The Yorkshire and Humber
Paediatric Critical Care
Operational Delivery Network

Service Evaluation of Level 1 & 2 Critical Care Final Report 2018

Contents Page

Introduction

The Yorkshire & Humber Paediatric Critical Care Operational Delivery Network (Y&H PCCODN) works collaboratively with 14 Trusts (19 hospital sites). This includes 2 tertiary units providing level 3 critical care in Leeds and Sheffield as well as Embrace, the Yorkshire & Humber Infant and Children's Transport Service. The role of the ODN is to coordinate patient pathways between providers over a wide area to ensure access to specialist resources and expertise. The provider units and the Y&H PCCODN work together to share learning, experience, knowledge, skills and best practice to ensure that critically ill children in Yorkshire and Humber receive high quality care.

Following the publication of the 2014 RCPCH 'Time to Move On' document the Yorkshire and Humber Paediatric Critical Care Operational Delivery Network (PCCODN) held a clinical forum to discuss high dependency care of children in the Yorkshire and Humber region. The outcome of the meeting was that the PCCODN should carry out an audit of high dependency activity alongside a service evaluation programme looking at Level 1 and 2 care within paediatric ward. In December 2015 the Paediatric Intensive Care Society published the 5th Edition Quality Standards for the Care of Critically Ill Children. These standards incorporated guidance from the RCPCH 'Time to Move On' as well as 'Facing the Future' RCPCH 2015. These standards were therefore used to form the framework for the service evaluation.

A pilot Service Evaluation was carried out by the PCCODN team in Doncaster and Bassetlaw NHS Trust in March 2014. This provided both the ODN and the local team an opportunity to test the framework of the document and make any amendments. A full programme of Service Evaluation visits started in April 2016.

The service evaluation contains 31 standards for Level 1 and Level 2 high dependency care outside of a paediatric intensive care unit. It is used as a self-assessment tool by the local team and then by the PCCODN team during the service evaluation visit.

Aims of Service Evaluation

- To provide the Y&H PCCODN with an overview of current Level 1 and 2 care within Paediatric wards around the Yorkshire and Humber region.
- To identify any challenges in meeting the PICS standards for Level 1 and 2 care.
- To assist with future planning of Level 1 and 2 paediatric critical care within the Yorkshire and Humber Region.
- To provide an opportunity for each Trust to review their own service and highlight any challenges they face.

Map showing hospitals within Yorkshire & Humber PCCODN

Process

Invitations were sent out to each Trust six to eight weeks prior to the visit along with the self-assessment document. They were asked to complete this document and return to the Lead Nurse along with any supporting evidence prior to the visit.

An agenda for the visit was also included – outlined below.

Time	
10:15 – 10:30	Pre meeting (PCCODN panel only) in agreed meeting room
10:30 – 11:00	Visit to Children's ward
11:00 – 12:00	Joint meeting with local team Presentation of evidence , review of standard document
12:00 – 12:15	Evaluation discussions (PCCODN panel only)
12:15 – 12:30	Feedback to local team

The ODN team consisted of a Clinical Lead, the Lead Nurse and Network Coordinator and on some occasions the Network Manager. The minimum members from the local team required for a visit to take place were a Paediatric Consultant and the Lead Nurse/ Matron. Other staff including the Ward Manager, Educator and General Manager were sometimes present. Verbal feedback was given on the day to the local team and a written report was sent to the Trust approximately six weeks after the visit.

All 14 Trusts in the Yorkshire & Humber Region took part in the process.

Executive Summary

- The Service Evaluation process identified the key challenges that units are facing. Common themes that emerged were workforce issues especially middle grade doctors above ST4, education and training around critical care competencies including advanced life support for nursing staff, and data collection. None of these were unexpected – the local teams fed back that it was very helpful to share challenges with the network team.

- There were many examples of good practice seen around the region including team working across different specialities, in house simulation training, parent information and feedback, use of regional guidelines particularly around transport.

- The ODN have been able to support the district general hospitals with particular challenges by providing a regional education programme which is delivered to local hospital sites. This includes the Paediatric Resuscitation and Stabilisation (PReS) day which is a multi-disciplinary simulation training day around management of critically ill children. This includes clinical aspects of care as well as human factors. Nurse skills study days are also provided to the paediatric teams and adult nurses in ED by the network educator.

- The PCCODN is also able to share good practice from around the region such as local critical care group meetings attended by paediatrics, ED and anaesthetics where cases can be discussed with Embrace and the PCCODN as well as education/training, guidelines, equipment and governance issues.

- Regional guidelines have been updated and shared with all hospitals in the region.

- Clinical forums organised by the PCCODN on topics including Hi flow, sepsis, and status epilepticus also provide opportunities for shared learning.

