

LLR Joint Health Scrutiny Committee meeting

Date: 27th April 2018

FOR INFORMATION

TITLE OF PAPER: Update on CHD Services in East Midlands and the NHS England review into PICU and ECMO services nationally

Report submitted by: Alison Poole – Senior Manager Special Projects UHL

1. PURPOSE

- 1.1. This briefing paper has been written by University Hospitals Leicester (UHL) NHS Trust to provide Leicestershire, Leicester and Rutland Joint Health Overview & Scrutiny Commission (LLR HOSC) with an update on the Congenital Heart Disease (CHD) services in the East Midlands and progress of the national reviews on Paediatric Intensive Care (PICU) and Extra Corporeal Membrane Oxygenation (ECMO) services in England.
- 1.2. The paper is for information and further updates will be provided to the LLR HOSC on request to provide assurance that the UHL service is meeting the required CHD standards/targets and to update on the national PICU and ECMO reviews.

2. BACKGROUND

- 2.1. In summer 2016 NHS England (NHSE) published proposals for changes to CHD services to improve the delivery and quality of CHD care. A revised set of standards were also produced [<https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/03/chd-spec-standards-2016.pdf>].
- 2.2. The national NHSE team led the process of ensuring services were compliant with or had plans in place to be compliant. Each hospital was assessed against a specific number of the standards, i.e. those considered to be most closely and directly linked to the measureable outcomes, and to effective systems for monitoring and improving quality and safety.
- 2.3. At the time of the original assessment, published in July 2016, UHL was assessed as Amber/Red – ‘Does not meet all the April 2016 requirements and is unlikely to be able to do so’ for a Level 1 Centre. The national team therefore at the time stated that they were not minded to continue commissioning these services.
- 2.4. Following this initial assessment a full formal public consultation on the proposals was conducted. The national team also continued to have dialogue with hospitals that would be affected by the proposed changes.

2.5. There was a further assessment in September 2017 to inform the National NHSE Board. UHL was then assessed as being Amber - 'should be able to meet the requirements with further development of its plans' and so the final recommendations were changed from the original proposals. There were no concerns with 9 out of 14 assessed standards. For the five remaining areas it was acknowledged that these would be met within an agreed timescale and plans were in place. These are set out in Table One below.

Table One: Assessment of UHL against 2016 CHD Standards as at September 2017

| Standard or deliverable | Challenges for UHL |
|--|---|
| Surgical activity for the year 2017/18 at least 375 operations. | UHL was one of only two Level 1 centres yet to reach 375 operations per year. UHL have submitted plans to reach this level by 2018. |
| Congenital cardiac surgeons must be the primary operator in a minimum of 125 congenital heart operations per year (in adults and/or paediatrics), averaged over a three-year period. | The level of activity in 17/18 does not support the three surgeons to each perform 125 cases in year; recruitment plans are in place for a fourth surgeon to as the activity increases. |
| 1:3 Consultant rota | Although UHL employed three surgeons, only two were taking part in the on-call rota. Leicester provided assurances that this arrangement was temporary and plans were in place to recruit as activity increases. |
| Interventional cardiologist rotas should be no more than 1 in 3 | UHL had three interventional cardiologists. The service is augmented by three other interventional congenital cardiologists, who are employed elsewhere, but have contracts with University Hospitals of Leicester for their work at the Trust. |
| Specialist Surgical Centres must have key specialties or facilities located on the same hospital site. Consultants from the following services must be able to provide emergency bedside care (call to bedside within 30 minutes). | <p>Plans are in place for the new Children's Hospital to include the CHD service on the LRI site –currently there are two options utilising space in the Balmoral building, or the Kensington Building (the preferred option). Both options enable the move of the CHD services by April 2020.</p> <p>The Kensington option will provide a stand-alone children's hospital and separate women's hospital which is part of the STP plans for the Trust moving from 3 sites to 2.</p> |

| | |
|--|--|
| | <p>Funding for the women's hospital forms part of the £397m needed from government for the transformation fund.</p> <p>The CHD service move in either option is funded from Trust capital provision and not dependent upon the allocation of the Transformation funds.</p> |
|--|--|

