

NHS ENGLAND – BOARD PAPER

Paper: PB.30.11.2017/06

Title:

Congenital Heart Disease Services for Adults and Children: Future Commissioning Arrangements

Lead Directors:

Paul Baumann - Chief Financial Officer

John Stewart - Acting Director of Specialised Commissioning

Purpose of Paper:

To take final decisions on the commissioning of congenital heart disease services for adults and children across England following full public consultation on proposals.

Summary:

The introduction of a standards-based approach to commissioning congenital heart disease services for adults and children responds to calls from patients, patient groups, clinicians and professional bodies, and will ensure the highest quality of care is provided to patients within resilient and sustainable services. Already, this approach has driven significant improvements across the country to out of hours and seven day cover, the number of specialist nurses and rates of antenatal diagnosis. Occasional and isolated practice has now almost entirely been eliminated.

However, in line with the standards, there is both scope to secure further improvements and, crucially, the opportunity to make some further adjustments that will ensure services are able to respond rapidly to future clinical, technological and scientific advances and, in doing so, maintain their world leading status. The recommendations in this paper, if agreed, will further support us in moving towards full national compliance with the standards through:

- Commissioning Liverpool Heart and Chest Hospital NHS Foundation Trust to provide level 1 adult CHD services in the North West, with Manchester University Hospitals NHS Foundation Trust providing the full range of level 2 adult CHD services as an integral part of a North-West CHD Network;
- Continuing to commission University Hospitals of Leicester NHS Trust to provide level 1 CHD services, *conditional* on achieving full compliance with the standards in line with their own plan to do so and demonstrating convincing progress along the way;
- Backing the Royal Brompton and Harefield NHS Foundation Trust's ambitious

new outline proposal for achieving full compliance with the standards and continuing to commission level 1 services from them in the meantime, *conditional* on demonstrating convincing progress along the way;

- Continuing to commission Newcastle upon Tyne Hospitals NHS Foundation Trust to provide level 1 CHD services until at least March 2021, with further consideration to be given, by NHS England, to the future commissioning of both the Trust's advanced heart failure and transplant service and its level 1 CHD service;
- Ceasing to commission level 2 CHD services, including cardiology interventions in adults with CHD, from Blackpool Teaching Hospitals NHS Foundation Trust, Imperial College Healthcare NHS Trust, Nottingham University Hospitals NHS Trust, and University Hospital of South Manchester NHS Foundation Trust^[1].

The Board is invited to:

- Note the results of the consultation;
- Note the assurances that due process has been followed and that it may appropriately proceed to take decisions;
- Agree the recommendations for changes to the provision of level 1 and level 2 adult and paediatric CHD services and the associated implementation schedules; and,
- Agree the proposals for full implementation of all the standards, and in particular confirm its support for the recommendations relating to better information, formal CHD networks and peer review.

^[1] University Hospital of South Manchester has now merged with Central Manchester University Hospitals to form Manchester University Foundation Trust. Under the recommendations the newly merged Trust would provide level 2 services from its Royal Manchester Infirmary site.

Congenital Heart Disease Services for Adults and Children: Future Commissioning Arrangements

Purpose

1. In February 2017, a full public consultation was launched on proposals for the future commissioning of congenital heart disease services for adults and children in England. The purpose of this paper is to provide feedback to the Board on the responses received during consultation and, in light of this, present a set of recommendations on future commissioning arrangements for final decision by the Board.
2. This paper should be read in conjunction with the supporting materials set out in **Table 1**.

Table 1	Title	Description
Annex A	Congenital Heart Disease Consultation Report.	Independent analysis of consultation responses provided by Participate Ltd.
Annex B	Decision Making Business Case.	A detailed consideration and analysis of the impact of consultation proposals and alternative proposals presented during consultation.
Annex C	Notes of a meeting of the Liverpool and Manchester Trusts, chaired by Professor Huon Gray, National Clinical Director, Heart Disease.	Record of discussions and agreements reached between the Trusts at the meeting on 23 October 2017.
Annex D	Letter from the Liverpool Trusts.	Letter supporting the delivery of level 2 services in Manchester.
Annex E	Leicester Growth Plan.	Growth Plan materials supplied by the Trust.
Annex F	Letters from referring hospitals in response to Leicester's Growth Plan.	Compendium of letters supplied by the Trust.
Annex G	Joint consultation response from the Royal Brompton & Harefield NHS Foundation Trust and King's Health Partners.	Proposals for a collaborative approach that would meet the requirement for RBH paediatric care to be delivered in a holistic children's environment.

Background

3. Congenital heart disease (CHD) is the most common birth anomaly, and affects between 5 and 9 in every 1,000 babies born in the UK, meaning 3,500 to 6,300 babies are born with CHD in England and Wales each year. Not every baby will need surgery, but when it is needed, it is both life-saving and life changing. As such, a great deal of focus is often placed on the surgical episode. However, although surgery can represent a critical and life-saving intervention, for most, this will not be

a final cure. Congenital heart disease is a lifelong condition, and patients and their families will need monitoring, support and care throughout their lives.

4. Services for CHD in England are very good, and survival after surgery is as good as, if not better than, anywhere in the world¹. A recent review has shown that UK mortality rates are low, compare favourably internationally², fell over the 10 years between 2000 and 2010, and more recently we have seen a continuing trend to improved survival³. About 80% of children with congenital heart disease will now survive into adulthood, with the result that for the first time, the number of adults living with CHD is thought to exceed the number of children and young people.
5. Despite these improvements, the origins of this review, which stem from the publication in 2001 of the public inquiry into concerns about the care of children receiving complex cardiac surgery at Bristol Royal Infirmary, remind us of the importance of not being complacent. We believe there is both scope to secure further improvements and, crucially, the opportunity to make some further adjustments that will ensure services are able to respond rapidly to future clinical, technological and scientific advances and, in doing so, maintain their world leading status. In doing so we are also seeking to ensure that services are more resilient, and will be sustainable for years to come.
6. When NHS England launched its review into congenital heart disease services, following previous failed attempts to put in place a coordinated programme of change, we listened to patients, their families and the clinicians who provide these services to understand what needed to be done.
7. They asked us to do two things. Firstly, they wanted to see national standards that set out what excellent care looks like and which every hospital would be expected to follow. Secondly, they asked us to deal with the uncertainty that had been allowed to develop about the future of individual centres providing these services, because it was affecting patient confidence and staff morale. So working with doctors, nurses, psychologists and patient representatives from across the country we developed a comprehensive set of service standards which, if implemented, would mean that hospitals providing this care were brought up to the level of the very best in every aspect of care.
8. In July 2015, the NHS England Board agreed the standards - almost 200 in total that covered the entire patient pathway, from diagnosis through to treatment and then on into care at home. The standards describe three levels of CHD service provision:

¹ See Annex B, Decision Making Business Case, Table 1: Survival Rates (paediatric surgery 2012-2015) before risk adjustment.