- The Lead Nurse has shared a competency package developed by one of the local hospitals, which was adapted from Time to Move On, for local implementation.

- The audit form used by the PCCODN has also been shared with the regional units to encourage them to collect PCCMDS (Paediatric Critical Care Minimum Dataset).

- The results of the Service Evaluation have been shared with the commissioners.

Section 1 – Support for the critically ill child & family

All of the units visited provided a child friendly environment. There was a great deal of variation in layout of each unit with a combination of cubicles and bays. Some had separate areas for teenagers providing them with a chill out area or a separate bay. Young people were encouraged in some hospitals to participate in a youth forum where they were consulted on services provided. All areas collected feedback from families and the majority displayed their response to this on 'You Said We Did' boards.

Parents were accommodated for on all the children's wards however facilities varied.

The majority of areas visited felt that access to psychological support was limited for those critically ill children who did not have an underlying long term condition. Some units were able to access support through the specialist services such as diabetes. One of the units had a local information board that had details of local support groups on it. This was updated on a monthly basis.

Section 2 – Staffing

All of the units in Yorkshire & Humber, with the exception of one, were unable to meet the standard for middle grade cover for level 2 care. This is due to a shortage of middle grade clinicians. The Trust that is the exception does not have a middle grade rota and cover is provided by resident consultants. Consultants in many of the units in region cover both neonates and paediatric services. Where consultants were not resident all but one Trust were able to attend within 30 minutes. This was identified as an area for concern by the ODN Review Team. All units have an identified consultant with responsibility for critically ill children.

The majority of units in Yorkshire & Humber have a minimum of two Registered Children's Nurses per shift. Two thirds of units had an advanced life support nurse on a shift and less than half had a nurse per shift with critical care competencies. As an action the ODN have shared a skills passport with all units in the region and provide nurse education sessions locally focussing on care of critically ill children. This skills passport has been adapted from the 'Time To Move On' RCPCH 2014 competency document by the senior nursing team at one of the Trusts in region to make it suitable for staff in a District General Hospital setting. One of the hospitals in region had managed to achieve 70% competency in critical care for nursing staff and was recognised as an area of good practice.

Another area of good practice in one Trust was identified as they had adopted a flexible workforce model which was based on seasonal acuity. This enabled them to increase staffing numbers at peak times of demand.

Section 3 – Facilities & Equipment

All of the units in Yorkshire and Humber met the standard for resuscitation equipment. A small number of wards did not have an accessible grab bag available so as an action the ODN team provided information about what the bag should contain so that those units could then create one.

Section 4 – Guidelines, policies & procedures

All areas had access to clinical guidelines. An early warning tool was in use in all paediatric units in Yorkshire and Humber at the time of the service evaluation process however some areas were looking at improving the type of tool used. There is a variety of tools used throughout the region.

The Embrace regional transfer guidelines were used by all units in the region. This was identified as an area of good practice as it provides consistency throughout the region. These guidelines were usually accessed via the Embrace website however some units had a shortcut on their local intranet site.

Section 5 – Data collection & governance

Review and learning was evident in all units however several units in the region have examples of excellent practice where they hold regular multi professional critical care groups that are focussed on critically ill children and have representation from Embrace and the ODN. All units were encouraged to follow this good practice.

All units in Yorkshire and Humber have participated in the regional HDU audits carried out by the PCCODN however less than half of those units collect the Paediatric Critical Care Minimum Dataset (PCCMDS) continuously.

Engagement with the PCCODN was good overall with regular attendance at the executive board meetings. Those units that did not attend regularly were recommended to do so.

Update 2018

All units were contacted again approximately one year after their original service evaluation visit and were asked to provide an update on the recommendations they received during the process. The following areas have improved following the reviews:

- Following the service evaluation visits more areas were able to access training in advanced life support for nurses. The majority of hospitals now have at least one nurse per shift with advanced life support training.
- All units now have a minimum of two registered children's nurses per shift.
- Nurse competencies are still a work in progress but the majority of units now have adopted a skills passport.
- Data collection starting locally in many areas,
- Regional guidelines being used in all areas.

The area that has seen no improvement is middle grade cover for level 2 care. There are still shortages all over the region and this is recognised as a national problem. The ODN will continue to monitor.

The next stage in the service evaluation process is to undertake a service evaluation of Anaesthesia and Emergency Departments across the region to complete the pathway for the critically ill child. This is planned for 2019.

Appendices

- Service Evaluation Self Assessment Document
- RAG Ratings and Definitions

The Yorkshire and Humber
Paediatric Critical Care
Operational Delivery Network

NHS

Service Evaluation

Level one and Level two Paediatric Critical Care

Karen Perring May 2016 (v6)

Service Evaluation – assessment document

Index Page

Introduction

In 2014 the RCPCH published 'High Dependency Care for Children – Time to Move On', which focused on the pathway for a critically ill child beyond the Paediatric Intensive Care Unit. It proposed a change in terminology away from High Dependency Care to three levels of paediatric critical care: Level 1, Level 2 and Level 3 Critical Care. Level 3 critical care is delivered in the PICU setting.

