adverse effect on patients and taxpayers (through a reduction of competition and choice), we then assess any benefits to patients that are likely to result from the merger. It was not necessary for us to assess any merger-specific benefits to patients, as a result of this transaction, as we concluded that the merger was not likely to result in material adverse effect on patients and taxpayers.

10. As set out in the partnership agreement, the NHS TDA will take account of our advice and any recommended actions.

What mergers we assess

11. For a transaction between NHS trusts to qualify as a merger and trigger a Monitor review, it must result in two previously independent organisations (or parts of organisations) coming under common management or control.[6]

---

[3] For a definition of pathology services, see Annex 1: Description of pathology services.
[4] www.ntda.nhs.uk/wp-content/uploads/2013/08/Monitor-and-NHS-Trust-Development-Authority-Partnership-Agreement.pdf
[5] The review process is consistent with that previously undertaken by the Co-operation and Competition Panel (CCP) and with the Office of Fair Trading's (OFT) process.
[6] Under the UK merger control regime, the OFT and the Competition Commission review qualifying mergers between NHS foundation trusts, between NHS foundation trusts and NHS trusts, and between NHS foundation trusts and other enterprises.The merger control regime in the UK is set out in Part 3 of the Enterprise Act 2002. Part 3 applies to 'relevant merger situations'. This covers a range of different kinds of arrangements, including mergers, acquisitions, joint ventures and other transactions. See further section 4 of the Competition & Markets Authority's guidance *Mergers: Guidance on the CMA's jurisdiction and procedur*e. Where the OFT (or, after 1 April 2014, the CMA) decides to review a merger involving an NHS foundation trust, Monitor has a statutory duty to provide

12. BSUH and SASH ('the parties') have told us that the merger will, in its initial stage, involve:

    - establishing a contractual joint venture and agreement of a supporting Heads of Terms
    - establishing a joint executive and joint management board
    - agreeing a common service specification and pricing structure
    - joint purchasing of laboratory consumables (ie items that are used and replaced).

13. Further details about the merger are set out below in the 'Details of the merger' section.

14. [✂].[7] Having considered the features of the proposed merger, in our view the proposal is likely to result in the previously independent pathology activities of the parties coming under common management or control.

15. For us to review a merger under the partnership agreement with the NHS TDA we expect it to meet a threshold for review. In applying that threshold we adopt an approach consistent with the process previously undertaken by the CCP and with the OFT's process. Under the approach previously used by the CCP, for a merger involving acute trusts to qualify for review, the revenue of the combined entity in the last financial year must exceed £70 million. The combined turnover of BSUH (£442.5 million) and SASH (£197 million) comfortably exceeds this threshold.

16. In deciding whether a merger qualifies for a review, the OFT also uses a £70 million turnover threshold.[8] In addition, a merger can qualify for review by the OFT on the basis of share of supply.[9]

More information on the parties

17. **Brighton and Sussex University Hospitals NHS Trust (BSUH)** is an acute teaching hospital working across two sites: the Royal Sussex County Hospital in Brighton and Princess Royal Hospital in Haywards Heath. It has 986 beds

---

advice to the OFT (or CMA) on any relevant patient benefits resulting from the merger. No specific role is set out in legislation for Monitor to assess mergers between NHS trusts. However, it has been agreed that Monitor will provide advice to the NHS TDA on the impact of mergers between NHS trusts.

[7] [✂].

[8] The OFT's turnover test, as applied to joint ventures, focuses on the venture being created. Generally the OFT deducts the value of continuing entities (ie those activities not being contributed to the joint venture by the participants) in calculating whether its £70 million threshold is exceeded.

[9] This threshold, called the 'share of supply test', is met if 25% of the services in a substantial part of the UK are provided by a single organisation; or together by the parties to the merger.

providing both District General Hospital services to the local populations in and around the City of Brighton and Hove, Mid Sussex and the western part of East Sussex and more specialised and tertiary services for patients across Sussex and the south east of England. Pathology services are available at both sites. BSUH treats over 750,000 patients per year and its total income from patient care activities in the financial year 2012/13 was £442.5 million, of which 5.2% (£22.8 million) was generated from pathology services.

18. **Surrey and Sussex Healthcare NHS Trust (SASH)** is a 612-bed acute hospital that provides a range of services for the population of East Surrey, West Sussex and East Croydon. It also provides services to patients from outside these areas as a result of its proximity to major transport links. It provides services mainly across two sites: East Surrey Hospital and Crawley Hospital (and also has services in Caterham, Oxted and Horsham). Pathology services are available at both main sites. SASH serves around 535,000 patients and its annual income from patient care activities in the financial year 2012/2013 was £197million, of which 6.8% (£13.5 million) was generated from pathology services.

Background to the proposed merger

19. The parties told us that they had previously worked with East Sussex Healthcare NHS Trust and Western Sussex Hospitals NHS Foundation Trust to develop proposals for a Sussex-wide pathology service. However, only BSUH and SASH decided in the end to continue with a proposal to merge their pathology services.

20. The parties told us that they were proposing the merger in response to the national Quality, Innovation, Productivity and Prevention (QIPP) Programme.[10] Pathology is one of the areas targeted by the QIPP Programme, which sets out an expectation that the national pathology workstream plan should be based on a consolidated service model, as recommended in the review of NHS pathology services conducted by Lord Carter of Coles (the Carter Review).[11]

21. The Carter Review concluded that changes to the provision of pathology services were needed to address the challenges of demand, innovation, quality, patient safety and resources.