² Brown KL, Crowe S, Franklin R, et al. Trends in 30-day mortality rate and case mix for paediatric cardiac surgery in the UK between 2000 and 2010. *Open Heart* 2015;2:e000157.doi:10.1136/openhrt-2014-000157

³ See Annex B, Decision Making Business Case, Figure 2: Variable Life Adjusted Display (VLAD) Chart for all 14 centres undertaking procedures in patients under 16 years of age, 2012-15.

- **Level 1 Specialist Surgical and Interventional CHD Centres:** manage all patients with highly complex CHD and provide the most highly specialised diagnostics and care, including all surgery and interventional cardiology.
- **Level 2 Specialist Medical Cardiology Centres:** provide the same level of specialist medical care as a level 1 centre, but not surgery or interventional cardiology (except for one specific minor procedure at selected adult centres). They focus on diagnosis and ongoing care and management. Not every network will include a level 2 centre: this will depend on local requirements for access and capacity.
- **Level 3 Local Cardiology Services :** accredited services in local hospitals run by general paediatricians / cardiologists with a special interest in CHD. They provide initial diagnosis, ongoing monitoring and care, including joint clinics with specialists from the level 1 or 2 centres, so allowing more care to be given nearer to home.

Using the standards to ensure services improve for patients

9. NHS England does not consider there to be a 'right number' of CHD surgery centres, nor that a certain number of centres should close. Rather, our aim is to ensure that every centre that offers CHD services meets the standards and, in doing so, provides the highest quality of care to patients on a sustainable basis. By setting standards that make clear what is required for an excellent service we have already seen improvements. For example, when NHS England completed its initial assessments, only seven centres had full out of hours cover for adults undergoing cardiology interventions (1 in 3 rota, specialist adult CHD interventionists); now all centres providing this service have full cover. Similarly, all now have full specialist adult cardiologist out of hours cover (1 in 4 rota). In addition, every centre now has consultant-led ward rounds seven days a week. These are important improvements that make a difference to the quality of care for patients. We have also seen increases in the number of specialist nurses and steady improvements in antenatal diagnosis of CHD; with targeted action becoming possible we expect to see more improvements.
10. The standards do not permit occasional and isolated practice (small volumes of surgery and interventional cardiology being undertaken in institutions that do not offer sufficient specialist expertise in this field). This has been of particular concern to patients and their representatives. We have worked with the hospitals involved and we are well on the way to completely eliminating occasional practice.
11. Patients and their families told us that while it was a good thing to have standards, they only really mattered if we ensured that they were met. Otherwise, they were a waste of time.
12. We therefore set out proposals to implement the standards, and asked for views in a full, formal, public consultation that ran between 9 February 2017 and 17 July 2017.

13. At the heart of our proposals was our aim that every patient should be confident that their care is being delivered by a hospital that meets the required standards. To achieve this, we proposed that in future, NHS England would only commission CHD services from hospitals that are able to meet the standards. The recommendations that the Board is now being asked to consider will, over time, ensure we achieve that aim and, more specifically, that:

- **Every operation or cardiology intervention for CHD patients will be carried out by specialist doctors** with a volume of practice sufficient to develop and maintain their skills;
- **All children with heart disease will receive their inpatient care in a holistic children's environment** so that they can receive optimum care for any non-cardiac clinical problems without either the child or the specialist having to travel to another hospital with the potential compromises involved;
- **Daily interaction between teams will be facilitated**, which is particularly important for children with complex conditions and multiple medical needs;
- **Resilience will be enhanced** through larger level 1 centres, with bigger teams, providing an assurance of full 24 hour seven day specialist care and the ability to cope with challenging clinical events or fluctuations in specialist staffing;
- **Care will be delivered as close to home as possible**, through networked specialist level 2 centres, level 3 services and outreach clinics, all co-ordinated by a network team;
- **Occasional and isolated practice will no longer be permitted**, so low volume surgery or interventional cardiology in institutions without sufficient specialist CHD expertise will cease.

14. **The recommendations set out in this paper modify NHS England's original consultation proposals, because we have listened to the views expressed and considered new proposals and information that has emerged as part of the process.**

Assurance of readiness for decision making

15. In taking final decisions as to whether to implement the consultation proposals or whether to take an alternative course of action the Board must:

- give conscientious consideration to the results of the consultation;
- ensure that NHS England has met the requirements of the Secretary of State's Four Tests for reconfiguration (and the fifth test set by the Chief Executive of NHS England) and has followed NHS England's Service Change Guidance;
- ensure that NHS England has met its legal duties including those set out in sections 13C - Q of the NHS Act 2006 and in the Equality Act 2010, the Human Rights Act 1998 and the Children Act 2004;

- take into account all the relevant factors and no irrelevant factors; and,
- satisfy itself that due process has been followed.

The results of consultation

16. We received 7673 online consultation responses (survey) and 78 ‘other responses’ in the form of letters/emailed documents. These were independently analysed by Participate Ltd and a report of their analysis accompanies this paper at **Annex A**. Further detail from the responses and the way they have influenced our thinking can be found in the relevant sections of the Decision Making Business Case (DMBC), also accompanying this paper at **Annex B**.

The five reconfiguration tests

17. NHS England has ensured that it has met the requirements of the five tests. This is described in Part 3 of the Decision Making Business Case (DMBC) accompanying this paper. In reviewing and accepting the DMBC, both the Oversight Group for Service Change and Reconfiguration and the Investment Committee have provided assurance that this requirement has been met.

Meeting our legal duties

18. Our external legal advisers have reviewed our compliance with sections 13C to 13Q of the NHS Act 2006 and the public sector equality duty. This is described in Part 3 of the DMBC accompanying this paper. We have completed a full Integrated Equalities Impact Assessment. This is described in the DMBC accompanying this document. In reviewing and accepting the DMBC, the Oversight Group for Service Change and Reconfiguration and the Investment Committee also provided assurance that this requirement has been met.