*'Each hospital Trust that admits children will be able to deliver Level 1 Critical Care activities and support (defined in section 2.3) within a Level 1 paediatric critical care unit. A more limited number of hospital Trusts will be designated by their *PCC ODN to deliver more complex, or prolonged, critical care activities known as Level 2 Critical Care (defined in section 2.3). These will be delivered in a Level 2 paediatric critical care unit. Level 2 units will exist within tertiary children's hospitals and will be able to provide support for complex specialist paediatric services, but others will be within larger regional hospitals and/or more remote regional hospitals. Each PCC ODN, working closely with commissioners, will be responsible for designating units based on their network requirements. Children will move along the critical care pathway as their physiological condition stabilises to the point where they can be cared for on a general ward or their condition deteriorates and they require care on a PICU.'* (High Dependency Care for Children – Time to Move On 2014 Appendix 11 RCPCH)

The Paediatric Critical Care Minimum Dataset (PCCMDS) is used to define the interventions that map Level 1, 2 and 3 critical care.

The Paediatric Intensive Care Society have recently published the 5th Edition Quality Standards for the Care of Critically Ill Children December 2015. These standards build on the 2010 standards and also reflect the guidance in 'High Dependency Care for Children – Time to Move On' (RCPCH, 2014) and 'Facing the Future' (RCPCH, 2015). These standards have been used to form the framework of this Service Evaluation.

*Paediatric Critical Care Operational Delivery Network

Listed below are the interventions that currently map Level 1 Critical Care.

LEVEL 1: BASIC CRITICAL CARE

Airway: Upper airway obstruction requiring nebulised adrenaline

Breathing:
• Apnoea – recurrent
• Oxygen therapy plus continuous pulse oximetry plus ECG monitoring
• Nasal high flow therapy

Circulation:
• Arrhythmia requiring IV anti-arrhythmic therapy

Diagnosis:
• Severe asthma (IV bronchodilator / continuous nebulisers)
• Diabetic ketoacidosis requiring continuous insulin infusion

Other:
• Reduced level of consciousness (GCS 12 or below) **and** hourly (or more frequent) GCS monitoring

Listed below are the interventions that currently map Level 2 Critical Care.

LEVEL 2: INTERMEDIATE CRITICAL CARE

Airway:
• Nasopharyngeal airway
• Care of tracheostomy (first seven days of episode only)

Breathing:
• Non-invasive ventilation (including CPAP and BiPAP)
• Long-term ventilation via a tracheostomy

Circulation:
• >80 ml/kg volume boluses
• Vasoactive infusion (including inotropes and prostaglandin)
• Temporary external pacing
• Cardiopulmonary resuscitation in the last 24 hours

Diagnosis:
• Acute renal failure requiring dialysis or haemofiltration
• Status epilepticus requiring treatment with continuous IV infusion

Monitoring:
• Invasive arterial monitoring
• Central venous pressure monitoring
• Intracranial monitoring / external ventricular drain

This information has been taken from Quality Standards for the Care of Critically Ill Children, PICS, December 2015 and is based on the Paediatric Critical Care Minimum Dataset.

Please note that the standards within this Service Evaluation have been taken from the self assessment tool in the Quality Standards for the Care of Critically Ill Children, 5th Edition, Paediatric Intensive Care Society, December 2015

Demographics

How many paediatric beds do you have?

Do you have medical and surgical beds?

How many high dependency beds do you have?

How many paediatric admissions do you have a year?

What is your current funded establishment for nursing staff in your Paediatric Department? Do you have any vacancies?

What is your current funded establishment for Medical staff (Consultants and Trainee posts) in the Paediatric Department? Do you have any vacancies?

Service Evaluation – assessment document

Support for the critically ill child and family (Level 1 & Level 2)
Demonstration of compliance – BI= Background Report, Doc =Document, V= visit, MP&S = meeting patients, families & staff