2.6. A fuller description of the initial assessment and consultation is within the Decision Making Business Case – which was tabled at the National Board on the 30th November [\[https://www.england.nhs.uk/wp-content/uploads/2017/11/06-pb-30-11-2017-annex-b-chd-dmbc.pdf\]](https://www.england.nhs.uk/wp-content/uploads/2017/11/06-pb-30-11-2017-annex-b-chd-dmbc.pdf)

3. The National Board Decision

3.1. The decision of the NHS England National Board on the 30th November 2017 in respect to UHL was as follows;

- To **continue 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;

4. UPDATE UHL

4.1. As shown in table one above the main concerns in achieving the required standards have been;

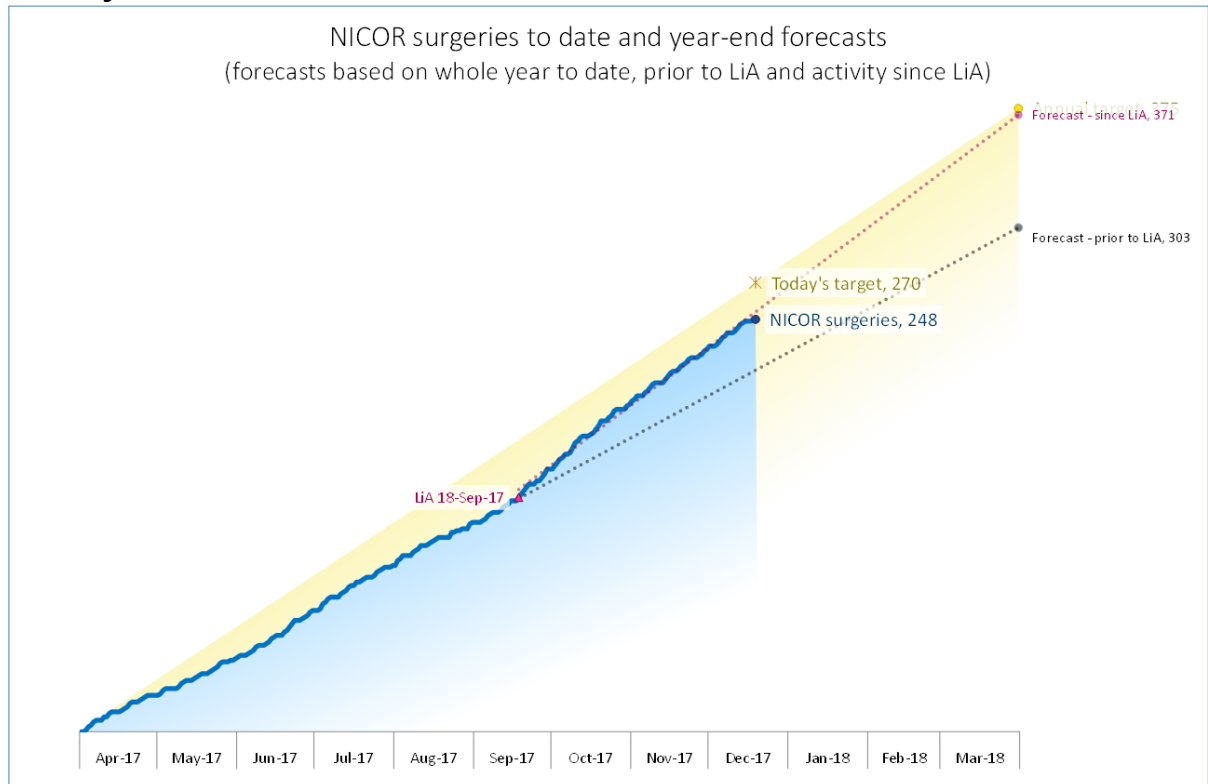
- Achieving the volume of surgical procedures;
- Maintaining and then increasing surgical consultants;
- Achieving compliant IR rotas; and
- Moving to an integrated children's service on one site.

