Quality Standards for the Care of Critically Ill or Injured Children

6th Edition

October 2021

PCCS Paediatric Critical Care Society

Next review: December 2025

ENDORSED BY:

Association of Paediatric Anaesthetists of Great Britain and Ireland.

UK Critical Care Nursing Alliance.

CONTENTS

FOREWORD

I am delighted to introduce the new version of the paediatric critical care standards document.
Paediatric critical care (PCC) staff deal with the sickest children in the country 24 hours a day, 365 days a year. Children can become ill anywhere and deteriorate rapidly. In order for us to provide the best outcomes for these children it is necessary to adopt a population-based regional approach, which permits high standard care for critically ill children irrespective of where they first become ill. Some children will require care in the most specialised centres with the critical colocations that permit definitive treatment. The standards set out in this document set out how we can achieve this. Moreover, they describe the standards required when moving PCC care records to electronic records and how to prepare for the national rollout of a standard Paediatric Early Warning System (NPEWS) in advance of the adoption of the Systemwide Paediatric Observations Tracker (SPOT).

Transport services need to be equipped to move some of the sickest patients in the NHS and have a long history of doing this safely. This document incorporates standards from unit to regional level.

The pandemic has reminded us of the need to care for the carers who often go well beyond reasonable expectation in the care of sick children. Paediatric critical care can be a hard business and we need to show kindness and recognise in ourselves and others the stresses that the job can bring. I am especially pleased that this document sets out practical ways in which the resilience of staff can be supported and the skills to recognise when we or colleagues need help are taught.

Finally, when a child requires critical care, the whole family are affected and I am pleased to see guidance that takes the entire family into account and puts the child and their family at the centre of care.

Professor Simon Kenny

National Clinical Director, Children, Young People and Transition to Adulthood
Medical Directorate
NHS England & NHS Improvement

INTRODUCTION

These Quality Standards (QS) should be used to drive quality improvement in services caring for critically ill and critically injured children. They are intended to address the following question "For each service, how will I know that national guidance and evidence of best practice have been implemented?", and they are suitable for use in service-specifications, self-assessment, and peer review visits. These Standards describe what services should be providing and all services should be meeting all, and exceeding some, of the applicable Standards. It is recommended that a risk analysis is completed by services where it is noted that they do not currently deliver these standards.

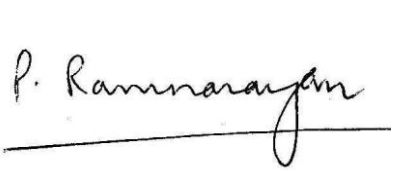
These standards have been developed collaboratively with a wide group of stakeholder organisations by the Paediatric Critical Care Society (PCCS) Standards Working Group (appendix 1). They are based upon the previous Paediatric Intensive Care Society Standards for the Care of Critically Ill Children (2015) but have been updated to align with the findings of the National Paediatric Critical Care and Surgery in Children review, NHS England and NHS Improvement 2019. The key recommendation of this report was for children and young people to receive critical care support as near to home as safely as possible, through a formal networked arrangement of non-specialist hospitals providing level 1 and 2 paediatric critical care (HDU). The main changes that have been made to support this recommendation is a focus upon specifying the competencies of staff supporting children receiving critical care rather than referring to traditional professional roles. Standards for the provision and management of informatics services have also been added in this edition.

Finally, these standards have been aligned with the final draft recommendations of the National Paediatric Critical Care GIRFT Programme National Speciality Report which is expected to be published this year (2021).

A full list of guidance used in developing the Standards is given in Appendix 2.

Peter-Marc Fortune
Chair, PCC Standards Working Group
Past-President, PCCS
Clinical SRO Digital Child Health & Maternity NHS*

James Fraser
President, PCCS



Padmanabhan Ramnarayan
Honorary Secretary, PCCS

USE OF THE STANDARDS

We hope that through the use of these Quality Standards:

1. Service quality and safety will improve.
2. Children, young people and families will know more about the services they can expect.
3. Reviewers will learn from taking part in review visits.
4. Commissioners will be supported in assessing and meeting the needs of their population, improving health and reducing health inequalities.
5. Commissioners will be better able to derive service specifications.
6. Service providers and commissioners will have external assurance of the quality of local services.
7. Service providers and commissioners will have relevant information to provide to the Care Quality Commission (CQC).