No.	*Quality standard*	*Notes*	*Demonstration of compliance*	*RAG*	*Comments*	*Standard agreed by Review Team*	*Review comments*
1.	*Child-friendly Environment* Children should be cared for in a defined safe and secure child-friendly environment, with age-appropriate stimulation and distraction activities.		Visit				
2.	*Information for Families* Information for families should be available covering, at least: a) The child's condition b) How parents can take part in decisions about their child's care c) Participation in the delivery of care and presence during interventions d) Support available including access to psychological and financial support e) How to get a drink and food f) Layout of the unit or ward, visiting arrangements including arrangements for children to visit, car parking advice, ward routines and location of facilities within the hospital that families may wish to use g) Relevant support		Visit Doc				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
3.	*Facilities and Support for Families* Facilities should be available for families, including: a) Somewhere to sit away from the ward b) Quiet room for relatives c) Kitchen, toilet and washing area d) Changing area for other young children e) Breast feeding facilities f) Chair for parents to sit next to the child g) Access to psychological support		Visit MP&S				
4.	*Parental Access and Involvement* Parents should: a) Have access to their child at all times except when this is not in the interest of the child and family or of the privacy and confidentiality of other children and their families b) Be informed of the child's condition, care plan and emergency transfer (if necessary) and this information should be updated regularly c) Have information, encouragement and support to enable them fully to participate in decisions about, and in the care of, their child.		Visit MP&S				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
5.	*Involving children and families* The service should: a) Have mechanisms for receiving feedback from children and families about the treatment and care they receive b) Have mechanisms for involving children and families in decisions about the organisation of the service c) Have examples of changes made as a result of feedback and involvement of children and families		Visit DOC				
6.	*Additional Support for Families* Families should have access to the following support and information about these services should be available: a) Interfaith and spiritual support b) Social workers c) Interpreters d) Bereavement support e) Patient Advice and Advocacy Services	*Availability' of support services is not defined but should be appropriate to the case mix and needs of the patients.*	Visit MP&S				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
7.	*Lead Consultant* A nominated lead consultant should be responsible for staffing, training, guidelines and protocols, governance and for liaison with other services. The lead consultant should undertake regular clinical work within the service for which they are responsible.		Visit				
8.	*Consultant Staffing* a) A consultant who is able to attend the hospital within 30 minutes and who does not have responsibilities to other hospital sites should be available 24/7 b) b) All consultants should have up to date advanced paediatric resuscitation and life support competences and should undertake CPD of relevance to their work with critically ill and critically injured children	'Available' means that the consultant can attend the unit if required. 'Facing the Future: A Review of Paediatric Services' (RCPCH, 2015) recommends that 'all general acute paediatric rotas are made up of at least 10 WTEs all of which are EWTD compliant'.	BI Visit				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
9.	*'Middle Grade' Clinician* ***Level 1*** A 'middle grade' clinician with the following competences should be immediately available at all times: a) Advanced paediatric resuscitation and life support b) Assessment of the ill child and recognition of serious illness and injury c) Initiation of appropriate immediate treatment d) Prescribing and administering resuscitation and other appropriate drugs e) Provision of appropriate pain management f) Effective communication with children and their families g) Effective communication with other members of the multi-disciplinary team, including the on-duty consultant	1. 'Immediately available' means able to attend within five minutes. 2. RCPCH competence frameworks are available at: www.rcpch.ac.uk/Training/Competency-Frameworks A competence framework and evidence of competences is required if this QS is met by use of non-medical staff. 3. Staffing levels needed will depend on the size and layout of the unit, dependency of patients and ward round patterns. Exact staffing ratios will depend on case-mix, availability of nurse specialists and seniority of medical trainees.	BI Visit				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
9. *Cont.*	A clinician with at least Level 1 RCPCH (or equivalent) competences and experience should be immediately available. Doctors in training should normally be ST4 or above. Larger hospitals with several wards or departments caring for children will require more than one clinician with these competences on site 24/7.						
10.	*Middle Grade' Clinician* ***Level 2*** A 'middle grade' clinician with the following competences should be immediately available at all times: a) Advanced paediatric resuscitation and life support b) Assessment of the ill child and recognition of serious illness and injury c) Initiation of appropriate immediate treatment d) Prescribing and administering resuscitation and other appropriate drugs e) Provision of appropriate pain management f) Effective communication with children and their families	1. 'Immediately available' means able to attend within five minutes. 2. RCPCH competence frameworks are available at: www.rcpch.ac.uk/Training/Competency-Frameworks A competence framework and evidence of competences is required if this QS is met by use of non-medical staff. 3. Staffing levels needed will depend on the size and layout of the unit, dependency of patients and ward round patterns.	BI VISIT				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
10. *Cont.*	g) Effective communication with other members of the multi-disciplinary team, including the on-duty consultant At least one clinician should be immediately available who is either: a) A paediatric trainee with at least Level 2 RCPCH (or equivalent) competences. Doctors in training should normally be ST6 or above, OR b) A paediatric trainee (at any RCPCH level) who has completed at least 6 months working in a Level 3 Unit, OR c) An anaesthetic specialty trainee, OR d) An advanced nurse practitioner or Hospital / Specialty Doctor with equivalent competences, OR e) A consultant (QS L2-202) Larger hospitals with several wards or departments caring for children will require more than one clinician with these competences on site 24/7.	Exact staffing ratios will depend on case-mix, availability of nurse specialists and seniority of medical trainees. 4. This is a developmental QS for Level 2 Units. The Level 1 Standard should be met immediately and the Level 2 Standard should be reached by 2018.					