Taking account of the relevant factors

19. NHS England has received advice on the current (as at August 2017) assessment of each hospital providing level 1 and 2 CHD services against the standards, the impacts of implementing NHS England’s proposals and appropriate mitigations of any potential adverse impacts. These assessments were undertaken by a specially convened National Panel including national and regional commissioners, clinical and patient representatives and chaired by Dr Vaughan Lewis. The panel met in August 2017. The report of its work is included at **Annex 6 of the DMBC** accompanying this paper. Its advice is reflected throughout the accompanying DMBC. The National Panel confirmed that there have been no changes in the assessment of any of the centres where change has been proposed which could imply that the original proposals would no longer be appropriate. It has also confirmed that the original proposals could, in principle, be implemented by the NHS England Board and that the impacts of doing so could be appropriately managed. The National Panel also considered alternative proposals that emerged during consultation.

20. NHS England has also received advice on a range of clinical issues in the light of consultation, including issues raised by respondents from a specially convened Clinical Advisory Panel chaired by Professor Sir Michael Rawlins. The panel met in August 2017. The report of its work is included at **Annex 5 of the DMBC** accompanying this paper. Its advice is reflected throughout the accompanying DMBC.
21. A full assessment of the financial impact, both revenue and capital, of NHS England's proposals is included in the DMBC accompanying this paper. In developing and agreeing the CHD standards, NHS England has been clear throughout that no additional funding will be provided to meet compliance costs for those providers wishing to offer these services and that no specific central funds are available for capital investment. The Investment Committee has confirmed that implementing the standards is affordable for NHS England under tariff and that risks around the capital funding requirement are minimal. The Investment Committee has also endorsed pump priming the development of CHD networks for a limited period in a similar way to other Operational Delivery Networks and using similar funding mechanisms from within the Specialised Commissioning budget.

Consideration and Recommendations

22. Having confirmed that NHS England has in its work on CHD followed due process, this paper now considers the proposals for change and whether the Board should decide to implement the proposals on which it has consulted, or, in light of the consultation response and all the other relevant factors, take a different course of action.
23. It is worth noting that the majority of standards can be met at every hospital currently providing level 1 services with the right focus, attention and in some cases some extra investment. However, there are two very important areas covered by the standards that have proved more challenging for certain hospitals, as follows:
- **Surgical activity standards** require that each level 1 centre has a team of three surgeons from April 2016, increasing to four surgeons from April 2021. Each surgeon must undertake at least 125 operations per year. CHD surgeons work across paediatric and adult practice, and all these operations count. Only a small number of centres already undertake more than 500 operations a year. Requiring each surgeon to undertake 125 operations per year (equivalent to about three operations a week) will enable them to maintain and develop their skills and will ensure the best possible outcomes for patients. Bigger teams, more effectively networked with other centres will be more resilient, providing an assurance of full 24 hour seven day care and the ability to cope with challenging events, for example the loss of a surgeon. They will be better for training, and because less onerous for

surgeons, better for patient care. There is good evidence, from a large number of studies, for a link between centre size and outcomes.

Professor David Anderson, Consultant Heart Surgeon and Professor of Children's Heart Surgery, Guy's and St Thomas', past President of the British Congenital Cardiac Association (BCCA) and member of the Clinical Advisory Panel has said: *'125 really is a minimum number. It equates to three operations a week, per surgeon. Practice makes perfect ... Some of the operations we do only come up once or twice a year...we must set a minimum standard in order to ensure that a surgeon has an acceptable level of skill refined and maintained through regular practice.'*

- **Paediatric co-location standards** require that level 1 centres delivering paediatric cardiac care must have a range of other paediatric specialties on site from April 2019. This means that specialist children's cardiac services will only be delivered in settings where a wider range of other specialist children's services are also present on the same hospital site. This determines what medical care is available by the bedside for a child in a critical condition, which is important because many children with CHD have multiple medical needs. It also facilitates daily interaction with the wider paediatric multidisciplinary team which is of significant benefit to patients. This approach brings paediatric cardiac services into line with expectations in other specialist children's services and with paediatric cardiac services in other countries. Having all tertiary specialties on one site means neither the child nor the specialist has to travel, and it avoids the potential compromises involved - in the care environment, access to the full team and equipment, and timeliness of advice and intervention. This works in both directions in that similar advantages are also gained by children under the care of other specialists who need access to the advice or care of a paediatric cardiologist.

The Clinical Advisory Panel has said: *'care for children should be provided in a holistic children's environment with on-site access to the full range of paediatric specialties and services'*. And the Royal College of Paediatrics and Child Health has told us that *'Isolated children's services are unacceptable; specialist children's cardiac services must be delivered within a hospital providing a broad range of other specialist children's services.'*

24. Having assessed all existing providers of level 1 services against the standards, four Trusts were identified as being unlikely to meet the standards and were the focus of our proposals for change and our formal consultation. These are now considered in turn. In each case we describe the original proposal and the reasons for that proposal, we then go on to discuss what we are now recommending, and if that differs from the original proposal we say why.

Level 1 and 2 Services: North-West England

25. In North-West England, specialist inpatient services for people with CHD (level 1) have, to date, been divided between two cities: Liverpool where children received their care at Alder Hey Children's Hospital; and Manchester where adults received their care at Manchester Royal Infirmary.
26. Running the service in this way inevitably required compromises, because it meant the adult service depending on a single surgeon. He could not be there all the time, and the distance between the cities was such that cover could not be provided from Liverpool. There also wasn't enough surgical work to allow him to meet minimum volume expectations – just 92 operations in 2016/17. On 19 June 2017 the service in Manchester was suspended by the Trust, when their surgeon moved to a new post at a different hospital. As a result, patients who previously received their care from the Manchester team currently receive much of that care from the clinical teams at Leeds, Newcastle and Birmingham under interim arrangements.
27. As such, NHS England's proposal was to bring the level 1 service together so that care for adults and children could be delivered in one city, by teams of surgeons, cardiologists and interventionists big enough to give full, consultant led, 24 hour, seven day care. Choosing which city should be the level 1 centre was always going to mean some people would be dissatisfied. We proposed that level 1 services should be centred in Liverpool, because around 80% of the operations are done in children and so moving the much larger children's service from Liverpool (Alder Hey Children's Hospital carried out 415 operations in 2015/16) to Manchester would be more difficult and potentially a greater risk than moving the smaller adult service to Liverpool. An important part of our proposal was that adults with CHD should still be able to get much of their care in Manchester if that is better for them. Inpatient care related to surgery and cardiology interventions is important, but it's something that happens only occasionally - sometimes just once in a lifetime - but outpatient appointments and investigations are a regular part of life for a person with CHD. So we wanted to make sure that people could still get that care in Manchester, without having to travel to Liverpool all the time if that's not convenient for them.
28. We've listened to concerns raised during the consultation and can confirm that Manchester can and should provide level 2 care for adults with CHD as part of a North-West England CHD Network (NWCHDN). That will mean they will still be able to provide maternity care to most women with congenital heart disease. It will also be possible to have some of the more straightforward interventional procedures conducted there. As such, Manchester will continue to play a pivotal role in the network of care for adults with CHD, and when a patient does need an operation or more complex intervention, the new service at Liverpool Heart and Chest Hospital will be able to provide it. Critically, all these services will meet the national standards, giving patients an assurance of the best care.