22. According to the Carter Review, consolidating pathology services[12] offers flexibility as well as operational and financial efficiency through significant

[10] The QIPP Programme is a large-scale initiative developed by the Department of Health to drive forward quality improvements in NHS care, at the same time as making up to £20 billion of efficiency savings by 2014/15.
[11] 'Report of the Review of NHS Pathology Services in England', 2006.
[12] Characteristics of a good consolidated service are considered to be end-to-end management of the service (including transport and logistics, IT connectivity and efficient and effective use of resources, including people) and the concentration of non-urgent and specialist work in one or more centralised and accredited core laboratories where throughput is sufficient to ensure high-quality results. Only

economies of scale. This could enhance services for patients by improving value for money and releasing funds which commissioners could then invest in improving service quality and patient safety in other areas. It would also mean better value for the taxpayer.

23. The parties told us that to compete successfully in the current pathology market, where a number of providers are partnering to offer pathology services, they would have to become more cost effective and build on their reputation for quality. They argue that the proposed merger of pathology services will:

    - improve cost effectiveness, by spreading fixed costs
    - provide strategic advantages based on size (eg mean they are able to offer a greater range of complex tests and improved staffing).

Details of the merger

24. The parties told us that they plan to merge their pathology services by forming a joint venture called Brighton, Surrey and Sussex Pathology (BSS Pathology). By consolidating their services, the parties told us, they could increase the volume of pathology activity at the remaining laboratories in line with the recommendations of the Carter Review.[13]

25. In summary, the merger would consolidate pathology services into three sites (from the existing four) as follows:

    - microbiology will be provided at a centralised unit at Princess Royal Hospital
    - blood sciences services will be provided from both Royal Sussex County Hospital and East Surrey Hospital, with a hot lab only retained at Princess Royal Hospital to provide essential support for acute activity (such as A&E or critical care)
    - Crawley Hospital will no longer provide pathology services.[14]

---

tests/investigations requiring a rapid turnaround on clinical grounds would be processed on site (the Carter Review).

[13] The Review of NHS Pathology Services in England was chaired by Lord Carter of Coles. Lord Carter is also the chair of Monitor's Cooperation and Competition Panel. The content of Monitor's advice to the TDA on this transaction was settled by Monitor's Board having taken advice from Monitor's Cooperation and Competition Panel. We are satisfied that Lord Carter's involvement in the Review of NHS Pathology Services in England does not affect the ability of Monitor's Cooperation and Competition Panel to provide advice on this matter to Monitor in an independent and impartial way, and does not affect Monitor's ability to carry out its functions in an independent and impartial way.

[14] Both BSUH and SASH will continue to provide cellular pathology services to support their current cancer network requirements. Cellular pathology services for gynaecology are already centralised at the Royal Sussex County Hospital.

How patients can benefit from competition in pathology services

26. Competition can be a useful tool to encourage providers to improve the quality of their pathology services and for purchasers (eg, commissioners, healthcare providers) to commission these services in the most efficient way.

27. For pathology providers, competition is an incentive to develop high quality, innovative services that are effective and efficient. This can benefit patients in two ways:

    - first, patients can benefit from high quality, reliable, fast and accurate pathology services – this, in turn, can improve the speed and accuracy of diagnosis and start of treatment or changing an existing treatment
    - second, for those buying pathology services, competition can deliver financial savings that can be used to improve the quality of the healthcare services currently provided to patients and/or extend the scope of those services.

28. In the following paragraphs, we describe how competition currently operates in relation to the provision of pathology services and consider whether there may be changes in the future that could affect this and other pathology mergers. We also identify two types of customers for pathology services (in addition to the patients):

    - commissioners (clinical commissioning groups, CCGs, on behalf of GPs)
    - healthcare providers (NHS acute trusts, community providers and private providers).

29. **Commissioners** currently buy pathology services in two ways:

    a) 'direct' – where tests are required within a primary care setting to help with a patient's diagnosis and treatment (referred to as 'direct access pathology services'

    b) 'indirect' – where pathology testing is included as an element in a broader healthcare episode.[15]

30. CCGs purchase **direct** access cold pathology services on behalf of each GP practice in their area. However, the merger parties told us that it is quite natural for pathology providers to first approach a GP practice with a view to marketing pathology services with the expectation that a GP practice might make appropriate recommendations to the CCG.

[15] Department of Health (2012), 'The Pathology Services Commissioning Toolkit'.

31. To date, the majority of contracts for providing direct access cold pathology services to a given GP practice have been negotiated locally, with CCGs purchasing a bundle of pathology services on behalf of the GP practices in question, typically from a single provider.

32. CCGs can, if they choose to, buy pathology services through an 'any qualified provider' (AQP) framework. This allows GPs, acting on behalf of patients, to choose between different pathology services providers (as long as the providers meet the pre-defined quality standards and accept a local tariff). However, we are not aware of any examples of CCGs in the Surrey and Sussex area choosing to do this.