These Standards can be used in a variety of ways:

Local Service Improvement

The Standards can be used by any service as a framework for their local improvement programme. Services can self-assess and then work towards meeting the Standards, supported by local governance and internal monitoring. The outcome of this work can be used as evidence for the Care Quality Commission and other external agencies. Local patient participation groups may be part of this work using, especially, the '100s' Standards which relate to 'Support for Children and their Families'. Self-assessment forms are available on the PCCS website Paediatric Critical Care Society for use in local service improvement.

Commissioning (where applicable)

Commissioners can use the Standards in service specifications or for service designation and / or monitoring.

Peer Review

PCCS peer review programs deploy a multi-disciplinary team of PCCS members to review compliance with the Standards and to identify related issues. Peer review is a powerful tool for driving local service improvement and for sharing good practice between services. Over 80% of our members who act as reviewers report making improvements to their own services after taking part in a peer review visit.

To support service quality improvement, the Standards usually refer to requirements that 'should' be met rather than those that 'must' be met. However, in contrast to the 2015 standards, 'must' is used sparingly in this edition, and where used it should be considered that any variance from that standard should be supported by a detailed formal risk evaluation. In other cases of non-compliance action is needed where Standards are not met but it is usually appropriate for services to carry on functioning whilst deficiencies are addressed.

Most of the issues identified by quality reviews can be resolved through providers' and commissioners' own governance arrangements. Many can be tackled using appropriate service improvement approaches; some require commissioner input. Individual organisations are responsible for taking action and monitoring this through their usual governance mechanisms. The lead commissioner for the service concerned is responsible for ensuring action plans are in place and monitoring their implementation liaising, as appropriate, with other commissioners.

Example of use of Standards for peer review:

Previous versions of the PCCS Standards have been used in peer review visits to hospitals. A report of each visit is produced, with a summary of findings followed by details of compliance with each Standard. Standards which are found not to be met at a peer review visit may or may not be mentioned in the main, free text report. Issues within the main report are categorised as 'good practice', 'immediate risks', 'concerns' or for 'further consideration'. Examples of these categories could include:

- *Good practice: Excellent information available for both parents and young people covering unit routines and common critical care procedures.*
- *Immediate risk: Oxygen and suction equipment was not set up ready for use which could lead to delays in their availability.*
- *Concern: Staffing levels were considered insufficient for the number and case mix of patients on the unit. Existing staff were working extra shifts to ensure safe staffing levels were maintained.*
- *Further consideration: Patient information was out of date and the layout was complex and not easy to understand.*

'Immediate risks' are notified to the hospital concerned and their commissioners within five working days and a response detailing the action taken to address or mitigate the risk is required within a further five working days. Concerns are addressed by hospitals' management and governance arrangements. Commissioners monitor whether hospital action plans have been implemented.

SCOPE OF STANDARDS

These Standards cover the pathway of care for critically ill and critically injured children.

Critically ill and critically injured children may present in Emergency Departments (ED), Children's Assessment Services (CAS) or become critically ill whilst in in-patient (IP) children's services. Those needing an enhanced level of observation, monitoring or intervention will need to be taken to a Paediatric Critical Care Unit (PCCU). Three levels of critical care are recognised in which Levels 1 and 2 map to high dependency care and Level 3 relates to intensive care. In the Paediatric Critical Care (PCC) Healthcare Resource Group (HRG) classification Levels 1, 2 and 3 paediatric critical care are also known as follows:

Level 1 (L1) critical care:	Basic Critical Care
Level 2 (L2) critical care:	Intermediate Critical Care
Level 3 (L3) critical care:	Advanced Critical Care

Children needing intermediate or advanced critical care may need to be transferred by a Specialist Paediatric Transport Service (SPTS). Anaesthetists and / or intensivists are crucial to the resuscitation and stabilisation of critically ill children and may be involved in the provision of ongoing paediatric critical care. Some children may spend a short period of time in a General (Adult) Intensive Care Unit (GICU) while waiting for the Specialist Paediatric Transport Service or because their condition is expected to improve quickly. These services should be working together within a Paediatric Critical Care Operational Delivery Network. This network and all of the services within it will need to be commissioned to provide the level of service appropriate for the needs of their local population. The Quality Standards cover all these aspects of the pathway of care for critically ill and critically injured children.