Recommendation for consideration by the Board:

After careful consideration of consultation responses and other supporting materials, the Board is asked to confirm that it is content to proceed with implementing its 'minded to' decision to commission adult level 1 CHD services from Liverpool Heart and Chest Hospital NHS Foundation Trust, with the full range of level 2 services to be commissioned from Manchester University Hospitals NHS Foundation Trust, as part of a North-West England CHD Network.

Under these network arrangements, we would expect Manchester University Hospitals to continue to play a leading role in providing maternity care for women with CHD, including the development of care pathways and the coordination of multidisciplinary discussions of maternity care. We would expect that care for women with complex needs would be discussed at the NW CHD Network multidisciplinary team meeting to determine the best place for delivery.

The Board's decision to support these network arrangements should be conditional on the Liverpool Trusts providing robust and adequate support for level 2 services in Manchester.

Assurance:

- Professor Huon Gray, National Clinical Director for Heart Disease, met with clinical and managerial leads from the Liverpool and Manchester Trusts on 23 October 2017. At this meeting there was agreement on the provision of maternity care for women with CHD, with services continuing in both Manchester and Liverpool: place of birth for women with complex needs would be discussed and determined at the NW CHD Network MDT. This could mean a bespoke arrangement to ensure that all aspects of care were 'wrapped around' the patient, including the relevant adult CHD support being provided at St Mary's Hospital if that was the most appropriate place for the woman to deliver. There was also agreement for continuing adult CHD interventions in Manchester, within the level 2 standards, subject to NW CHD Network MDT oversight. Professor Gray has confirmed that in the north-west, providers will work together to establish a robust network with strong level 1 and 2 centres providing ACHD and paediatric cardiac care to patients in the north-west (**Annex C**).
- We have received written confirmation from the Liverpool Trusts that they are committed to ensuring that Manchester University Hospitals NHS Foundation Trust (MFT) will be able to provide the full range of level 2 adult CHD services as described in the National Standards, including facilitating the delivery of obstetric care for women with CHD and adult CHD interventions at a level two centre in Manchester as part of the North West CHD Network (**Annex D**).
- The impacts of implementing this recommendation have been assessed. The full assessment is reported in the Decision Making Business Case accompanying this paper. This confirms that the recommendation could be implemented by the

NHS England Board and the impacts of doing so could be appropriately managed.

Implementation

NHS England will monitor progress in the North-West towards meeting the standards and take commissioning action, if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule. These timescales are informed by the Trusts' own plans and the original timetable set out in the standards.

Alder Hey Children's Hospital Trust, Liverpool Heart and Chest Hospital, The Royal Liverpool and Broadgreen Hospitals, Liverpool Women's Hospital and Manchester University Hospitals will be required to re-provide all level 1 and level 2 services for adults with CHD within the NW CHD Network by January 2019. A detailed implementation schedule can be found at **Appendix 1 to this paper**.

Level 1 Services: University Hospitals of Leicester NHS Trust

29. In the East Midlands, specialist inpatient services for people with CHD (level 1) have been provided by University Hospitals of Leicester NHS Trust (UHL) from its Glenfield Hospital site in Leicester. This is one of the two smallest level 1 CHD services in the country, and this has meant that, to date, the Trust has cared for too few patients for its surgeons to be able to fully develop and maintain their skills. In recent years the service has grown, but it still is not big enough to allow each of its three surgeons to do at least 125 operations per year, a minimum requirement that came into effect on 1 April 2016. In addition, Glenfield is a mainly adult hospital, so the other specialists whose care and advice are sometimes needed for children with congenital heart disease were not all immediately at hand. When their help was needed they were usually at one of the Trust's other hospitals, the Leicester Royal Infirmary (LRI), and that meant either the doctor or the child would need to travel to a different hospital. It also meant that the specialist heart doctors at Glenfield were not so easily available to the children with other conditions, who were at the LRI.
30. UHL has produced plans to address these concerns, so that the standards could be met. Although we were happy with their plan to move children's services all under one roof at the LRI, we did not think, at the time, that we could be sure that their plan to increase the number of patients they care for would be enough for them to be able to meet the surgical activity standards. As a result, NHS England proposed that UHL should not provide level 1 CHD services in future, and patients needing surgery, cardiology interventions and specialist inpatient care or investigations would go to another hospital, generally in either Birmingham or Leeds. Under those proposals, it would still have been possible for patients with CHD to have most of their care - most outpatient appointments and investigations and some inpatient admissions and cardiology interventions - in Leicester because it would still have provide level 2 services.

31. Since that time, and in response to that prompt, UHL has further developed its plans to attract more patients to its service (**see Annex E**), and gained support from many of the surrounding hospitals (**see Annex F**). We also know from the consultation that, assuming UHL is meeting the standards, people want to see them continue to provide a level 1 CHD service.
32. Taking these developments into account we think it is now reasonable to give the Trust the opportunity to prove that it can implement its plans to meet the standards. To succeed, it will need to change the choices made by referring doctors and their patients, so neither we nor the UHL leadership can be absolutely certain what will happen. We plan, therefore, to monitor UHL's progress against their plan closely, and should it become clear that it is not going to be able to deliver its commitments and so meet the requirements, we will take the necessary action.
33. If UHL succeeds in attracting additional patients as planned, it will, of necessity, mean that activity levels at other hospitals will fall. Our analysis shows that the greatest impact is likely to be on Great Ormond Street and the Birmingham hospitals. The scale of the likely impact should not materially affect any other hospital's ability to meet the standards.