33. Commissioners buy **indirect** pathology services as part of their purchase of services under the national tariff (where providers are paid for each episode of care).[16]

34. **Individual healthcare providers** must decide whether to provide their own hot and cold pathology services or whether to buy them from a third party. Providers choosing to buy pathology services from third parties can put their pathology service contract out for competitive tendering. The tendering process aims to secure pathology services from the provider offering the best quality services, delivered in the most effective and efficient way.

35. To date we have seen limited use of formal tendering (as a competitive mechanism) by the commissioners and healthcare providers buying pathology services. However, submissions from the merger parties and third parties suggest this is likely to change.

Our assessment of the proposed merger's impact on choice and competition

36. In this section we set out our assessment of how the proposed merger is likely to affect choice for those purchasing pathology services and competition between providers of pathology services. We will:

- describe the situation we would expect to see if the merger did not take place
- identify services that could be affected by the merger (including considering the geographic area within which to assess this impact)
- evaluate the impact of the merger on those services.[17]

[16] Each Healthcare Resource Group (HRG) within the national tariff will include a payment reflecting the pathology tests required as part of the treatment specified in that HRG.

37. We reviewed a range of information when carrying out our assessment. This included internal documents from BSUH and SASH as well as submissions and other evidence provided by both the merger parties and third parties (providers and commissioners).[18]

What happens if the merger does not go ahead?

38. To evaluate the possible effect of the merger on choice and competition for pathology services, we assessed it against the situation we would expect to see if the merger did not take place. This is known as the 'counterfactual' to the merger. Comparing the counterfactual to the predicted outcome if the merger goes ahead enables us to judge whether the merger would be likely to reduce choice and competition (to the detriment of patients).[19]

39. The parties told us that in the absence of the merger they would each continue to operate their pathology services independently for the foreseeable future. They told us that all pathology services could continue in their current form for the next 1 to 2 years, although over time the income from these services would increasingly face competitive pressure.[20] They also told us that if they were to lose contracts, the economic viability of the remaining services would be at risk. However, the information we reviewed did not suggest that either merger party had plans to stop providing pathology services absent the merger.

40. To analyse the effects of the proposed merger on choice and competition, we take the appropriate counterfactual scenario to be one in which the merger parties' pathology activities continue to operate independently of each other. This scenario includes the situation where the parties continue to operate standalone and a situation where either or both of the trusts merge their activity with an alternative provider that does not raise competition concerns.

[17] This would include, where appropriate, an assessment of barriers to entry and the extent of any countervailing commissioner buying power. However, since we do not find material costs to patients and taxpayers, we do not examine these issues in detail in this report.
[18] These included documents produced prior to the proposed merger (for example minutes from board meetings, strategy documents and market analysis reports), and documents produced as part of the work stream to develop the merger proposals (for example option appraisal exercises) as well as evidence provided as part of our review of this merger.
[19] This approach is consistent with the Office of Fair Trading 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
[20] Most notably biochemistry, haematology and microbiology services.

What services could be affected by the merger?

41. To evaluate the effect of the merger on choice and competition we identify services that could be affected by the merger and consider the geographic area within which to assess this impact. This allows us to define the market or markets within which to assess the merger.

42. In this process we seek to identify other services (and their locations) that would limit the merged organisation's ability to increase the price or reduce the investment in quality of the services it provides following a merger.[21]

43. In order to define the relevant markets we started by identifying services that could be affected by the merger. Both parties provide the following pathology services:

    - chemical pathology
    - haematology and blood transfusion
    - microbiology
    - cellular pathology
    - mortuary
    - phlebotomy.[22]

44. The parties also provide a number of elective and non-elective services that need the input of pathology.

45. We then assessed whether a different pathology test can be used instead of the one that has been requested. We found that there was no scope for substituting one type of pathology test for another in the assessment of a particular condition.[23] We therefore concluded that, from the perspective of those requesting pathology tests, each type of pathology service constitutes a separate market that could be affected by the merger.

46. We also assessed whether those providing certain pathology specialities could also start providing ones that they currently do not offer (eg, if a provider offered a histopathology service but not cytopathology, how easy would it be for it to also provide cytopathology). We found that, overall, the ability to switch into different specialities is limited to some extent by the distinct expertise and equipment

[21] Annex 2 summarises the conceptual framework underlying product market definition.
[22] A full list of the pathology specialties that are provided by both trusts are listed in Annex 3. As only BSUH provides a range of specialist pathology services, there are no overlaps in specialist or tertiary services.
[23] Since each patient's requirement depends on the clinical assessment there is no scope for demand side substitution between different specialties.

required for each. We therefore found that each pathology specialty was a market that might be affected by the merger. However we analysed in a single cluster those different pathology services that are purchased by the same types of customers and provided by the same set of providers, operating in a similar competitive environment.[24]

47. As a result, we identified four groups of pathology services that could be affected by the proposed merger:[25]

    - direct access cold pathology services (purchased by CCGs on behalf of GPs)[26]
    - cold pathology services (purchased by healthcare providers)
    - hot[27] pathology services (purchased by healthcare providers)
    - specialist pathology services.

48. We also assessed the proposed merger's likely effect on choice and competition for the provision of elective and non-elective healthcare services (which almost always include a pathology element).

49. We did not find it necessary to define precisely the geographic areas within which to conduct our assessment. In light of the responses we received from commissioners and providers, there is some uncertainty about the exact size of the relevant geographic area within which pathology providers can compete for contracts. Our conclusions in this case are based on conservative assumptions and would not be different had we applied alternative plausible estimates about the size of the relevant geographic area. We consider different options to define the geographic areas that could be affected by the merger in each of the sections below.