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
11.	*Lead Nurse* A nominated lead nurse should be responsible for staffing, training, guidelines and protocols, governance and for liaison with other services. The lead nurse should be a senior children's nurse. The lead nurse should undertake regular clinical work within the service for which they are responsible.		Visit				
12.	*Staffing Levels: Bedside Care* Nursing and non-registered health care staffing levels should be appropriate for the number, dependency and case-mix of children normally cared for by the service and the lay-out of the unit. An escalation policy should show how staffing levels will respond to fluctuations in the number and dependency of patients. If staffing levels are achieved through flexible use of staff (rather than rostering), achievement of expected staffing levels should have been audited.	1. 'Defining Staffing Levels for Children's and Young People's Services' (RCN, 2013) and 'Safer Staffing: A Guide to Care Contact Time' (NHS England, 2014) give guidance on staffing levels and competence. Staffing levels should be related to the level of care needed by the child.	Visit BI Doc				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
12. *Cont.*	Before starting work in the service, local induction and a review of competence for their expected role should be completed for all agency, bank and locum staff. The following minimum nurse staffing levels should be achieved: a) At least one nurse with up to date advanced paediatric resuscitation and life support competences on each shift b) At least two registered children's nurses on duty at all times in each area c) At least one nurse per shift with appropriate level competences in paediatric critical care d) One nurse with appropriate level competences in paediatric critical care for every two children needing Level 1 or Level 2 critical care	This will be influenced by the patient's diagnosis and complexity and severity of illness, geographical lay-out of the unit and by the nursing skill-mix and experience. 2. Staff required to meet 'minimum staffing levels' should have achieved all appropriate level competences in paediatric critical care as assessed through a validated/accredited education and training programme. Further details are available on The Paediatric Intensive Care Society website: http://picsociety.uk/ 3. Healthcare staff caring for children with tracheostomies may include non-registered health care staff who normally care for the child in the community.					

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
12. *Cont.*	e) At least one nurse per shift with competences in care of children with tracheostomies and those requiring non-invasive or tracheostomy ventilation (for level 2 Units)	Parents who have received appropriate training may also contribute to this care.					
13.	*Competence Framework and Training Plan – Staff Providing Bedside Care* A competence framework and training plan should ensure that all staff providing bedside care have or are working towards, and maintain, competences appropriate for their role in the service including: a) Paediatric resuscitation: All staff should have basic paediatric resuscitation and life support competences and the service should have sufficient staff with advanced paediatric resuscitation and life support competences to achieve at least the minimum staffing levels and expected input to the paediatric resuscitation team	1. Competences should be maintained through CPD. 2. This QS is about the needs of the service and cannot be met solely by individual staff appraisals and personal development reviews (PDRs). Appraisals and PDRs are sufficient for assessing maintenance of competence but details of individual appraisals and PDRs are not required.	BI Visit Doc				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
13. *Cont.*	b) Care of children needing surgery (if applicable) c) Use of equipment as expected for their role d) Care of children with acute mental health problems e) Appropriate level paediatric critical care competences: 70% of nursing staff working on the PCC Units should have appropriate level competences in paediatric critical care For Level 2 units a) Care of children with tracheostomies b) Care of children needing acute and chronic non-invasive ventilation, and tracheostomy ventilation	Reviewers may, however, request information about specific aspects of relevance to the service, in particular, where a therapeutic intervention or activity is undertaken rarely and / or where competence may not be maintained by the individual's usual clinical practice. 3. For compliance with this QS the service should provide: a. A matrix of the roles within the service, competences expected and approach to maintaining competences b. A training and development plan showing how competences are being achieved and maintained.					

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
13. *Cont.*		4. Training may be delivered through a variety of mechanisms, including e-learning, Hospital-Wide training and departmental training. The network education and training programme will support maintenance of competences, especially in smaller units. 5. 'High Dependency Care for Children - Time to Move On' (RCPCH, 2014) gives more detail of expected paediatric critical care competences which should be achieved within 12 months of starting work in a PCC Unit. 6 Staff working in specialty-specific Level 2 Units should achieve all the competences for Level 2 paediatric critical care as well as appropriate specialty-specific competences.					