These Quality Standards link with other existing guidance and standards, in particular:

- Long-Term Ventilation for Children and Young People
- Children and Young People's Palliative Care
- End of Life Care
- Organ Donation
- Theatres and Anaesthetic Services
- Urgent Care Services
- Adult intensive Care
- Transition

PCCS guidance is available on the PCCS website Paediatric Critical Care Society.

TERMINOLOGY

The following terms are used throughout and are key to understanding the Quality Standards. Appendix 3 gives a glossary of abbreviations used in the Standards.

Terminology	Explanation
Advanced Airway Management	Administration of anaesthetic agents to facilitate safe tracheal intubation, including rapid sequence induction.
Aeromedical Transport	Transport of patients by air, including by rotary and fixed wing vehicles.
Bedside care	Direct patient care delivered on a bed or trolley.
Children	The term 'child' refers to an infant, child or young person aged 0 to 18 years. Young people aged 16 to 18 may sometimes be cared for in adult facilities for specific reasons, including their own preference. The special needs of these young people are not specifically mentioned in the standards but should be borne in mind.
Children's Assessment Service	A service where children are clinically assessed for up to 24 hours. Children seen in the service may or may not be formally admitted to hospital. The service should be situated alongside either an Emergency Department or in-patient children's service.
Children's Nurse	A registered nurse who is recorded on the Nursing and Midwifery Council Register Sub Part 1 RN8 or RNC (or equivalent) as a 'Registered Nurse – Children'.
Clinician	A registered healthcare professional.
Commissioner	Clinical Commissioning Group or NHS England and Improvement Specialist Commissioner.
Critically ill and critically injured	The care of both critically ill and critically injured is covered by these Standards. For simplicity, 'critically ill' is used throughout to refer to 'critically ill or critically injured'. These are children requiring, or potentially requiring, paediatric critical care whether medically, surgically or trauma related.
Family	Family includes parents, siblings, grandparents, extended family members or others with carer responsibility.
Policies, Protocols, Guidelines and Procedures	The Standards use the words policy, protocol, guideline and procedure based on the following definitions: **Policy:** A course or general plan adopted by a hospital, which sets out the overall aims and objectives in a particular area. **Protocol:** A document laying down in precise detail the tests/steps that must be performed. **Guidelines:** Principles which are set down to help determine a course of action. They assist the practitioner to decide on a course of action but do not need to be automatically applied. Clinical guidelines do not replace professional judgement and discretion. **Procedure:** A procedure is a method of conducting business or performing a task, which sets out a series of actions or steps to be taken. For simplicity, some Standards use the term 'guidelines and protocols' which should be taken as referring to policies, protocols, guidelines and procedures. Local guidelines, policies and procedures should be based on national standards and guidance and appropriate for the local situation. Where guidelines, policies and procedures impact on more than one service, for example, imaging, anaesthesia or Emergency Department, they should have been agreed by all the services involved.

Terminology	Explanation
Immediately available	On site and able to attend within five minutes.
In-patient care of children (in-patient paediatrics)	Medical and / or surgical care of children led by consultants qualified in paediatric medicine, paediatric surgery or paediatric critical care, and with facilities for overnight stays. Outside of specialist children's hospitals, children undergoing surgical care should be under the care of a consultant paediatrician as well as a consultant surgeon. All children with complex healthcare needs should have a single, clearly identified lead consultant who should be kept fully informed about all admissions. Hospitals with in-patient paediatric facilities should have a unit providing at least Level 1 paediatric critical care on the same hospital site.
Middle grade (Often referred to as Registrar)	A registered healthcare professional (doctor, advanced (nurse) practitioner (AP or ANP), advanced critical care practitioner (ACCP) or Clinical Fellow*) who has the competences to take decisions on behalf of the responsible consultant, calling on the consultant when required. The required 'middle grade' competences are specified in the relevant Quality Standards. This person will often be a doctor but another health care professional with advanced paediatric competences may fulfil this role if deemed able to do so by the responsible consultant. *The title 'Clinical Fellow' may also be deployed for non-training grade doctors, equivalent to "Core Trainees' (Senior House Officer, SHO) who cannot fulfil this role.
Operational Delivery Network (ODN)	A network of providers of care for critically ill and critically injured children who work together, with young people and their families and with commissioners of services (if applicable) to improve the safety and quality of care across the whole patient pathway.
Parents	The term 'parents' is used to include mothers, fathers, carers and other adults with responsibility for caring for a child or young person, including appointed guardians.
Paediatric	Relating to the care of infants, children and young people.
PAEDIATRIC CRITICAL CARE	
Paediatric Critical Care (PCC)	Paediatric critical care describes the care of children who need an enhanced level of observation, monitoring or intervention which cannot safely be delivered in general wards. 'Time to Move On' (RCPCH, 2014) defines three levels of paediatric critical care, based on the Paediatric Critical Care Minimum Dataset (PCC MDS) and Paediatric Critical Care Healthcare Resource Groups. NOTE: There will be some children who are admitted to a Paediatric Critical Care Unit for close observation, monitoring or intervention who do not meet the current HRG definitions. The interventions that currently map to Levels 1, 2 and 3 are:

Terminology	Explanation
Paediatric Critical Care Level 1	**LEVEL 1: BASIC CRITICAL CARE** **Airway:** • Upper airway obstruction requiring nebulised adrenaline **Breathing:** • Apnoea – recurrent • Oxygen or nasal high flow therapy plus continuous pulse oximetry and ECG monitoring **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
Paediatric Critical Care Level 2	**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 **Other:** • Exchange transfusion • Intravenous thrombolysis • Extracorporeal liver support (MARS) • Plasmafiltration • Epidural infusion

Terminology	Explanation
Paediatric Critical Care Level 3	**LEVEL 3: ADVANCED CRITICAL CARE** Advanced critical care as defined in the Advanced Critical Care HRGs (1 to 5): **Advanced 1** Invasive Mechanical Ventilation (IMV) OR Non-invasive ventilation / CPAP PLUS one or more of: Vasoactive infusion — CPR in last 24 hrs >80ml/kg volume boluses — Intravenous thrombolysis Haemofiltration — Burns >20% BSA Haemodialysis — iNO / Surfactant Peritoneal dialysis — Exchange transfusion Plasmafiltration — ICP monitoring Extracorporeal liver Support (MARS) **Advanced 2** Invasive Mechanical Ventilation PLUS one or more of: Vasoactive infusion ICP monitoring Burns 20-49% BSA Intravenous thrombolysis CPR in last 24 hrs OR Advanced Respiratory Support (ARS) (Jet ventilation or High Frequency Oscillatory Ventilation (HFOV)) **Advanced 3** Invasive Mechanical Ventilation or Advanced Respiratory Support (Jet Ventilation or HFOV) PLUS one or more of: Haemofiltration Haemodialysis Peritoneal dialysis Burns 50-79% BSA Extracorporeal liver Support (MARS) Exchange transfusion iNO Surfactant Plasmafiltration **Advanced 4** Invasive Mechanical Ventilation or Advanced Respiratory Support (Jet Ventilation or HFOV) PLUS one or more of: Burns >79% BSA >80 ml/kg volume boluses **Advanced 5** Extracorporeal membrane oxygenation (ECMO) Extracorporeal Life Support (ECLS) including Ventricular Assist Device (VAD) Aortic balloon pump

Terminology	Explanation
PAEDIATRIC CRITICAL CARE UNITS (PCCU)	
Paediatric Critical Care Unit	A discrete area within a ward or hospital where paediatric critical care is delivered.
Level 1 PCCU	A discrete area where Level 1 paediatric critical care is delivered. With Paediatric Critical Care Network agreement, CPAP for bronchiolitis may be initiated or continued in a number of Level 1 Paediatric Critical Care Units.
Level 2 PCCU	A discrete area where Level 1 and Level 2 paediatric critical care are delivered. Other than in specialist children's hospitals, Level 2 Units should be able to provide, as a minimum, acute (and chronic) non-invasive ventilation (both CPAP and BiPAP support) and care for children with tracheostomies and children on long-term ventilation but should not be expected to deliver specialist Level 2 interventions such as ICP monitoring or acute renal replacement therapy. Within specialist children's hospitals, Level 2 Units may provide some or all of these additional specialist interventions. This unit may also be called a Paediatric High Dependency Unit (PHDU).
Level 3 PCCU	A unit delivering Level 2 and Level 3 paediatric critical care (and Level 1 if required). This unit may also be called a Paediatric Intensive Care Unit (PICU).