Competition for direct access cold pathology services

50. As explained in paragraph 30 above, CCGs buy direct access cold pathology services on behalf of GPs, with GPs having some scope to influence this decision. In this section, we describe our assessment of whether the merger could reduce the choice of pathology providers available to CCGs. We also describe our assessment of whether any such reduction would be likely to affect

[24] Our findings were broadly consistent with the OFT's recent decision in this regard. Office of Fair Trading (2013), 'Anticipated pathology joint venture between University College London Hospitals NHS Foundation Trust, Royal Free London NHS Foundation Trust and the Doctors Laboratory Limited'.
[25] See Annex 1 for a description of pathology services.
[26] We also found that pathology services are provided to GPs as a package encompassing the same (or similar) sets of key sub-specialties.
[27] Providing hot pathology services typically entails providing services from the site of the customer. The incentives of providers to do that will differ.

the incentives of the pathology providers, available to a given CCG, to compete against one another.

Competition between the merger parties

51. We began our assessment by considering the degree to which the merger parties compete against each other to provide direct access cold pathology services.[28]

52. First, we looked at the contracts the merger parties hold. We found that the parties were contracted to provide services to 138 GP practices in total and were not contracted to provide these services to the same GP practice.

53. We then considered the contracts the merger parties were likely to compete for if the merger did not go ahead. To do so, we assessed the credibility of the two merger parties as potential competitors for contracts with CCGs to provide services to particular GP practices. We found that pathology providers can compete for contracts with clusters of GPs inside CCG areas or contracts covering entire CCG areas. We also found that the credibility of a provider depends on factors including price, turnaround times and quality.

54. We consider quality to be dependent, to some extent, on travel times, as pathology samples deteriorate (the length of time a sample remains viable depends on the exact nature of the test to be performed) and cost typically increases with the travel time. However, as noted in the Carter Review, insofar as the test results are available within an acceptable time, it does not matter to the patient whether the test is undertaken by a local or a more distant laboratory. Therefore, any provider located within an acceptable transport time can credibly bid for contracts to provide direct access services to GPs. We received differing views from the third-party providers about an acceptable transport time, broadly ranging from 30 to 90 minutes, with some providers indicating that even greater transport times were acceptable.[29] Given no competition concerns arise under any possible segmentation, it has not been necessary to conclude on the maximum drive time for providers to fall within the geographic scope. For the purposes of conducting the assessment in this case we took the view that providers with pathology laboratories within approximately 60 minutes of a GP practice were likely to be credible competitors for contracts to provide the service

[28] We note that GPs may also request urgent tests although the required turnaround times would not necessitate a rapid-response laboratory at the immediate proximity to the GP.

[29] Portsmouth Hospitals NHS Trust said transport times in excess of 90 minutes were acceptable if specimens were spun (process of separating blood from plasma) at the point of collection. Western Sussex Hospitals NHS Foundation Trust indicated that the maximum drive times were likely to be up to 2 hours. King's College Hospital NHS Foundation Trust told us that based on its logistics and stability of samples it would be able to provide services within 3 to 4 hours' transport times for labile samples (for the majority of samples, 48 to 72 hours transport times would not be detrimental to their integrity). The Carter Review notes that in the USA, for example, some pathology providers use their own transport networks (including vans and planes) to transport samples over long distances across the country.

to that GP practice (depending on the price and turnaround times that they offer).[30]

55. We identified that approximately 300 GP practices were located within 60 minutes of both SASH and BSUH. We considered that these GP practices were likely, if the merger did not happen, to consider both parties to be credible competitors to provide their pathology services. Each of these 300 practices would therefore lose a credible competitor as a result of the merger.

56. Lastly, we considered whether the parties would have an incentive to compete for direct access cold pathology contracts if the merger did not go ahead. We found that both BSUH and SASH would have strong incentives to maintain and attract these contracts.

57. Based on the matters set out above regarding direct access cold pathology, we took the view that in the absence of this merger, it is likely that the merging parties would compete with each other.

Other competitors

58. Given our conclusion above, we examined the degree to which other providers would be likely to compete with the merged parties for contracts to provide direct access cold pathology services.

59. We note that the merger parties expect their contracts for direct access cold pathology services to face significant competitive pressure in future.[31] The merger parties identified several providers that they expected to be strong competitors for contracts to provide direct access cold pathology services (both in the areas where the merger parties currently operate and where they might seek to expand).[32] This competitive pressure, according to the merger parties, is likely to [✂].[33]

60. We also received submissions from other providers of pathology services and CCGs.[34] Pathology providers told us that they would consider competing for contracts with CCGs to provide direct access services to GPs. Their responses also suggested that capacity constraints were unlikely to affect their ability to

[30] We tested our results in a scenario where the transport time was 30 minutes, and these results were consistent with our conclusions.
[31] Internal documents produced by the merger parties before the merger.
[32] These included Surrey Pathology Services [✂], Kent Pathology Partnership [✂], Hampshire and Isle of Wight Pathology Consortium, the proposed South West London Pathology, and several private providers that are expected to become strong competitors (such as The Doctors Laboratory, Spire Healthcare, Integrated Pathology Partnership and Serco). The Doctors Laboratory is entering a joint venture with University College London Hospitals NHS Foundation Trust and Royal Free London NHS Foundation Trust.
[33] [✂].
[34] We did not receive responses for all the CCGs we contacted.

compete with the merged organisation to provide these services.[35] The CCGs told us they did not consider that the proposed merger would materially reduce their options when seeking to contract with providers of direct access cold pathology services.

