Paediatric Intensive Care and Paediatric Specialist Surgery Service Review

Webinar – Surgery

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About this webinar

- Webinar participants will be able to see slides and hear presenters as we progress through
- Can all webinar participants please place their phones on mute until the Q&A to prevent background noise
- Participants can use the text box on the right hand side of the screen to ask questions or communicate with the facilitator throughout the webinar. Use the drop down box to select who sees the message
- During the Q&A section, participants will be able to signal they wish to ask a question by clicking the ‘raise your hand’ button on their screen. The chair will un-mute them and invite them to ask their question. Please remember to ‘put your hand down’ afterwards
- We will check with people joining by phone only so that they also are able to ask questions

Why are we doing this review now?

What are the key issues we are addressing?

What we would like to achieve

Questions

Why are we doing this Review?

The NHS *Five Year Forward View* committed to a three-year 'rolling review' of specialised services. Paediatric critical care and specialised surgery in children were initially identified as a priorities for review by NHS England earlier in 2016.

Since then, the *Independent Review of Children's Cardiac Services in Bristol* reinforced that decision by recommending that NHS England should commission a review of paediatric intensive care (PIC) services across the country. There is also a need to consider the interdependencies between the recommendations from other initiatives and Reviews and the future provision and location of critical care services. The review will consider:

I. Paediatric Critical Care (PCC)
II. Paediatric Specialised surgery
III. Extracorporeal membrane oxygenation (ECMO)
IV. Paediatric transport

The Review is looking at all of these services at once given the interdependencies that exist between services and the need to look at children's specialist services in an integrated manner.

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The predominant concerns for the Review are increasing pressure on services and variation in care

Increasing pressure on services

- The number of admissions to PIC over the last few years has remained relatively stable – however changing nature of work on PICUs and increasing average length of stay place the service under considerable strain. A small number of children now use a large proportion of resources.
- There has been a year on year increase in the number of children's surgical procedures carried out in specialist hospitals – we need to better understand reasons for this.
- Workforce pressures face both critical care and specialist surgery. This can add additional pressure on already strained services.

Variation in care

- The volume of children with specialist conditions is small and there are numerous challenges involved in the planning of children's specialised services which can lead to variable provision across the country.
- There is variation in the way care is delivered for PIC, children's specialist surgery, transport and ECMO. This includes:
  - variation in admission rates for PIC;
  - variation in where a child will be operated on
  - variation in service provided by transport teams; and
  - inequity of access to respiratory ECMO.

A main focus of the Review is to create a sustainable solution that takes into account interdependencies

The Review aims to address key challenges in each of the four areas

Paediatric Critical Care

- Significant seasonal pressures present every winter
- Balancing emergency/elective demand
- Variable admissions criteria in PICUs across country (reflected by variation in rates of invasive ventilation)
- Morbidity in children surviving has increased significantly
- Provision of level 2 care is variable across the country
- A small number of children are using a high level of resources in PICUs
- Staffing critical care units to levels recommended by the Paediatric Intensive Care Society (PICS) often proves to be challenging

Paediatric Specialist Surgery

- No of children undergoing specialised surgery has increased yearly from 2008/09
- Spend on paediatric specialised surgical procedures has risen
- The number of children operated on in district general hospitals for non-specialised surgery has reduced with a corresponding increase in the number who are operated on in specialist hospitals
- Fewer adult surgeons and anaesthetists train in, or have enough exposure to children's surgery to carry out these procedures in district general hospitals than previously

ECMO

- Reported concerns include apparent inequity of access to respiratory ECMO and a need to transfer patients a significant distance to receive care
- Local networks have been established on an ad hoc basis and there is variation in referral arrangements
- ECMO services are affected by seasonal demand

Paediatric Transport

- All critical care transport services transport critically ill children to PICU, some are additionally commissioned to provide repatriation after intensive care, but this varies
- Funding and commissioning models vary by regions
- Repatriation is currently performed by local ambulance services and can be deemed a low priority -this can lead to delayed discharges from PICUs

Challenges for Paediatric Specialised Surgery in more detail

The current infrastructure and model for children's surgical services has evolved over time, and in some areas has now become fragmented. Commissioners of specialised services have traditionally implemented services at a local level. There are issues with this approach both regionally and nationally around service variation, co-dependencies, governance and treatment volumes.