Terminology	Explanation
PAEDIATRIC RESUSCITATION AND LIFE SUPPORT	
Paediatric Resuscitation and Life Support	For staff other than the 'Team Leader' of the Paediatric Resuscitation Team, the Standards refer to two levels of competence in paediatric resuscitation and life support. Detailed definitions of these are available from the Resuscitation Council UK or the Advanced Life Support Group UK. In summary: **Basic paediatric resuscitation and life support:** • Recognition of cardiac arrest • Basic airway management, including approach to an obstructed airway • Mouth to mouth ventilation • Chest compression **Advanced paediatric resuscitation and life support:** • As above plus: • Recognition of critical illness • Intraosseous access • Bag-mask ventilation • Defibrillation • Knowledge of advanced resuscitation algorithms • Managing the team in an emergency A number of training courses are available but specific training courses in order to achieve these competences are not described. The training needed will depend on the individual's previous experience and their role. An appropriate training plan for each individual is therefore the responsibility of the employing hospital through local governance arrangements. Assessment of competence should be undertaken, and evidence of competence should be documented. The frequency of updates will depend on the frequency with which staff are required to provide paediatric resuscitation and life support. Staff who use these skills infrequently will need to supplement this with scenario training or clinical attachments in order to maintain their competences. Staff who use their paediatric resuscitation and life support competences on a frequent basis will require less frequent updating. These staff may not need to attend specific training courses. Evidence that competence has been maintained will still need to be provided. Monitoring through annual appraisals and Continuous Professional Development (CPD) alone will not give sufficient assurance of ongoing competence.
Referring hospitals	District General Hospitals within the normal catchment population of the Specialist Paediatric Transport Service or Level 3 Paediatric Critical Care Unit or Operational Delivery Network.
Specialist children's hospital	Hospital commissioned to provide several specialist children's services.
Team Leader: Paediatric Resuscitation Team	Staff who take the role of 'Team Leader' of the Paediatric Resuscitation Team (QS HW-203) should have advanced paediatric resuscitation and life support competences (defined above) and should be able to demonstrate up to date knowledge relating to paediatric resuscitation through completion of Advanced Paediatric Life Support (APLS) or European Paediatric Life Support (EPLS) training or equivalent assessments of knowledge and skills.

Sections Of The Quality Standards

The Quality Standards are in the following sections:

- **Hospital-Wide Standards**
- **Service-specific Standards**

These Standards are additional to the Hospital-Wide Standards and apply to each of the following clinical services for children:

- In-patient Paediatric Service
- Level 1 Paediatric Critical Care Unit (L1 PCCU)
- Level 2 Paediatric Critical Care Unit (L2 PCCU)
- Level 3 Paediatric Critical Care Unit (L3 PCCU)
- Specialist Paediatric Transport Services: These Standards apply to services commissioned to provide ground transfers, air transfers or both ground and air transfers
- Paediatric Anaesthesia and General (Adult) Intensive Care

When used for self-assessment or peer review, the Standards in this section should be reviewed separately for each area that is separately individually managed or staffed.

- **Paediatric Critical Care Operational Delivery Network**
- **Commissioning**

Applicable Standards

The Quality Standards applicable to any hospital therefore depend on the local configuration of services. Figure 1 shows the Standards applicable to different settings and Figure 2 illustrates how this would work in different types of hospitals. In each section a few Standards may not be applicable, depending on local circumstances. These are identified in the short heading or the notes to the Standard.

The Quality Standards have been developed so that the core elements, nomenclature and numbering structure are consistent for each type of service. This will make them easier for services to use and gives the potential for direct comparison across services but appears as duplication in this full set of Standards. This duplication will disappear when services start to use the self-assessment form relating to their particular service.

Where in-patient paediatric services and a Level 1 Paediatric Critical Care Unit are staffed and managed in an integrated way, services may wish to use the 'integrated in-patient and L1 PCCU' self-assessment which removes all duplication between these sets of Standards.