61. Finally, we assessed the number of credible competitors available to each GP practice located in the areas where both merger parties could compete for these contracts. Given that we found that providers can compete for contracts covering groups of GPs inside CCG areas (rather than each CCG contracting necessarily with a single provider), we assessed the impact of the merger on competition from the perspective of the GP.[36] As mentioned in paragraph 54 above, for the purposes of this assessment we considered providers located within 60 minutes drive time of a given GP practice were likely to be credible competitors for a contract to provide direct access cold pathology services to the practice. We found that after the merger a significant number of pathology providers would be available to compete for contracts in direct access cold pathology services for all GP practices in the area.[37]

Effects of merger on direct access cold pathology services: our conclusion

62. We found that there was a range of providers that were likely, and able, to compete with the merged organisation to provide direct access cold pathology services. The merger was not likely to reduce their incentives to continue improving the quality and efficiency of their direct access cold pathology services. Given this, we concluded that the merger was not likely to result in an adverse effect on patients due to a loss of choice and competition for direct access cold pathology services.

[35] For example, East Sussex Healthcare NHS Trust told us that certain labour intensive departments (eg histology and cytology) operate at almost full capacity, while automation is expected to increase capacity in, for example, microbiology. Also Portsmouth Hospitals NHS Trust noted that they would be able to increase workload significantly especially in blood sciences without investing in new equipment or facilities. Some other providers told us that they could expand their workload significantly (50% as suggested by, Epsom and St Helier University Hospitals NHS Trust) or did not highlight any issues with capacity constraints (Spire Healthcare).
[36] We considered that analysing competition from the perspective of the CCG would require assumptions about what proportion of the CCG areas would have to be within any given drive time distance from pathology providers. Basing the analysis on GPs does not require such assumptions to be made. We therefore considered it a reasonable way to assess the extent of choice before and after the merger across different areas. See Annex 4 for further details of our analysis.
[37] We also considered whether the merger could create or strengthen providers' incentives and/or ability to coordinate on the level of prices and quality of, and investment into their direct access pathology services or their hospital-based services. However, we took the view that the presence of external competitive constraints would be likely to undermine any attempts to coordinate on increased prices or reduced investment in quality of service.

Competition for contracts with healthcare providers

63. As explained in paragraph 34 above, individual healthcare providers can choose to buy cold and hot pathology services from other parties (as an alternative to investing in building their own lab). In the following sections we describe our assessment of whether the merger could reduce the choice of pathology providers available to healthcare providers. We also describe our consideration of whether any such reduction would be likely to impact on the incentives of the available pathology providers to compete against one another.

Cold pathology services

64. We began our assessment by considering the extent to which the merger parties compete against each other to provide cold pathology services to other healthcare providers.

65. The information we reviewed did not suggest that the merger parties had competed with each other to provide these services in the past. For example, BSUH bid against other providers for the contract to provide cold pathology services to Queen Victoria Hospital NHS Foundation Trust,[38] but SASH did not put forward a bid. We considered whether the merger parties would, if the merger did not go ahead, be likely to compete for contracts to provide cold pathology services to other healthcare providers.

66. As with our analysis of direct access cold pathology services, we considered that if the merger did not go ahead both trusts would be credible competitors for future contracts to provide pathology services (including contracts to provide cold pathology services to healthcare providers). We also considered that they would have strong incentives to compete for these contracts due to increasing pressure on their revenues. Given this, we took the view that the merger was likely to remove a credible competitor for these contracts.

67. Given our conclusion above, we examined the extent to which other providers would be likely to compete with the merged parties for cold pathology contracts from healthcare providers. Based on submissions from providers and commissioners, in this case, we took the view that pathology providers located within 60-minute drive time from a healthcare provider would be most likely to compete for a contract with this particular provider. Our analysis suggested that there would likely to be a range of credible competitors for contracts to provide cold pathology services to healthcare providers in Surrey and Sussex. These included the same providers identified in our assessment of competition for direct access cold pathology services (see paragraphs 58 to 61 above). This was

[38] Located in East Grinstead, West Sussex.

supported by submissions from third-party providers who told us that they would consider bidding for cold pathology service contracts from healthcare providers.

68. We found that there was a range of providers likely, and able, to compete with the merged organisation to provide cold pathology services to healthcare providers. The merger was not likely to reduce their incentives to continue improving the quality and efficiency of these services and to compete against one another to provide these services. We therefore concluded that the merger was not likely to result in an adverse effect on patients due to a loss of choice and competition for cold pathology services bought by healthcare providers.

Hot pathology services

69. We began our assessment by considering the degree to which the merger parties compete against each other to provide hot pathology services to healthcare providers.

70. We did not find any examples of tenders for hot services in the Surrey and Sussex area.[39] However, given increasing competition to provide direct access services from more distant laboratories we expect that opportunities to bid to provide hot services are more likely to occur in the future. In the case of any such tender, we consider it likely, if the merger does not go ahead, that the merger parties would compete with each other. This is because both trusts have experience providing these services and would have incentives to do so (particularly if hot and cold pathology services were tendered together). Given this, we took the view that the merger was likely to remove a credible competitor for these contracts.