Surgical Activity

4.2. In terms of **surgical activity** - in first part of 2017/18 the levels were falling behind expectations, with theatre throughput identified as the main cause. The East Midlands Congenital Heart Centre (EMCHC) held a Listening into Action event with all EMCHC and associated staff to identify ways to increase surgical throughput.

4.3. A task group was established chaired by John Adler CEO, and a new working process was trialled starting September 2017. Performance improved dramatically and was on track to recover the shortfall from the first few months and meet the 375 expected surgical cases by April 2018 see Figure One. To meet this trajectory the service needed to complete between 8 – 9 surgical cases per week based on December performance.

Figure One - UHL 2017/18 Year-end Forecast Trajectory for NICOR Surgical Activity



Winter pressures since December impacted the ability of the service to maintain this level of activity for 3-4 weeks. The demand for respiratory beds resulted in no adult cases being completed during this time, and fewer paediatric cases than planned. The Trust put measures in place to prioritise CHD surgery and caseload numbers recovered back to 8-9 cases per week. This did however impact the final number for 2017/18 which was 357 just above the 356 level stated in the NHSE Board recommendation.

The operational measures put in place by the service demonstrate that (without winter pressures) it is possible to consistently deliver eight cases per week, which will ensure the 2018/19 target of 403 surgical cases can be met.

- 4.4. The Trust has gained assurances from a number of trusts in the East Midlands that they will refer patients to the EMCHC to ensure the required level of activity. NHSE have issued a monitoring framework which sets out the levels at which the service will need to either produce a recovery plan or be referred back to the national CHD Panel to consider the on-going commissioning arrangements. (Appendix 1). For 17/18 these triggers are 356 and 337 surgical cases respectively.
- 4.5. It should be noted at this stage that all Level 1 centres are required to meet the surgical caseload numbers – and any that fall behind will be subjected to the same degree of scrutiny. The Trust does not therefore feel that this monitoring is extraordinary.
- 4.6. EMCHC are continuing to develop the excellent relationships they have with the network hospitals and with the increased certainty provided by the decision on the 30th November are now able to establish stronger pathways and innovative working arrangements to support the referral of patients to the service.
- 4.7. The Trust are establishing a network board to oversee the needs of the network hospitals and drive the network strategy, a launch day for which will be in September

with the first network meeting planned for December . Board membership will include representation from the network hospitals as well as key representation from EMCHC

- 4.8. The EMCHC growth plan sets out an expected activity level of between 525 and 546 case by 2021 which meets the standards in terms of volume and timescales.

Consultant Numbers & Primary Operator Numbers

- 4.9. During 2017 EMCHC experienced significant change in its surgical operators. In June Mr Corno assumed an academic role and was replaced by Mr Omeje, and in November Mr Speggorin left and was replaced by Mr Saeed. The Trust has confirmed that there are 3 Consultants in place with a view to moving these to be all substantive posts by the end of November 2018.
- 4.10. Table Two below provides details of the current individual EMCHC surgeon targets and position to date as of December 2017. Standard B10 (L1) states that each surgeon should achieve an average of 125 procedures each year over the previous three years. Table two shows the position as of December 2017 with the target for each surgeon calculated on the 125 target pro- rated from the date they commenced at EMCHC.

Table Two: Consultants in Post as at December 2017

| Surgeon | Annual target | End of year position | Comments |
|----------|---------------|----------------------|---|
| Mr Mimic | 125 | 125 | |
| Mr Omeje | 100 | 115 | Mr Omeje began operating for our service in June 2017; his annual target is therefore pro rata. |
| Mr Saeed | 47 | 38 | Mr Saeed began operating for our service on 13th November 2017; his annual target is therefore pro rata |
| Total | 272 | 278 | |

Based on this and the projected surgical caseload for 2018/19 it is expected that with continued planning and monitoring all three surgeons will achieve 125 cases within a 12 month period of commencing employment at EMCHC, and in the 2018/19 financial year.

IR Rota

- 4.11. Since the reported September position, the Trust has recruited two interventional cardiologists. One appointee is due to commence in April 2018 the other appointee withdrew due to the uncertainty surrounding the service at the time. This post is currently being re advertised and the Trust is confident that they will now attract more interest following the decision from the NHS England Board. Interviews for this post are expected in April after which the full-time paediatric interventional on-call rota will be back to 1:3. In the interim the Trust has robust plans in place to ensure this standard is met as per the update in Table 1.