Figure 1 Applicable Standards

Service provided	Applicable Quality Standards								
	Hospital-Wide[1]	In-patient Service	Level 1 PCCU	Level 2 PCCU	Level 3 PCCU	SPTS	Paediatric Anaesthesia & GICU[2]	Paediatric Critical Care Operational Delivery Network[1]	Commissioning [1]
In-Patient Service	✓	✓					✓	✓	✓
Level 1 Paediatric Critical Care Unit	✓		✓				✓	✓	✓
Level 2 Paediatric Critical Care Unit	✓			✓			✓	✓	✓
Level 3 Paediatric Critical Care Unit	✓				✓			✓	✓
Specialist Paediatric Transport Service	✓					✓		✓	✓
Paediatric Anaesthesia & GICU	✓						✓	✓	✓

Notes:

1. *Standards are reviewed only once for each hospital.*
2. *Paediatric anaesthesia and GICU Standards are reviewed once for each hospital. GICU Standards are not applicable to services in specialist children's hospitals with Level 3 PCCUs or if the hospital policy is that children and young people are not admitted to a GICU.*

Figure 2 **Quality Standards Applicable in Different Hospitals**

PAEDIATRIC CRITICAL CARE OPERATIONAL DELIVERY NETWORK

Applicable Standards: PCC Operational Delivery Network

HOSPITAL A:
Emergency Department
Children's Assessment Service

APPLICABLE STANDARDS:

- Hospital-Wide
- Paediatric Anaesthesia & GICU
- Commissioning

HOSPITAL B:
Emergency Department
Two in-patient wards, managed & staffed together, one with L1 PCCU

APPLICABLE STANDARDS:

- Hospital-Wide
- In-patient Paediatric Service
- L1 PCCU
- Paediatric Anaesthesia & GICU
- Commissioning

HOSPITAL C:
Emergency Department
Two in-patient wards, one with L2 PCCU

APPLICABLE STANDARDS:

- Hospital-Wide
- In-patient Paediatric Service
- L2 PCCU
- Paediatric Anaesthesia & GICU
- Commissioning

TRUST WITH TWO HOSPITAL SITES:

Hospital D:
Emergency Department
Children's Assessment Service

Hospital E:
Emergency Department
Two in-patient wards, one with L2 PCCU

APPLICABLE STANDARDS:

- Hospital-Wide
- Hospital D:
  - Paediatric Anaesthesia & GICU (may be combined with hospital E)
- Hospital E:
  - In-patient Paediatric Service
  - L2 PCCU
  - Paediatric Anaesthesia & GICU (may be combined with hospital D)
- Commissioning

SPECIALIST HOSPITAL – ELECTIVE ADMISSIONS ONLY
One children's ward with L1 PCCU

APPLICABLE STANDARDS:

- Hospital-Wide
- In-patient Paediatric Service
- L1 PCCU
- Paediatric Anaesthesia & GICU
- Commissioning

SPECIALIST CHILDREN'S HOSPITAL:
Emergency Department
Children's Assessment Service
10 In-patient wards
Four Level 1 PCCU
Two Level 2 PCCUs
One Level 3 PCCU
SPTS

APPLICABLE STANDARDS:

- Hospital-Wide
- In-patient Paediatric Service
- L1 PCCU
- L2 PCCU
- L3 PCCU
- SPTS
- Paediatric Anaesthesia & GICU
- Commissioning

Structure Of Each Standard

<table>
<tr><td>Reference Number (Ref)</td><td>This column contains the reference number for each Standard which is unique to these Standards and is used for all cross-referencing. Each reference number is composed of two letters and three digits (see below for more detail).

The reference column also includes a guide to how the Standard will be reviewed:
<table>
<tr><td>BI</td><td>Background information for the review team</td></tr>
<tr><td>Visit</td><td>Visiting facilities</td></tr>
<tr><td>MP&S</td><td>Meeting patients, carers and staff</td></tr>
<tr><td>CNR</td><td>Case note review or clinical observation</td></tr>
<tr><td>Doc</td><td>Documentation should be available. Documentation may be in the form of a website or other social media.</td></tr>
</table>
The shaded area indicates the approach that will be used to reviewing the Quality Standard. Appendix 4 summarises the evidence needed for review visits.</td></tr>
<tr><td>Quality Standard (QS)

Notes</td><td>This describes the quality that services are expected to provide.

The notes give more detail about either the interpretation or the applicability of the Standard.</td></tr>
</table>

Chapter Letters: The following letters for the Chapters of the Standards:

HW-	Hospital-Wide
IP-	In-patient Paediatric Service
L1-	Level 1 Paediatric Critical Care Unit
L2-	Level 2 Paediatric Critical Care Unit
L3-	Level 3 Paediatric Critical Care Unit
T-	Specialist Paediatric Transport Service
TA-	Specialist Paediatric Aeromedical Transport Service
TE-	Specialist Paediatric ECMO/ECLS Transport Service
A-	Paediatric Anaesthesia and General (Adult) Intensive Care
N-	Paediatric Critical Care Operational Delivery Network
C-	Commissioning

Topic Sections: Each section covers the following topics:

-100	Information and Support for Children and their Families
-200	Staffing
-300	Support Services
-400	Facilities and Equipment
-500	Guidelines and Protocols
-600	Service Organisation and Liaison with Other Services
-700	Governance
-800	Education
-900	Informatics

Comments On The Quality Standards

The Quality Standards will be revised as new national guidance becomes available and as a result of experience of their use. Comments on the Quality Standards are welcomed and will be reviewed when they are next updated. Comments should be sent to PCCS@anaesthetists.org.