71. In light of our consideration above, we examined the extent to which other providers would be likely to compete with the merged parties for hot pathology contracts with healthcare providers. We found that a provider's ability to compete for hot pathology contracts with healthcare providers did not depend on the proximity of its existing facilities to those of a given healthcare provider. As hot pathology tests require very short turnaround times, these tests are typically carried out in a dedicated lab at the healthcare provider's premises (or very nearby). Therefore, where hot pathology services are tendered, we understand that the healthcare provider would be likely to offer access to an on-site facility (albeit one that might require investment). We took the view that credible competitors would include those providers identified in our assessment of cold pathology services (see paragraph 67 above), as well as those located outside the area (potentially across the UK).

[39] There are examples of tenders for hot pathology services in other parts of the country.

72. Accordingly, we concluded the merger was not likely to reduce the incentives for hot pathology providers to improve their services in order to compete against one another (and increase competitiveness of their bids). We therefore found that the merger was not likely to result in an adverse effect on patients due to a loss of choice and competition for hot pathology services bought by healthcare providers.

Competition for specialist pathology services

73. Of the two merger parties, only BSUH provides specialist pathology services so the parties' activities do not currently overlap in this area. SASH already buys some specialist services from BSUH and from other providers. The merger parties told us that after the merger, SASH might buy specialist pathology services from the merged organisation, where the merged organisation was able to offer improved quality and value for money.

74. In this section, we describe our consideration of whether the merger might reduce the incentives for merged organisation to continue improving the quality and efficiency of its specialist pathology services.

75. First, we note that the merger does not necessarily lead to the merged organisation securing SASH as a buyer of its specialist services.

76. Second, we examined the extent to which providers of specialist pathology services compete with one another. We found that the acceptable transport times for cold specialist tests are significantly longer than those for cold routine tests. For example, it is possible to outsource some cold specialist tests to providers across the UK as well as in other countries. We therefore considered that, as a minimum, any UK provider of cold specialist pathology tests could compete to provide these tests.

77. Third, we were told that the specialist tests that SASH buys from BSUH make up a small proportion of the latter's total volume. Therefore, the merged organisation would still need to compete with other providers of specialist pathology services provided to the purchasers of these services.

78. We therefore concluded that the merger would not be likely to reduce the merged organisation's incentives to continue improving the quality and efficiency of its specialist pathology services.

Effects on the provision of elective and non-elective healthcare services

79. Almost all episodes of elective and non-elective health care require a pathology element. Given this, we considered whether the proposed merger might affect the provision of elective and non-elective services by the merger parties.

80. We note that pathology constitutes only a proportion of the revenues made from an episode of elective care or non-elective care. In addition, the merger parties expect [✂] if the merger did not go ahead.[40] It therefore appeared to us unlikely that the merger parties' decisions with regard to the quality of their elective and non-elective care would be determined by margins made on pathology activities.

81. Accordingly, we concluded that the incentives of the merger parties to continue improving their elective services[41] and non-elective care were not likely to be reduced by the merger.

Our advice to the NHS TDA

82. We found that the proposed merger was not likely to result in a material adverse effect on patients and taxpayers as a result of a loss of choice or competition in the following markets:

    - direct access cold pathology services (purchased on behalf of GPs by CCGs)
    - cold pathology services (purchased by healthcare providers to assist in diagnosis and treatment of patients)
    - hot pathology services (purchased by healthcare providers to assist in diagnosis and treatment of patients)
    - specialist pathology services.

83. We also found the merger was not likely to reduce the incentives of the merger parties to continue improving their elective and non-elective healthcare services.

[40] We have not examined these projections in detail.
[41] In any case, we found that the merger parties were not each others' closest competitors, and that there are important alternatives to each of the merger parties (with whom they compete for elective referrals).

Annex 1: Description of pathology services

84. Pathology is the branch of medicine concerned with the cause, origin and nature of disease, including changes occurring as a result of disease. It involves examining changes in the tissues and in blood and other body fluids to show the potential for disease to develop, to detect its presence, cause or severity, or to monitor its progress or the effects of treatment.

85. Pathology is broadly divided into the following areas: cellular pathology; blood sciences; microbiology; and mortuary services. Each pathology area is associated with a number of clinical subspecialties:

    - cellular pathology – histopathology, cytopathology
    - blood sciences – chemical pathology (also known as clinical biochemistry), haematology and blood transfusion
    - medical microbiology – bacteriology, virology, immunology, parasitology
    - mortuary services.

86. The provision of pathology services involves three elements:[42]

    1. pre-analytical work (collection of blood, logistics and transportation of samples, clinical guidance)
    2. analytical work
    3. post-analytical work: interpretation and dissemination of results and providing advice in subsequent investigations.[43]

87. Pathology investigations take place in **hot** or **cold** laboratories. Hot laboratories provide urgent and essential clinical support for acute services. They are expected to be located within, or very near, the acute hospital served because results need to be provided within a few hours or less. Cold laboratories typically process non-urgent high volumes of routine tests and may also process low volume specialist tests. They can be located away from hospital's main site as it can take several days or even weeks to analyse and report on tests (turnaround time varying by type of test) as there is less urgency for clinicians to receive results.[44]

[42] The Carter Review.
[43] Each provider we have contacted is active in all three of these activities. Therefore, we consider all these activities as elements of an overall product of providing pathology services. The Australian Competition and Consumer Commission follows a similar approach. See 'Statement of Issues – Sonic Healthcare Limited – proposed acquisition of pathology businesses of Healthscope Limited in Queensland, NSW, ACT and WA.'
[44] The catchment area for hot and cold labs will be different in our geographic market definition.