Location of Services on to One Site

- 4.12. As detailed in Table 1 there is a robust plan to meet the co-location standard by April 2020. The Children's Hospital Project is well established, with a project board chaired at an executive level, meeting fortnightly to review progress and ensure the project remains on programme. The design team have been appointed to progress plans for the paediatric CHD service in the Kensington Building, as this has been identified as the preferred location for all children's services. As outlined in table one, the Kensington option is interdependent upon the availability of capital for wider reconfiguration as a part of the STP funding. If we are unsuccessful with our bid for capital funding, or there is significant delay to a decision on this, plans will be progressed to deliver the paediatric CHD service within the Balmoral building, adjacent to the existing location for other paediatric services.
- 4.13. The Trust has identified the capital funding for the move of the paediatric CHD service within its internal Capital Resource Limit, therefore the move of the service to the LRI is NOT interdependent upon external capital funding from the Department of Health (this only impacts the location). Confirmation of the STP capital funding will enable the Kensington option to be confirmed.

5. Update on National PICU and ECMO review

- 5.1. There has been very little progress on the PICU review since the last update to the HOSC in September. The main objective of the review is to manage the increasing demand for PICU beds with limited capacity by enabling provision for long term respiratory patients, and HDU patients in designated district general hospitals. There has been no strategy presented for consideration since the meetings in July and the concept presents problems to NHS England as all PICU commissioning currently falls within their remit, but it is unlikely that a wider network of level 2 HDU centres could continue to be commissioned in the same way .
- 5.2. It was anticipated that initial recommendations would be made by April 2018; we have no indication if this is still possible.
- 5.3. The review of PICU transport provision is focussing purely on a peer review of all the teams to ensure they are performing to expected standards, it is not anticipated that there will be any change to the current service set up recommended.
- 5.4. The ECMO review prior to the decision the 30th November was considering how the service would be managed without EMCHC (assuming the decision would go against us). Since the positive decision the review has had to reconsider the service with EMCHC as a major player.
- 5.5. Adult ECMO is currently provided in 5 designated centres, with 300 cases per year being split across the 5 centres. This set up was commissioned in 2011 and has had numerous peer reviews and is deemed to be working effectively.
- 5.6. Paediatric ECMO numbers are much smaller c 80 cases per annum. Currently all ten Level 1 centres are required to do cardiac ECMO as part of the CHD standards, but only 5 centres designated to deliver respiratory ECMO . The same argument on caseload numbers and familiarity applies in this service as it does in CHD so there is a reluctance to split the workload across all ten centres as this would severely reduce the practice and experience of all centres. The main constraints for ECMO provision however is PICU capacity, and therefore the ECMO review is totally reliant on the PICU

review to assess the best way of managing demand. The need for a central mobile ECMO transport team is being discussed and currently there is no indication of when a decision is likely to be made concerning these crucial issues. The next review meeting is on the 2/3 March.

Appendices :

Appendix A – UHL Compliance Matrix

| | Deliverable | Commissioner action if not delivered | | Milestone- no later than | Update as at end of 2017 |
|----|---|--|---|-----------------------------|---|
| | | Trust required to produce, and agree with NHS England, a recovery plan | Referral to Specialised Services Commissioning Committee for decision whether to terminate contract to provide level 1 CHD services | | |
| 1. | Surgical activity for the year 2017/18 at least 375 operations. | Surgical activity less than 356. | Surgical activity is less than 337. | April 2018 | Due to recent winter pressures and restrictions to surgical caseload the activity for 2017/18 will not reach 375; but will exceed 356. |
| 2. | Surgeons undertaking at least 125 operations per year. | One or more surgeons undertook fewer than 125 operations in 2017/18. | Fewer than three surgeons in post; no appointment made for replacement(s). | April 2018 | The service has 3 surgeons, 2 of which have joined in 2017/18 and will have therefore a pro rata caseload requirement. Mr Mimic will meet the 125 operations in 2017/18 and it is expected that the other 2 surgeons will meet this within the 12 month period of their commencement in employment. |
| 3. | Surgical activity for the year 2018/19 at least 403 operations. | Surgical activity less than 382. | Surgical activity is less than 362. | April 2019 | It is anticipated that the 403 target will be met. |