More information about the Paediatric Critical Care Society and its work is available at Paediatric Critical Care Society.

HOSPITAL-WIDE

These Standards apply to all hospitals that provide care for critically ill children. They also apply to hospitals with Emergency Departments which are signposted for all ages, but which are routinely by-passed by ambulances carrying children.

It is also recommended that hospitals that do not offer any services for acutely unwell children undertake a risk assessment examining the likelihood of a self-presentation occurring in order to assess the requirement to undertake an assessment against these standards.

In self-assessment or peer review, these Standards should be reviewed only once but reviewers should ensure that they are met in all services for critically ill children provided by the hospital. This Hospital-Wide section of the Standards covers some corporate issues, some aspects of clinical care that will be common across a hospital, and Hospital-Wide support for paediatric resuscitation.

Ref	Quality Standard
STAFFING	
HW-201 BI Visit MP&S CNR Doc	**Board-Level Lead for Children** A Board-level lead for children's services should be identified.
HW-202 BI Visit MP&S CNR Doc	**Clinical Leads** The Board-level (or managed clinical network) lead for children's services should ensure that the following leads for the care of children have been identified: a. Lead consultants and nurses for each of the areas where children may be critically ill (QS HW-201) b. Lead consultant for paediatric critical care (if applicable) c. Lead consultant for surgery in children (if applicable) d. Lead consultant for trauma in children (if applicable) e. Lead anaesthetist for children (QS A-201) f. Lead anaesthetist and/or GICU consultant for paediatric critical care or children & young people (QS A-202/QS A-203) g. Lead consultant and lead nurse for safeguarding children h. Lead allied health professional for the care of critically ill children *Notes:* *1 A lead surgeon is not applicable to hospitals which do not provide surgery for children. A lead consultant for trauma is not applicable to hospitals which do not receive children with trauma* *2 If the Specialist Paediatric Transport Service provides both air and ground transport, there may be a separate lead consultant and lead nurse for ground and air transport.*

Ref	Quality Standard
HW-203 BI Visit MP&S CNR Doc	**Hospital-Wide Group** Hospitals providing hospital services for children should have a single group responsible for the coordination and development of care of critically ill and critically injured children. The membership of this group should include all nominated leads (QS HW-202) and the Resuscitation Officer with lead responsibility for children. The accountability of the group should include the Hospital Board level Lead for children's services (QS HW-201). The relationship of the group to the hospital's mechanisms for safeguarding children and clinical governance issues relating to children should be clear. *Note: This group may have other functions so long as the QS is met in relation to terms of reference, membership and accountability.*
HW-204 BI Visit MP&S CNR Doc	**Paediatric Resuscitation Team** A (paediatric) resuscitation team must be immediately available at all times, comprising at least three people: a. A Team Leader with up-to-date advanced paediatric resuscitation and life support knowledge and competences and at least Level 1 RCPCH (or equivalent) competences (QS -203) b. A second registered healthcare professional with up-to-date advanced paediatric resuscitation and life support competences c. An anaesthetist, or other practitioner, with airway management skills, (ideally paediatric), and ideally also up-to-date competencies in advanced paediatric resuscitation and life support'. *Notes:* *1 'Immediately available' means able to attend within five minutes. Hospitals with multiple hospital sites will therefore need more than one Paediatric Resuscitation Team.* *2 Staff who take the role of 'Team Leader' of the Paediatric Resuscitation Team (QS -203) should have advanced paediatric resuscitation and life support competences and should be able to demonstrate up to date knowledge relating to paediatric resuscitation through completion of Advanced Paediatric Life Support or European Paediatric Life Support training or equivalent assessments of knowledge and skills.* *3 The paediatric resuscitation team may include other staff, for example, a 'runner'.* *4 Competences in advanced airway management for children of different ages may be provided by different people so long as there are robust arrangements covering children of all ages, at all times. For example, paediatric medical staff may have expertise in neonatal airway management.* *5 Further details of achievement and maintenance of anaesthetists' competences is given in QS A-204.*
HW-205 BI Visit MP&S CNR Doc	**Consultant Anaesthetist 24 Hour Cover** A consultant anaesthetist with up-to-date competences in advanced paediatric resuscitation and life support and advanced paediatric airway management who should be able to attend the hospital within 30 minutes. This must be available 24/7. *Note: Further detail of achievement and maintenance of anaesthetists' competences is given in QS A-205.* *1 APLS provider or instructor status or equivalent course endorsed by RCPCH 'RCPCH endorsed courses'*
HW-206 BI Visit MP&S CNR Doc	**Other Clinical Areas** Staff in other clinical areas where children may be critically ill, such as imaging and paediatric out-patient departments, should have basic paediatric resuscitation and life support training. *Note: During peer review visits reviewers may decide to visit these clinical areas.*