Annex 2: Conceptual framework for market definition

88. A market definition exercise should identify services, and the locations from which they are provided, that are effective substitutes for the services provided by the merged organisation. This provides a framework for analysing the competitive effects of a merger through identifying alternative providers capable of applying competitive pressure to the merged organisation.[45] Market definition is not an end in itself and it may not be necessary to reach a definite view on the specific boundaries of the relevant product and geographic markets.

89. In line with best practice, and consistent with the CCP's guidelines, we use the 'hypothetical monopolist' test, wherever feasible, as the basis for identifying and defining the markets affected by a merger.[46]

90. The test begins by considering the narrowest set of products or services supplied by the merging organisations. It then asks: 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? 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.

[45] 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.

[46] 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 US Department of Justice/Federal Trade Commission 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-maximising firm, not subject to price regulation, that was the only present and future seller of those products ('hypothetical monopolist') would be likely to 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 many case regulated).

91. To define the relevant product market we consider substitution possibilities on both the demand side (ie substitution by GPs, commissioner and healthcare providers) and the supply side (ie substitution by providers of pathology services) of the market. In the main body of the document we began by considering which services are affected by the merger and therefore what would be an appropriate starting point for market definition. We looked at demand-side substitution, that is, whether commissioners/GPs/healthcare providers would choose to switch provider if the quality of the service were to decline. We then considered the supply side, that is, whether other providers would choose to switch to providing the service if quality of services were to decline.

Annex 3: Services provided by Brighton and Sussex University Hospitals NHS Trust and Surrey and Sussex Healthcare NHS Trust

92. Brighton and Sussex University Hospitals NHS Trust provides the following pathology services:

- Chemical Pathology
- Haematology
- Blood Transfusion
- Microbiology (including Virology)
- Cellular Pathology (Histology, Diagnostic Cytology, Cervical Cytology screening programme, Andrology)
- Mortuary
- Phlebotomy.

93. Surrey and Sussex Healthcare NHS Trust provides the following pathology services:

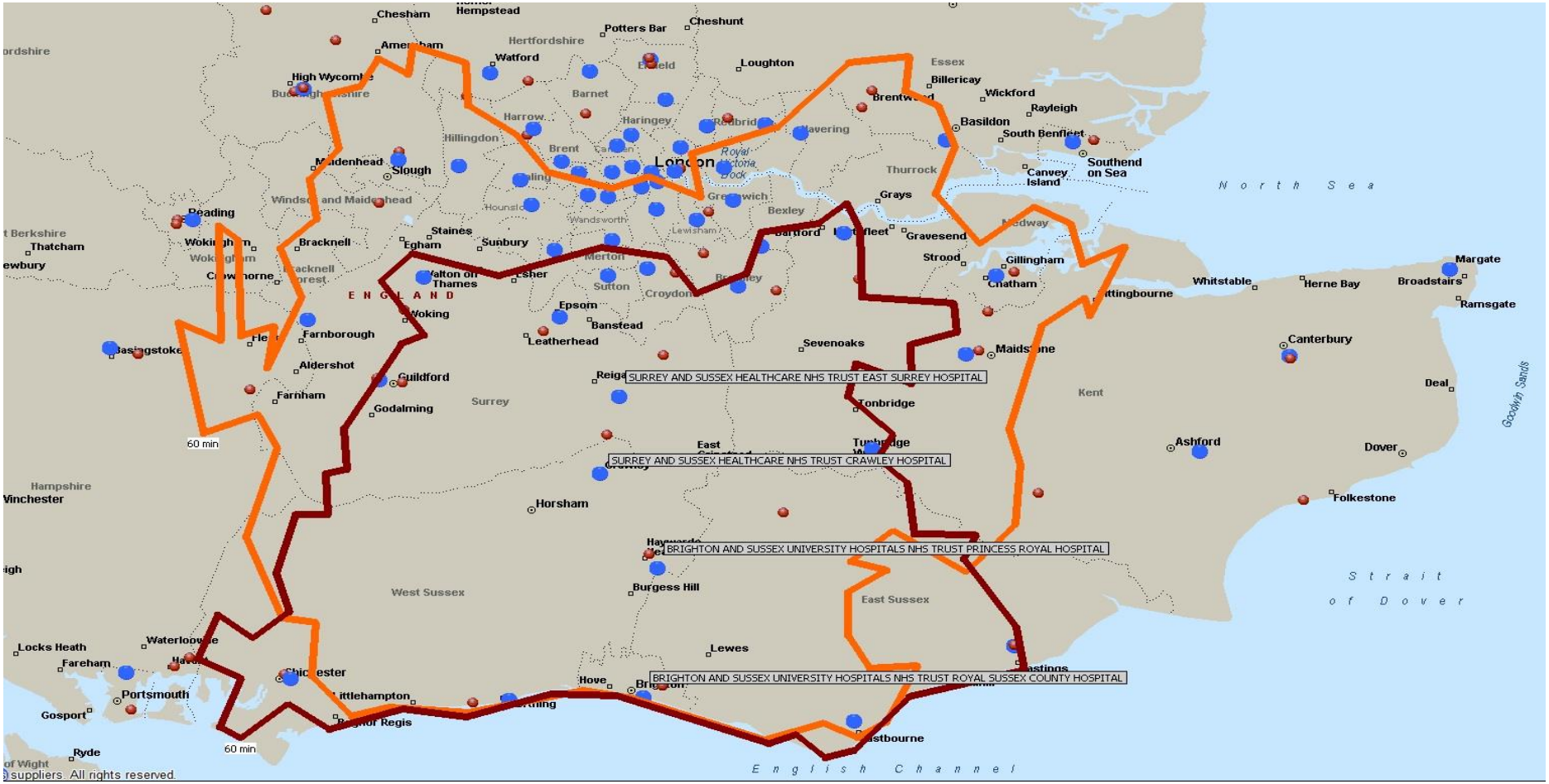
- Chemical Pathology
- Haematology
- Blood Transfusion
- Microbiology (including Virology)
- Cellular Pathology (Histology, Diagnostic Cytology, Andrology)
- Mortuary
- Phlebotomy.