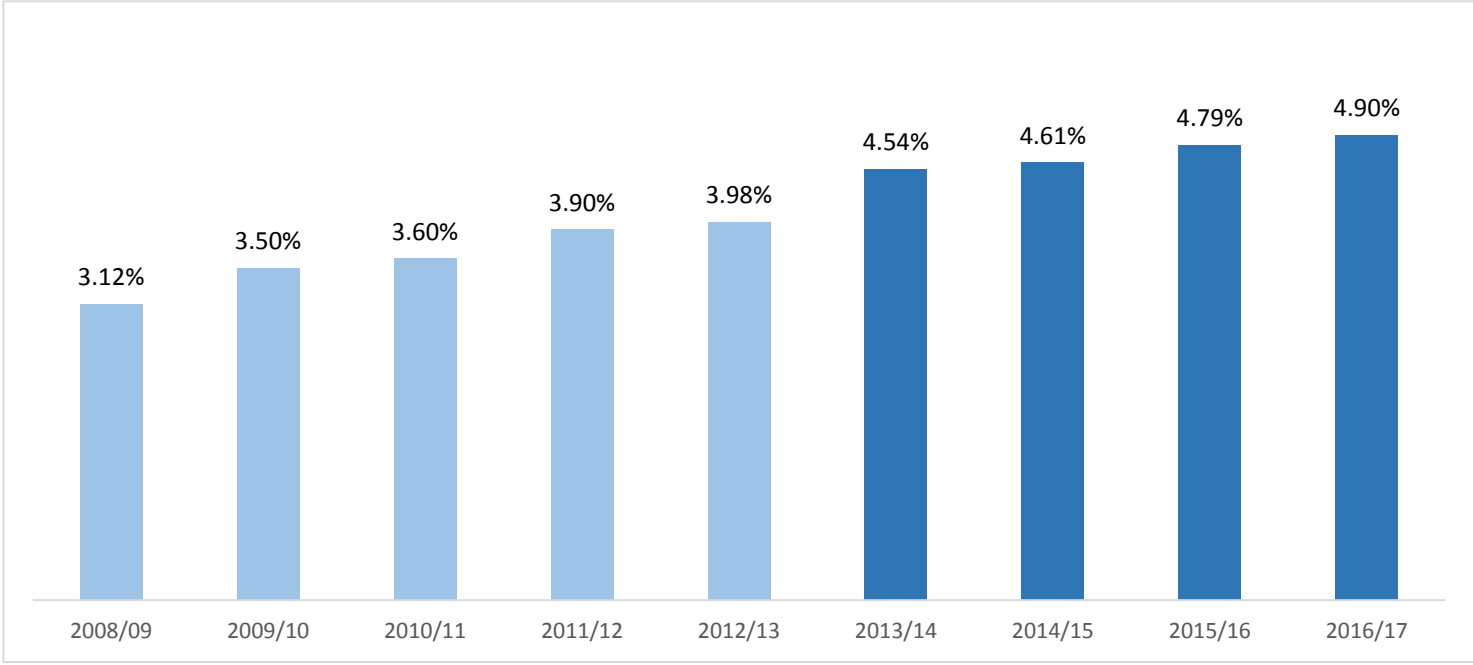
- There is difficulty in retaining staff in specialist areas were experience and skills are in short supply

- The model of provision for general paediatric surgery (GPS) is also now impacting on specialised activity, as there has been a steady decline in the number of GPS cases operated on in non-specialist hospitals, whilst activity in specialised centres has increased.

    - More children (especially under 5s) are likely to be transferred to specialised children's hospitals for non-specialised surgery. This means they are likely to be transferred further away from home to receive care.
    - In 2004/5 specialist services were responsible for 39% of children's surgery compared with 24% in 1994/1995.
    - Exposure to elective GPS for surgeons and anaesthetists in district general hospitals has declined in recent years, posing a challenge in replacing the cohort of general surgeons who are nearing retirement and have traditionally provided this service.

Specialised surgical activity has risen year on year

Spend on specialised surgery appears to have increased: initial analysis shows that increased volume has led to an increase in costs for specialised paediatric surgery. The number of admissions for under 19s has increased steadily year on year as shown below:



We need to better understand the reasons for this, and the impact of an increasing number of non-specialised procedures being carried out in specialist centres

Source: PICANet annual reports

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We hope that the review will bring about the following benefits, linked to NHS England's triple aim for health outlined in the *NHS Five Year Forward View*

Improving population health

- Improved **sustainability** of services and equity of access across the country to critical care services (including ECMO and swift transfer to critical care) and specialist paediatric surgery
- Delivery of more joined-up services for children with different levels of need, involving greater professional collaboration and possible network style working

Improving the quality of care

- **Reductions in variation of care** currently experienced – such as different admission criteria for paediatric intensive care, and reduction in variation experienced by children undergoing surgery
- Treating children **closer to home** wherever possible and improving patient and family experience of care

Improving value for money

- **Improved value for money** through preventing, where possible, children from requiring intensive care services in the first place as a result of greater support at lower levels of critical care
- Providing care in an appropriate setting and location for the child, thereby optimising use of the highest level of critical care and specialist surgical services

We propose 3 principles to underpin any future service

Our vision for the future of paediatric critical care and specialised surgical services is simple: services should be high quality, sustainable and equitable across the country. To achieve this, we think the following 3 principles need to underpin any future service:

1 Right Place

- The right children should be treated in the right place, at the right time, and close to home where possible.

2 Greater collaboration between services

- There should be greater collaboration between services to ensure that children receive consistent and excellent care.
- This will involve collaboration between commissioners, providers of different services, and patients and families.

3 Family involvement

- Families should be consistently involved in their children's care, and care should focus on the whole child.

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1. Have we correctly identified the pressing issues that specialist surgical services are facing?
2. Are we missing any major issues?
3. Are there some issues that are more pressing than others?
4. Are these the right aims and principles?
5. What actions should be prioritised to realise the aims of the Review?