Recommendation for consideration by the Board

After careful consideration of consultation responses, other supporting materials and the additional evidence supplied by University Hospitals of Leicester NHS Trust around plans for achieving the co-location standard and meeting the surgical volumes standards, the Board is asked to confirm if it is content to continue to commission level 1 services from Leicester, conditional on the Trust achieving full compliance with the standards within the required timeframes, as described in its new plan to do so, and the Trust demonstrating convincing progress in line with the implementation milestones and key performance indicators (KPIs) set out in the implementation schedule at Appendix 1. Should this not be achieved, referral to the Specialised Services Commissioning Committee will be made to confirm that the process of decommissioning level 1 services should begin, with alternative arrangements put in place to ensure patients are able to benefit from receiving care from centres compliant with the required standards.

Assurance

- University Hospitals Leicester has provided a detailed plan for increasing the number of operations to be undertaken by its surgeons to allow it to meet the requirement of having a team of four surgeons, each undertaking 125 operations per year, from 1 April 2021 (**Annex E**). It has also provided statements of support from many of the hospitals that would be required to increase referrals (**Annex F**).
- The impacts of implementing this recommendation have been assessed. The

full assessment is reported in the Decision Making Business Case. This confirms that the recommendation could be implemented by the NHS England Board and the impacts of doing so could be appropriately managed.

Implementation

NHS England will monitor UHL's progress towards meeting the standards and take commissioning action if it becomes clear that the standards will not be met according to the agreed timescale and KPIs. These timescales and KPIs are informed by the Trust's own plans and the original timetable set out in the standards.

University Hospitals of Leicester NHS Trust will be required to achieve full compliance with the standards within the timeframes set out in the detailed implementation schedule which can be found at Appendix 1 to this paper. This includes achieving full co-location for all inpatient paediatric CHD care by April 2020 and increasing surgical activity so that it has a team of at least four surgeons, each undertaking at least 125 operations per year, from April 2021.

Level 1 Services: Royal Brompton and Harefield NHS Foundation Trust

34. The Royal Brompton and Harefield NHS Foundation Trust has provided specialist inpatient services for both adults and children with CHD (level 1) from its Royal Brompton Hospital (RBH) site in Chelsea. RBH is a mainly an adult hospital, so the other specialists whose care and advice are sometimes needed for children with congenital heart disease are not all immediately at hand. When their help was needed they were usually at another hospital, often Chelsea and Westminster Hospital, and that meant that either the doctor or the child would need to travel to a different hospital. RBH did not, at the time, produce any plans to address these concerns, so that the standards could be met. As such, NHS England proposed that RBH should not provide level 1 CHD services in future, and patients needing level 1 CHD care, including surgery, cardiology interventions and specialist inpatient care or investigations, would go to another hospital, generally still in London.
35. Since that time, and in response to our 'minded to' decision, RBH has begun to develop a proposal to work closely with another of the hospitals that provides level 1 CHD services in London, Guy's and St Thomas', part of King's Health Partners (**see Annex G**). They propose bringing together the CHD services offered by the two hospitals. Cardiac services for children would be provided from new buildings to be developed as part of the Evelina Children's Hospital and CHD services for adults from a newly created specialist heart and lung centre (both developments forming part of St Thomas' Westminster Bridge Campus).
36. We also know from the consultation that many aspects of RBH's service are held in high regard, with a special emphasis placed on the way their teams work together, and people want to see those teams kept together if possible.

37. Taking all that into account, we think it is reasonable now to allow the Trust to develop its plans further to the stage where they can be properly evaluated. The advantages of the proposed model (or one like it, involving another partner), if it could be delivered, would be very significant. Amongst these advantages is that this solution also addresses the parallel challenge relating to paediatric respiratory services, and that it facilitates keeping together the Royal Brompton's clinical and research teams. Although the proposal submitted involved Guy's and St Thomas', other partnerships might also be possible, so we will not make our decision specific to this one partnership arrangement. In any case, developing plans of this sort will mean RBH considering and fully evaluating a range of options, in terms of strategic fit, clinical quality, value for money and affordability (capital and revenue), and deliverability, to make sure that it is pursuing the best one.

38. It is important to note that the specific proposal presented in response to the consultation is ambitious and would require a great deal of money to fund the necessary new buildings and equipment, much, if not all, of which would probably need to be found by the Trusts themselves, including from surplus land disposals. So, if this option is pursued it would need to go through the exacting scrutiny that the Government requires of such projects. We plan, therefore, to monitor progress closely and provide appropriate support to the evaluation of options. However, if it becomes clear that RBH is not going to be able to meet the requirements through such an initiative, or that the solution cannot be put in place within a reasonable timescale, we would begin the process of decommissioning level 1 CHD services for children from the Royal Brompton site at this point.

Recommendation for consideration by the Board

After careful consideration of consultation responses and other supporting evidence, the Board is invited to note the outline alternative solution presented by the Royal Brompton and Harefield NHS Foundation Trust, for how full compliance against the standards might be achieved and, in light of this, confirm that NHS England should work with RBH and other potential partners on the full range of options for delivering a solution that could deliver full compliance with the standards and ensure the sustainability of other connected services. Progress should be reviewed by the NHS England Board over the next two years. Should a credible solution not have been presented by the end of November 2019 in the form of a submitted Outline Business Case, supported by NHS England, referral to the Specialised Services Commissioning Committee will be made to confirm that the process of decommissioning level 1 services for children should begin, with alternative arrangements put in place to ensure patients are able to benefit from receiving care from centres compliant with the required standards.

Assurance

- Royal Brompton & Harefield NHS Foundation Trust in collaboration with

King's Health Partners has submitted a proposal to develop a model for CHD services that brings together the existing Royal Brompton Hospital and Guy's & St Thomas' Hospital services to deliver a joint service that would meet the paediatric co-location standards (**Annex G**).

- The impacts of implementing this recommendation have been assessed at a level commensurate with the level of detail in the plans. The assessment is reported in the Decision Making Business Case. Further assessment of the plan, its impacts and appropriate alternatives will be undertaken as the plan passes through the public sector business case development process through to potential Outline Business Case approval.

Implementation

NHS England will monitor RBH's progress towards meeting the standards, and take commissioning action, if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule. These timescales are informed by the Trust's own plans and a realistic planning schedule.

RBH will be required to develop and deliver a credible solution for meeting the co-location requirements for its paediatric services. RBH should develop its plans (working with potential partners as appropriate) following Treasury guidance for preparing a Public Sector Business Case and using the five case model.

RBH will be required, as part of its planning process, to develop and deliver a detailed plan with clear milestones, that will achieve full co-location for all RBH paediatric specialist services by April 2022 at the latest.

A detailed implementation schedule can be found at **Appendix 1** to this paper.