Annex 4: Drive-time analysis

94. We assessed the impact of the proposed merger on the number of pathology providers available to GP practices in areas where both merger parties are likely to be credible competitors for contracts to provide direct access pathology. In this annex we explain our methodology and results.

95. Based on the estimates from the third parties, we considered that providers within 60 minutes' drive time from GP practices would be likely to be considered by commissioners as credible bidders for contracts to provide direct access services. We estimated the locations within a 60-minute drive time from BSUH and SASH respectively. These areas are called 'isochrones'. Drawing these isochrones allowed us to identify GP practices for which both merging parties would be likely to be credible competitors to provide direct access services (ie GPs located inside the 'overlap' area). On the basis of this estimation the GP practices located in the overlap area would have one less credible bidder to provide their pathology services after the merger.

Figure 1: 60-minute drive-time areas around the two providers



Note: Brown and orange lines correspond with the isochrones of BSUH and SASH respectively. Blue and red dots indicate where NHS acute trusts and independent sector providers are located.

96. We then estimated how many other pathology providers are located within a 60-minute drive time of the GP practices inside the overlap area. This analysis allowed us to assess the impact of the merger on the likely number of credible providers of direct access pathology available to each GP practice.

97. More specifically, we followed an iterative process to examine how many credible providers each GP would be likely to be able to choose from after the merger, ie providers within the 60-minute drive time from the GPs. We first took into account healthcare providers with sites inside the overlap area. For providers outside the overlap area (but with isochrones reaching GPs in the overlap area), we followed a conservative approach and included providers identified as credible competitors, based on the submissions we received.[47] Given our findings, it was not necessary to include more providers in this context. We counted multisite providers and pathology networks each as a single entity and excluded providers that do not provide pathology services, or that only provide a narrow sub-set of services.

98. Table 1 demonstrates the impact of the proposed merger on the likely number of credible bidders for pathology services available to the GP practices located in the overlap area (ie the area in which the number of competitors reduces). It shows that the GP practices in the relevant area have a wide variety of pathology providers within 60 minutes.[48]

[47] Specifically, as well as the pathology providers with sites inside the overlap area, we included the main (existing or proposed) pathology networks (Surrey Pathology Services, Kent Pathology Partnership, South West London Pathology and Hampshire and Isle of Wight Pathology Consortium). Our analysis is therefore conservative in that it excludes some providers that could potentially bid for contracts. We considered this reasonable in light of what the main and third parties told us about the relevant competitors and given that our conclusions would not change if we included more providers in the analysis.

[48] The table displays how many GPs ('Number of GP practices') can choose between how many providers after the merger ('Number of providers available to GP practices after the merger'). The column 'Share of GPs shows' the proportion of GPs in each category (as of all GPs in the overlap area).

Table 1: Choice of providers after the merger (60-minute distance)

Number of GP practices	Number of providers available to GP practices after the merger	Share of GPs
1	5	0%
36	6	12%
23	7	8%
139	8	47%
62	9	21%
33	10	11%
3	11	1%

99. As a sensitivity check, we undertook similar analysis for the 30-minute drive time scenario (Table 2). The isochrones, and hence the overlap area, are considerably smaller and this is reflected in the (smaller) number of GP practices and providers inside the overlap area. Taking into account providers identified as potential bidders within the 30-minute distance from the GP practices inside the overlap area, we found that GP practices have several providers within 30 minutes. Although this sensitivity check provides further support for our conclusions, we considered that the 30-minute isochrones are likely to be overly conservative as they do not include some providers considered to be strong competitors by the commissioners, main and third parties.

Table 2: Choice of providers after the merger (30-minute distance)

Number of GP practices	Number of providers available to GP practices after the merger	Share of GPs
4	3	13%
18	4	58%
9	5	29%

Monitor

Making the health sector work for patients

Contact us

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

Telephone: 020 3747 0000
Email: enquiries@monitor.gov.uk
Website: www.monitor.gov.uk

 Publication code: IRREP 13/14