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
14.	The following staff should be available: a) Appropriately qualified staff to provide support for play, mental stimulation and distraction during procedures (7/7) b) Access to a liaison health worker for children with mental health needs (7/7) c) Access to staff with competences in psychological support (at least 5/7) d) Pharmacist with paediatric competences (with time allocated at least 5/7 for work on the unit) e) Physiotherapist with paediatric competences (with time allocated at least 5/7 for work on the unit) f) On-call access to pharmacy and physiotherapy services able to support the care of children (24/7)		MP&S Visit				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
14. *Cont.*	g) Access to dietetic service (at least 5/7) h) Access to an educator for the training, education and continuing professional development of staff						
15.	*Safeguarding Training* All staff involved with the care of children should: a) Have training in safeguarding children appropriate to their role, as agreed by the Hospital and local Safeguarding Board b) Be aware of who to contact if they have concerns about safeguarding issues c) Work in accordance with latest national guidance on safeguarding children and the safeguarding policy of the Hospital and local Safeguarding Board		Doc				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
16.	*Resuscitation Equipment* An appropriately designed and equipped area, or adequate mobile equipment, for resuscitation and stabilisation of critically ill children of all ages should be available. Drugs and equipment should be checked in accordance with local policy.	A list of drugs and equipment needed for paediatric resuscitation is available on The Paediatric Intensive Care Society website http://picsociety.uk/	Visit				
17.	*'Grab Bag'* Appropriate drugs and equipment for in-hospital and time-critical transfers should be immediately available and checked in accordance with local policy.		Visit				
18.	*Imaging Services* 24 hour on site access to imaging services should be available including ultrasound and CT scanning, with reporting available within one hour. Arrangements for access to MRI should be in place. If staff with competences in reporting imaging of children are not available 24/7 then the Hospital should have arrangements for review of imaging by a paediatric radiologist	1. Availability within one hour applies only to services receiving critically ill and critically injured children and is not applicable to services receiving elective admissions only. 2. Arrangements for access to MRI could include on site access or access through network arrangements with another hospital.	BI				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
19.	*'Point of Care' Testing* 'Point of care' testing for blood gases, glucose, electrolytes and lactate should be easily available.	'Easily available' means within the unit or department or nearby.	Visit BI				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
20.	*Clinical Guidelines* The following clinical guidelines should be in use: a) All treatment of all major conditions, including: i. acute respiratory failure (including bronchiolitis and asthma) ii. sepsis (including septic shock and meningococcal infection) iii. management of diabetic ketoacidosis iv. seizures and status epilepticus v. trauma, including traumatic brain injury, spinal injury and rehabilitation of children following trauma (if applicable) vi. burns and scalds vii. cardiac arrhythmia viii. upper airway obstruction	1. Guidelines should be clear on the roles and responsibilities of all members of the multi-disciplinary team, including anaesthetic services. 2. Guidelines should include actions to prevent / prepare for deterioration and may link with 'early warning' guidelines. 3. Where relevant, guidelines should be specific about the care of children with developmental delay, multiple disabilities or co-morbidities. 4. Guidelines on the treatment of trauma should be based on regional trauma guidelines.	BI Doc Visit				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
20. *Cont.*	b) Management of acutely distressed children, including use of restraint c) Drug administration and medicines management d) Pain management e) Procedural sedation and analgesia f) Infection control and antibiotic prescribing g) Tissue viability, including extravasation h) Nasal high flow therapy (if used) i) Management of children undergoing surgery (if applicable) j) Rehabilitation after critical illness (if applicable) In Level 2 areas : k) Acute non-invasive ventilation (CPAP and BiPAP) l) Tracheostomy care, including management of a tracheostomy emergency m) Care of children on long-term ventilation (tracheostomy and *mask)*						

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
21.	*Paediatric Early Warning System* A system to provide early warning of deterioration of children should be in use. The system should cover observation, monitoring and escalation of care.		Doc Visit				
22.	*Resuscitation and Stabilisation* Hospital-wide protocols for resuscitation and stabilisation should be in use, including: a) Alerting the paediatric resuscitation team b) Arrangements for accessing support for difficult airway management c) Stabilisation and ongoing care d) Care of parents during the resuscitation of a child		Doc				
23.	*Paediatric Advice* Guidelines on accessing advice from the local paediatric service and local paediatric critical care service should be in use in units where children are not under the care of a paediatrician.						