Level 1 Services: Newcastle upon Tyne Hospitals NHS Foundation Trust

39. In the North-East of England, specialist inpatient services for adults and children with CHD (level 1) have been provided by Newcastle upon Tyne Hospitals NHS Foundation Trust (NUTH) from its Freeman Hospital site in Newcastle. This is one of the two smallest level 1 CHD services in the country, and this has meant, to date, that the Trust has cared for too few patients for its surgeons to be able to fully develop and maintain their skills, as it is not big enough to allow each of its three surgeons to do at least 125 operations per year, a minimum requirement that came into effect on 1 April 2016. In addition, the Freeman Hospital is a mainly adult hospital, so the other specialists whose care and advice are sometimes needed for children with congenital heart disease were not all immediately at hand. When their help was needed they were usually at one of the Trust's other hospitals, the Great North Children's Hospital (GNCH), and that meant either the doctor or the child would need to travel to a different hospital. It also means that the specialist heart doctors at the Freeman Hospital were not so easily available to the children with other conditions, who were at the GNCH.

40. The Trust has told us that it is confident it will reach the minimum 375 operations needed to meet the current requirement, but it does not consider it likely that it will have enough activity to be able to support a team of four surgeons each undertaking at least 125 operations a year as required by the standards from April 2021. In addition, while the Trust had looked at options for moving its paediatric cardiac services to the GNCH, they had not identified funding, or made definite plans, partly because of the uncertainty about the service's future. Under these circumstances NHS England would normally have proposed that NUTH should not provide level 1 CHD services in future. However, it was clear that if it did not provide level 1 CHD care, NUTH would also have to stop providing its advanced heart failure and heart transplant service for children and for adults with CHD. There are only two hospitals that do heart transplants for children and NUTH is also the main hospital for transplanting hearts for adults with CHD. These services could not be replaced in the short term without a negative effect on patients. Because of the way these services are intertwined, we cannot make a decision on one without also making a decision on the other, and heart transplants were outside the brief of our work on CHD services. Taking this into account we originally proposed that surgery and interventional cardiology for adults and children should continue to be provided by NUTH for the time being, with further consideration given to the commissioning position beyond 2021.
41. We are now recommending that NUTH should continue to provide a level 1 CHD service, until at least March 2021, which will allow us time to further consider our commissioning approach for both the CHD and the advanced heart failure and transplant service at the Trust from April 2021 onwards.
42. Whilst this consideration should assess the potential for moving the advanced heart failure and transplant service to another provider, it is possible that we could conclude that it is in the overall interest of patients to maintain current arrangements with permanent derogation against the 2021 surgical activity standard. If this were to be the case NUTH would still be required to meet the other standards, including having a team of at least three surgeons, each carrying out at least 125 operations a year, and to achieve full paediatric co-location.
43. Although NUTH has considered how it would achieve co-location of children's services, we think it would be premature to move to implementation of this until the commissioning position beyond 2021 is confirmed. As such, derogation against the co-location standard, for a time limited period, will be needed from April 2019.

Recommendation for consideration by the Board

After careful consideration of consultation responses and other supporting materials, the Board is asked to confirm that the commissioning of level 1 CHD services at Newcastle upon Tyne Hospitals NHS Foundation Trust should continue until at least March 2021.

Recognising the importance of the quality and sustainability of both the CHD service

and the interdependent advanced heart failure and transplant service, the Board is invited to agree that further consideration should be given to the future commissioning of both. This will inform our commissioning approach from 2021 to ensure services meet the required standards. Until the outcome of this work is known, derogation against the 2019 co-location standard should be assumed.

Assurance

- The impacts of implementing this recommendation have been assessed. The full assessment is reported in the Decision Making Business Case. This confirms that the recommendation could be implemented by the NHS England Board and the impacts of doing so could be appropriately managed.

Implementation

NHS England will further consider its commissioning approach for both the CHD and the transplant service at NUTH from April 2021 onwards. It will confirm its plans by no later than April 2019.

NHS England will monitor NUTH's progress towards meeting the standards, and take commissioning action, if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule, and subject to the relevant derogations. These timescales are informed by the Trust's own plans and the original timetable set out in the standards.

NUTH will be required to develop and deliver a plan to increase surgical activity so that it has a team of at least three surgeons, each undertaking at least 125 operations per year from 2019/20, in line with the detailed implementation schedule which can be found at **Appendix 1** to this paper.

NUTH will not be required to meet the 2019 deadline for full co-location for paediatric cardiac services, but will be required to meet these standards if NHS England confirms a plan to commission level 1 CHD services beyond March 2021.

44. If implemented, these revised proposals will mean that in future level 1 CHD services in England will be provided by the following hospitals:

- Alder Hey Children's Hospital NHS Foundation Trust (children's services) and Liverpool Heart and Chest Hospital NHS Foundation Trust (adult service) – subject to the conditions described above;
- Birmingham Women's and Children's Hospital NHS Foundation Trust (children's services) and University Hospitals Birmingham NHS Foundation Trust (adult service);
- Great Ormond Street Hospital for Children NHS Foundation Trust (children's services) and Barts Health NHS Trust (adult service);
- Guy's and St Thomas' NHS Foundation Trust (children's and adult services);

- Royal Brompton & Harefield NHS Foundation Trust (children’s and adult services) – subject to the conditions described above;
- Leeds Teaching Hospitals NHS Trust (children’s and adult services);
- Newcastle upon Tyne Hospitals NHS Foundation Trust (children’s and adult services) – subject to the conditions described above;
- University Hospitals Bristol NHS Foundation Trust (children’s and adult services);
- University Hospitals of Leicester NHS Trust (children’s and adult services) – subject to the conditions described above; and
- University Hospital Southampton NHS Foundation Trust (children’s and adult services).

Level 2 Services

45. Changes were also proposed to the provision of level 2 CHD services. These follow the same principle of only commissioning from hospitals that are able to meet the standards. We found a number of hospitals had been providing aspects of level 2 services, particularly cardiology interventions in adults with CHD, which were not able to meet the full level 2 standards. Common findings were that there were not enough doctors with specialist expertise in caring for CHD patients and that the doctors doing the interventions were not doing enough in CHD patients to develop and maintain their skills as required by the standards.

46. Since we made these proposals the situation has not really changed, except in one case, that of Papworth. Papworth Hospital has taken action in response to our assessment and as a result it now either meets or has good plans to be able to meet all the requirements.

47. With that in mind we consider that four hospitals, listed below, should no longer provide level 2 services for adults with CHD, including interventional cardiology.