| | Deliverable | Commissioner action if not delivered | | Milestone- no later than | Update as at end of 2017 |
|----|---|--|---|-----------------------------|---|
| | | Trust required to produce, and agree with NHS England, a recovery plan | Referral to Specialised Services Commissioning Committee for decision whether to terminate contract to provide level 1 CHD services | | |
| 4. | 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 2019 | It is anticipated that all three surgeons will undertake at least 125 cases in 2018/19. |
| 5. | Surgical activity for the year 2019/20 at least 435 operations. | Surgical activity less than 418. | Surgical activity is less than 402. | April 2020 | |
| 6. | 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. | April 2020 | |

| | Deliverable | Commissioner action if not delivered | | Milestone- no later than | Update as at end of 2017 |
|----|--|--|---|-----------------------------|--|
| | | Trust required to produce, and agree with NHS England, a recovery plan | Referral to Specialised Services Commissioning Committee for decision whether to terminate contract to provide level 1 CHD services | | |
| 7. | Full co-location achieved for all inpatient paediatric CHD care. | | Full co-location not achieved for all inpatient paediatric CHD care. | April 2020 | <p>Plans are in place for the new Children's Hospital to include the CHD service on the LRI site – currently there are two options utilising space in the Balmoral building, or the Kensington Building (the preferred option). Both options enable the move of the CHD services by April 2020.</p> <p>The Kensington option will provide a stand-alone children's hospital and separate women's hospital which is part of the STP plans for the Trust moving from 3 sites to 2. Funding for the women's hospital forms part of the £397m needed from government for the transformation fund.</p> <p>The CHD service move in either option is funded from Trust capital provision and not dependent upon the allocation of the Transformation funds.</p> |

| | Deliverable | Commissioner action if not delivered | | Milestone- no later than | Update as at end of 2017 |
|-----|---|--|---|-----------------------------|--------------------------|
| | | Trust required to produce, and agree with NHS England, a recovery plan | Referral to Specialised Services Commissioning Committee for decision whether to terminate contract to provide level 1 CHD services | | |
| 8. | Surgical activity for the year 2020/21 at least 471 operations. | Surgical activity less than 453. | Surgical activity is less than 435. | April 2021 | |
| 9. | 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 | April 2021 | |
| 10. | Fourth surgeon appointed and in post. | | No appointment made for fourth surgeon. | | |
| 11. | Surgical activity for the year 2021/22 at least 500 operations. | Surgical activity less than 487. | Surgical activity is less than 475. | April 2022 | |

| | Deliverable | Commissioner action if not delivered | | Milestone- no later than | Update as at end of 2017 |
|-----|---|---|---|-----------------------------|--------------------------|
| | | Trust required to produce, and agree with NHS England, a recovery plan | Referral to Specialised Services Commissioning Committee for decision whether to terminate contract to provide level 1 CHD services | | |
| 12. | Four surgeons undertaking at least 125 operations per year. | Fewer than four surgeons in post. One or more surgeons undertook fewer | Fewer than three surgeons in post. | April 2022 | |

Appendix Two – CHD Network Development

Hub and spoke networks exist in many parts of the country the standards but require more formal networks with a greater focus on improvement. Networks should also have a role to play in ensuring that standards are met in their area, including level 3 services. A commitment has been given by the National Board to pump prime the development of these new formal networks.

| Milestone | Deliverable | Lead |
|-----------------------------|---|--|
| January 2018 | Agreed vision for CHD network working | National programme team / CHD Programme Board |
| February 2018 | Funding for CHD network development | Regional Directors / Director of Specialised Commissioning |
| March 2018 | National service specification for CHD networks | National programme team |
| September 2018 | New formal CHD networks established. | Regional specialised commissioning teams |
| September 2018 and ongoing. | Participate in and support running of the new formal networks | Regional specialised commissioning team |