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
24.	*PCC Transfer Guidelines* Guidelines on referral to a Specialist Paediatric Transport Service should be in use, covering at least: a) Accessing advice from a Specialist Paediatric Transport Service and providing full clinical information b) Ensuring decisions on whether a child needs to be transferred are taken by the appropriate local consultant together with the Specialist Paediatric Transport Service c) Local guidelines on the maintenance of paediatric critical care until the child's condition improves or the SPTP arrives. These guidelines should stipulate the location/s in which children may be maintained	Although the Specialist Paediatric Transport Service will give advice, the management of the child remains the responsibility of the referring team until the child is transferred to the Specialist Paediatric Transport Service. It is also expected that the local paediatrician and anaesthetist will remain involved with the care of the child and support the work of the Specialist Paediatric Transport Service while on-site.	MP&S Doc				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
25.	*In-hospital Transfer Guidelines* Guidelines on transfer of seriously ill children within the hospital (for example, to or from imaging or theatre) should be in use. The guidelines should specify the escort arrangements and equipment required.		Doc MP&S				
26.	*Time-Critical Transfer Guidelines* Guidelines should be in place for situations where emergency transfer is time-critical and waiting for the SPTS to arrive may introduce unsafe delay, for example, severe head injury, intracranial bleeding, severe thoracic vascular trauma, burns and some intra-abdominal emergencies. The guidelines should include: a) Securing advice from the Specialist Paediatric Transport Service	1. Information about ambulance services should include contact information, vehicle specification (road ambulance) and response times. 2. All children, equipment and staff in the ambulance should be restrained during transfer in accordance with European CEN 1789/2000 Standard. Age-appropriate child restraint devices should either be available either within the department or there should be an arrangement with the ambulance service for such devices to be provided.	Doc MP&S				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
26. *Cont.*	b) Escort team of at least two clinical staff with appropriate training and experience. The referring consultant and senior nurse on duty should judge the appropriateness of the escorts who would normally be senior clinicians with experience and/or training in 1) care of the critically ill child, 2) emergency transfer and 3) advanced airway management c) Indemnity for escort team d) Availability of drugs and equipment, checked in accordance with local policy e) Arrangements for emergency transport with a local ambulance service and the air ambulance f) Arrangements for ensuring restraint of children, equipment and staff during transfer.	3. Equipment used during transport should be secured and there should be no loose items in the rear cabin. 4. The advice of the Paediatric Critical Care Operational Delivery Network and the Specialist Paediatric Transport Service for the local population may be helpful in developing local guidelines.					

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
27.	*Operational Policy* The service should have an operational policy covering at least: a) Individualised management plans are accessible for children who have priority access to the service (where applicable) b) Informing the child's GP of their attendance / admission c) Level of staff authorised to discharge children d) Arrangements for consultant presence during 'times of peak activity' (7/7) e) Servicing and maintaining equipment, including 24 hour call out where appropriate f) Arrangements for a consultant-led rapid access service which can see children within 24 hours of referral g) Arrangements for admission within four hours of the decision to admit						

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
27. *Cont.*	h) Review by a senior clinician within four hours of admission i) Discussion with a consultant within four hours of admission j) Review by a consultant within 14 hours of admission and at least two consultant-led clinical handovers every 24 hours k) Handover of patients at each change of responsible consultant, non-consultant medical staff, nursing staff and other staff l) Discussion with a senior clinician prior to discharge						

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
28.	*Review and Learning* The service should have appropriate multi-disciplinary arrangements for review of, and implementing learning from, positive feedback, complaints, morbidity, mortality, transfers and clinical incidents and 'near misses'.	These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.	Doc BI				
29.	*Data Collection* The service should have arrangements in place for collecting data on all children receiving paediatric critical care	High Dependency Care for Children – Time to Move On RCPCH 2014 (Appendix 8)	Doc Visit				
30.	*Document Control* All policies, procedures and guidelines and should comply with Hospital document control procedures.		Doc				

No.	Quality standard	Notes	Demonstration of compliance	RAG	Comments	Standard agreed by Review Team	Review comments
31.	Paediatric Critical Care *Operational Delivery Network Involvement* At least one representative from the Hospital should attend each meeting of the Paediatric Critical Care Operational Delivery Network. Information about the work of the network should be disseminated to all staff involved in the provision of critical care for children.		MP&S				

NOTES

RAG definitions for Paediatric Service Evaluation of Level 1 and 2 care

Q1		**Child Friendly Environment**
	Green	Safe, secure child friendly assessed on the day of visit
	Amber	Concern highlighted by unit
	Red	Unsafe, not child friendly
Q2 a - g		**Information for families**
	Green	Verbal and written information accessible
	Amber	Verbal information only
	Red	No information provided
Q 3 a - g		**Facilities and Support for parents**
	Green	Facility available on unit
	Amber	Facility available near to unit
	Red	Facility not available
Q5 a-c		**Involving children and families**
	Green	Feedback mechanisms in place and evidence of change
	Amber	Feedback limited
	Red	No feedback mechanism in place
Q6 a-e		**Additional Support for families**
	Green	All support services available
	Amber	Limited support services available
	Red	No support service available
Q7		**Lead Consultant**
	Green	Nominated lead consultant for paediatric critical care
	Red	No consultant lead
Q8 a		**Consultant staffing**
	Green	Can attend within 30 minutes and has no other responsibilities offsite
	Amber	Can attend within 30 minutes but covers second hospital site
	Red	Not able to attend within 30 minutes
b	Green	All consultants up to date APLS/EPLS
	Amber	Some consultants lapsed in APLS/EPLS
	Red	No consultants with APLS/EPLS
Q9 a-g		**Middle Grade Clinician Level 1**
	Green	ST4 cover and above with RCPCH competencies at Level 1 available in 5 mins
	Red	<ST4 cover