Recommendation for consideration by the Board

After careful consideration of consultation responses and other supporting materials, the Board is asked to confirm that the commissioning of level 2 CHD services, including cardiology interventions in adults with CHD, should no longer continue at the following hospitals:

- *Blackpool Teaching Hospitals NHS Foundation Trust*
- *Imperial College Healthcare NHS Trust*
- *Nottingham University Hospitals NHS Trust*

- *University Hospital of South Manchester NHS Foundation Trust⁴*

Assurance

- The impacts of implementing this recommendation have been assessed by the National Panel which has confirmed that the recommendation could be implemented by the NHS England Board and the impacts of doing so could be appropriately managed.

Implementation

NHS England's regional teams will give notice on any contracts for the provision of level 2 services, and will no longer reimburse such services from the providers named above.

48. If implemented, these proposals will mean that in future level 2 CHD services in England will be provided by the following hospitals:

- Brighton and Sussex University Hospitals NHS Trust (adult service)
- Manchester University NHS Foundation Trust (adult service)
- Norfolk & Norwich University Hospitals NHS Foundation Trust (adult service)
- Oxford University Hospitals NHS Foundation Trust (children's and adult services)
- Papworth Hospital NHS Foundation Trust (adult service)

Further action to support full implementation of the standards

49. We are clear that all of the standards are important in ensuring excellent patient care and we are committed to ensuring that the NHS in England continues to work to see them all implemented in practice. A lot of the work we have done so far has concentrated on the challenge of meeting those standards that could not be met at every hospital working as they were. However, most of the standards are not of this type, and they can be met at every hospital with the right focus, attention and in some cases some extra investment. We are therefore putting in place a range of mechanisms to support the full implementation of all the standards.

Better information

50. Surviving surgery (or a cardiology intervention) is clearly vital for patients, but that is not the whole story when considering how good services are or the quality of life they achieve for patients and their families. Unfortunately, to date, few other reliable measures have been available. To address that shortfall we have:

- Developed a measure of patients' experience of their own care.

⁴ University Hospital of South Manchester has now merged with Central Manchester University Hospitals to form Manchester University Foundation Trust. Under the recommendations the newly merged Trust would provide level 2 services from its Royal Manchester Infirmary site.

- Worked with the Congenital Heart Services Clinical Reference Group to introduce a dashboard that makes available a much wider range of measures of the quality of care than has ever been available before.
- Worked with the National CHD Audit to encourage reporting on a wider range of procedures and with a wider range of measures.
- Developed a research proposal to investigate longer term outcomes by diagnosis, which will now be commissioned by the Department of Health. This will use linked data from the national CHD audit and paediatric intensive care network databases, and other sources.

Networks

51. While most level 1 CHD surgical centres already have informal networks, the extent to which these networks have been developed varies. The standards place great emphasis on networks, and we believe they have a vital role to play in ensuring standards are met across the board. That's why we have agreed to provide funding to support their development.

Peer review

52. Peer review provides a mechanism by which centres are required to provide evidence to show that they meet the standards. The emphasis is on improvement and learning from other centres. NHS England's Specialised Commissioning Quality Surveillance Team (QST) will support the development and delivery of a rolling peer review programme that will cover all of the standards at all hospitals.

Conclusion

53. We have made a series of recommendations for changes to services for people with CHD. Ultimately, the aim of all our work has been to improve the care that patients receive. We believe that if these recommendations are implemented they will mean that, in time, every hospital will be brought up to the level of the very best in every aspect of care. It will mean that every child with CHD receives their care in a hospital that offers a holistic children's environment, with all the facilities and other specialists on site and readily able to contribute to their care. It will mean that all CHD surgeons and interventional cardiologists are doing enough procedures to develop and maintain their skills, and they will be part of teams large enough to provide full 24 hour / seven day care, resilient enough to continue to do so, even if one of the team leaves or is away for some reason. Occasional practice by non-specialists will be a thing of the past. Over time the full range of standards will be implemented with the help of more formal networked working, and including better information, communication and support which patients told us is so important. Commissioners, hospitals and patients alike will have access to a wider range of measures that can tell us all how well services are doing and help inform further improvements.

54. The Board is invited to:

- **Note** the results of the consultation;
- **Note** the assurances that due process has been followed and that it may appropriately proceed to take decisions;
- **Agree** the recommendations for changes to the provision of level 1 and level 2 adult and paediatric CHD services and the associated implementation schedules; and
- **Agree** the proposals for full implementation of all the standards, and in particular confirm its support for the recommendations relating to better information, formal CHD networks and peer review.

Appendix 1: Implementation Schedules

North West of England

- NHS England will monitor progress in the north-west towards meeting the standards and take commissioning action if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule. These timescales are informed by the Trust's own plans and the original timetable set out in the standards.
- Alder Hey Children's Hospital Trust, Liverpool Heart and Chest Hospital (LHCH), The Royal Liverpool and Broadgreen Hospital, Liverpool Women's Hospital and Manchester University Hospitals (MFT) will be required to re-provide all level 1 and level 2 services for adults with CHD within the North-West England CHD Network (NWCHDN) by January 2019.

Milestone- no later than	Deliverable	Commissioner action if not delivered
		Trust required to produce, and agree with NHS England, a recovery plan.
January 2018	NWCHDN Network MDT meets at least weekly.	If milestone missed.
April 2018	NWCHDN Network Board established.	If milestone missed.
September 2018	All outpatient appointments for adults with CHD delivered within the NWCHDN at both LHCH and MFT (and outreach), excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.	Less than 85% outpatient appointments for adults with CHD delivered within the NWCHDN at both LHCH and MFT, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.
November 2018	All cardiology interventional procedures for adults with CHD delivered within the NWCHDN at both LHCH and MFT, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.	Less than 85% interventional procedures for adults with CHD delivered within the NWCHDN at both LHCH and MFT, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.
January 2019	All cardiac surgery for adults with CHD delivered within the NWCHDN at LHCH, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.	Less than 85% cardiac surgery for adults with CHD delivered within the NWCHDN at LHCH, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.

January 2019	All non-cardiac surgery for adults with CHD delivered within the NWCHDN at the appropriate centre, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.	Less than 85% non-cardiac surgery for adults with CHD delivered within the NWCHDN at the appropriate centre, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.
January 2019	All inpatient admissions for adults with CHD delivered within the NWCHDN at the appropriate centre, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.	Less than 85% inpatient admissions for adults with CHD delivered within the NWCHDN at the appropriate centre, excluding patients whose care is delivered elsewhere because of patient choice or for clinical reasons.

University Hospitals of Leicester NHS Trust

- University Hospitals of Leicester NHS Trust will be required to achieve full compliance with the standards within the required timeframes and specified milestones. This includes achieving full co-location for all inpatient paediatric CHD care by April 2020 and increasing surgical activity so that it has a team of at least four surgeons, each undertaking at least 125 operations per year from April 2021.
- NHS England will monitor UHL's progress towards meeting the standards and take commissioning action if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule. These timescales are informed by the Trust's own plans and the original timetable set out in the standards.

Milestone- no later than	Deliverable	Commissioner action if not delivered	
		Trust required to produce, and agree with NHS England, a recovery plan.	Referral to Specialised Services Commissioning Committee for decision whether to terminate the contract to provide level 1 CHD services.
April 2018	Surgical activity for the year 2017/18 at least 375 operations.	Surgical activity less than 356.	Surgical activity is less than 337.
	Surgeons undertaking at least 125 operations per year.	One or more surgeons undertook fewer than 125 operations in 2018/19.	Fewer than three surgeons in post; no appointment made for replacement(s).
April 2019	Surgical activity for the year 2018/19 at least 403 operations.	Surgical activity less than 382.	Surgical activity is less than 362.
	Three surgeons undertaking at least 125 operations per year.	One or more surgeons undertook fewer than 125 operations in 2018/19.	Fewer than three surgeons in post; no appointment made for replacement(s).
April 2020	Surgical activity for the year 2019/20 at least 435 operations.	Surgical activity less than 418.	Surgical activity is less than 402.

	Three surgeons undertaking at least 125 operations per year.	One or more surgeons undertook fewer than 125 operations in 2019/20.	Fewer than three surgeons in post; no appointment made for replacement(s). One or more surgeons undertook fewer than 125 operations a year averaged across 2018/19 or 2019/20.
	Full co-location achieved for all inpatient paediatric CHD care.		Full co-location not achieved for all inpatient paediatric CHD care.
April 2021	Surgical activity for the year 2020/21 at least 471 operations.	Surgical activity less than 453.	Surgical activity is less than 435.
	Three surgeons undertaking at least 125 operations per year.	One or more surgeons undertook fewer than 125 operations in 2020/21.	Fewer than three surgeons in post. One or more surgeons undertook fewer than 125 operations a year, on average across the years 2018/19, 2019/20 and 2020/21.
	Fourth surgeon appointed and in post.		No appointment made for fourth surgeon.
April 2022	Surgical activity for the year 2021/22 at least 500 operations.	Surgical activity less than 487.	Surgical activity is less than 475.
	Four surgeons undertaking at least 125 operations per year.	Fewer than four surgeons in post. One or more surgeons undertook fewer than 125 operations in 2021/22.	Fewer than three surgeons in post.

Royal Brompton and Harefield NHS Foundation Trust

- The Royal Brompton and Harefield NHS Foundation Trust will be required to develop and deliver a credible solution for meeting the co-location requirements for its paediatric services. RBH should develop its plans (working with potential partners as appropriate) following Treasury guidance for preparing a Public Sector Business Case and using the five case model.
- The Royal Brompton and Harefield NHS Foundation Trust will be required, as part of its planning process, to develop and deliver a detailed plan with clear milestones, that will achieve full co-location for all RBH paediatric specialist services by April 2022.

NHS England will monitor RBH's progress towards meeting the standards, and take commissioning action if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule. These timescales are informed by the Trust's own plans and the original timetable set out in the standards. NHS England will expect the following:

- Strategic Outline Case prepared by the Trust, supported by NHS England and submitted for approval by 30 June 2018
- Outline Business Case prepared by the Trust, supported by NHS England and submitted for approval by 30 November 2019
- Full Business Case approved by 30 August 2021

Milestone- no later than	Deliverable	Commissioner action if not delivered	
		Trust required to produce, and agree with NHS England, a recovery plan.	Referral to Specialised Services Commissioning Committee for decision whether to terminate the contract to provide level 1 CHD services.
June 2018	Strategic Outline Case (SOC) prepared by the Trust, supported by NHS England, and submitted for approval.		SOC not submitted.
April 2019	Early priorities for joint working implemented.		

	Detailed plan to achieve full co-location for all inpatient paediatric specialist services.	Co-location plan not delivered.	Further slippage to delivery of co-location plan vs recovery plan.
November 2019	Outline Business Case (OBC) prepared by the Trust, supported by NHS England, and submitted for approval.		OBC not submitted.
August 2021	Full Business Case.		Approved FBC not delivered.
April 2022	Full co-location achieved for all inpatient paediatric specialist services.	Full co-location not achieved for all RBH paediatric specialist services.	Full co-location not achieved for all inpatient paediatric CHD care.

Newcastle Upon Tyne Hospitals NHS Foundation Trust

NHS England will further consider its commissioning approach for both the CHD and the heart transplant service at NUTH from March 2021 onwards, and will confirm its plans by no later than April 2019.

- NUTH will be required to develop and deliver a plan to increase surgical activity so that it has a team of at least three surgeons, each undertaking at least 125 operations per year, within the required timeframes, and specified milestones.
- NUTH will not be required to meet the 2019 deadline for full co-location for paediatric cardiac services but will be required to meet these standards, if NHS England confirms a plan to commission level CHD services beyond April 2021.

NHS England will monitor NUTH's progress towards meeting the standards, and take commissioning action if it becomes clear that the standards will not be met according to the timescale set out in the implementation schedule. These timescales are informed by the Trust's own plans and the original timetable set out in the standards.

Milestone- no later than	Deliverable	Commissioner action if not delivered	
		Trust required to produce, and agree with NHS England, a recovery plan.	Referral to Specialised Services Commissioning Committee for decision whether to terminate the contract to provide level 1 CHD services.
February 2018	Growth plan to increase surgical activity to at least 375 operations a year by 2019/20.	Plan not delivered.	Further slippage to delivery of plan vs recovery plan.
April 2019	NHS England to produce a commissioning plan for CHD services including advanced heart failure and heart transplant for children and adults with CHD.	n/a	n/a
April 2020	Surgical activity for the year 2019/20 at	Surgical activity less than 365.	Surgical activity is less than 356.

	least 375 operations.		
	Three surgeons undertaking at least 125 operations per year.	One or more surgeons undertook fewer than 125 operations in 2019/20.	Fewer than three surgeons in post.
To be confirmed if long term commissioning of level 1 CHD confirmed.	Full co-location achieved for paediatric cardiac services.		Full co-location not achieved for all inpatient paediatric CHD care.