Q10		**Middle Grade Clinician Level 2** **Please note that first section a – g of this standard is same as cover at level 1 so above criteria apply**
Next part a-e	Green	Paediatric trainee ST6 or above with level 2 competencies/ ANP/ consultant/PICU trainee on rota and immediately available
	Amber	Gaps in rota but at times some cover available
	Red	Does not have staff available at the level identified at any time
		This section can be left blank if level 2 care not provided in unit.
Q11		**Lead Nurse**
	Green	Lead Nurse nominated
	Red	No nominated Lead Nurse
Q12		**Staffing levels : Bedside Care**
Q12a		At least one nurse with up to date advanced life support competencies on a shift
	Green	APLS/EPLS nurse on each shift
	Amber	APLS /EPLS trained nurse on >50% shifts
	Red	BLS/PILS trained staff only
Q12b		At least two registered children's nurses on duty at all times
	Green	>two registered children's nurses 24/7 7 days a week
	Red	<two registered children's nurses on every shift
Q12 c & d		At least one nurse per shift with appropriate level competencies
	Green	>1 Nurse per shift with level 1 / 2 competencies
	Amber	<1 nurse per shift with competencies
	Red	No staff with level 1 or 2 competencies available
Q12e		At least 1 nurse per shift with Tracheostomy competency
	Green	>1 nurse per shift
	Amber	< 1 nurse per shift
	Red	No nurses with competency **Please note this standard applies mainly to level 2 areas so some units may wish to leave blank**
Q13		**Competence Framework and Training Plan – Staff providing bedside care**
Q13a		Paediatric Resuscitation **See standard 12 a for criteria**
Q13 b,c,d		Surgery, equipment & mental health
	Green	All staff have or are working towards competency
	Amber	Some staff have competency
	Red	No staff are competent

Q13 e,f,g		Critical care competencies >70%
	Green	>70% staff have competencies
	Amber	Staff have some competencies but not documented in skills passport
	Red	No records of staff competency or skills passport
		Please note parts f and g of this standard apply mainly to level 2 areas so some units may wish to leave blank
Q14		**Other staffing**
	Green	Staff meet the standard for availability
	Amber	There are staff available at certain times
	Red	Staff not available
Q15		**Safeguarding Training**
	Green	Compliant
	Amber	Just compliant
	Red	Not compliant
Q16		**Resuscitation Training**
	Green	Compliant
	Amber	Just compliant
	Red	Not compliant
Q17		**Grab Bag**
	Green	Grab bag available on unit with checklist
	Amber	Grab bag available in hospital
	Red	No Grab bag
Q18		**Imaging Services**
	Green	24 hr access
	Amber	Restricted access to some services
	Red	Restricted access to all services
Q19		**Point of Care Testing**
	Green	Easily accessible
	Red	Difficult to access
Q20 a-m		**Clinical Guidelines**
	Green	Guideline in place and accessible
	Amber	Guideline in draft or working towards
	Red	No guideline

Q21		**Paediatric Early Warning System**
	Green	PEWS in place and clear escalation
	Amber	Currently piloting PEWS
	Red	No PEWS
Q22		**Resuscitation and Stabilisation**
	Green	Protocols in place
	Red	No
Q23		**Paediatric advice**
	Green	Guidelines in place
	Amber	Informal arrangements only
	Red	No guidance
		Left blank if not applicable
Q24		**PCC Transfer guidelines**
	Green	Yes
	Red	No
Q25		**In hospital Transfer guidelines**
	Green	Yes
	Amber	Currently in draft form
	Red	No information
Q26		**Time Critical Transfer guidelines**
	Green	Yes and compliant in all areas
	Amber	Yes but unsure of some information
	Red	No guideline
Q27 a - l		**Operational Policy**
	Green	compliant in all areas
	Amber	not meeting requirements fully
	Red	not meeting requirement at all
Q28		**Review and Learning**
	Green	Multi-professional review meetings
	Amber	Paediatric staff involvement only
	Red	No review and learning evident
Q29		**Data collection**
	Green	PCCMDS collected
	Amber	Some data collection for HDU but not PCCMDS/ participation in regional audit
	Red	No data collection
Q 30		**Document Control**
	Green	Compliant
	Amber	Compliant in some areas
	Red	Not compliant

Q31		**Paediatric Critical Care Operational Delivery Network Involvement**
	Green	Representative attends all executive meetings and good engagement in network education
	Amber	Attendance at executive meeting not consistent, does not in engage in network education
	Red	No attendance at meetings