Ref	Quality Standard
FACILITIES AND EQUIPMENT	
HW-401 BI Visit MP&S CNR Doc	**Paediatric Resuscitation Team – Equipment** The paediatric resuscitation team must have immediate access to appropriate drugs and equipment which are checked in accordance with local policy. *Note: A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council (UK) website 'Paediatric advanced life support Guidelines'*
GUIDELINES AND PROTOCOLS	
HW-501 BI Visit MP&S CNR Doc	**Resuscitation and Stabilisation** Protocols should be in use covering resuscitation and stabilisation, 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 *Notes:* *1 Implementation of this QS is covered by QS -503.* *2 Arrangements for managing difficult airways may involve either on-site or network ENT/ Anaesthetic Services.*
HW-502 BI Visit MP&S CNR Doc	**Surgery and Anaesthesia Criteria** Hospital-Wide guidelines on criteria for surgery and anaesthesia for children should be in use covering: a. Elective and emergency surgical procedures undertaken on children of different ages b. Day case criteria c. Non-surgical procedures requiring anaesthesia or sedation *Notes:* *1 These guidelines should show consideration of children's age, clinical condition and co-morbidity and the time of day and expertise available within the hospital.* *2 The guidelines should be explicit about life-threatening situations where surgery needs to take place on site because transfer would introduce clinically inappropriate delay.* *3 Implementation of this QS is covered by QS -598 and QS A-598.* *4 The guideline should be consistent with the Royal College of Anaesthetists, Chapter 10, Guidelines for the Provision of Paediatric Anaesthetists Services 2020 'Chapter 10: Guidelines for the Provision of Paediatric Anaesthesia Services 2020'*

Ref	Quality Standard
HW-598 BI Visit MP&S CNR Doc	**Hospital-Wide Guidelines** The following Hospital-Wide guidelines should be in use: a. Consent b. Organ and tissue donation c. Parallel/advanced care planning and palliative care d. Bereavement e. Child death review f. Staff acting outside their area of competence covering: i. Exceptional circumstances when this may occur ii. Staff responsibilities iii. Reporting of event as an untoward clinical incident iv. Support for staff *Notes:* *1 All guidelines should specifically cover the care of children. Organ and Tissue Donation Guidelines should include SNOD contact details.* *2 Bereavement Guidelines should specifically cover the death of a child and bereavement of parents, carers and siblings. 'Bereavement support standards for children's hospitals'* *3 This policy should specify arrangements for obtaining consent for post-mortems.* *4 'Child Death Review (Statutory and Operational Guidance (England)'* *5 Implementation of this QS is covered by QS -598 and A-598.*
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
HW-602 BI Visit MP&S CNR Doc	**Paediatric Critical Care Operational Delivery Network (ODN) 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. *Notes:* *1 This QS applies only to hospitals providing paediatric critical care services.* *2 Emergency Departments and Children's Assessment Services will be part of Urgent Care Networks but should also have links with Paediatric Critical Care ODNs.*

IN-PATIENT PAEDIATRIC SERVICES

Ref	Quality Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
IP-101 BI Visit MP&S CNR Doc	**Child-friendly Environment** Children should be cared for in a defined safe and secure child-friendly environment, with age-appropriate stimulation and distraction activities. *Note: The facility should have visual and, ideally, sound separation from adult patients. More detail of recommendations for the environment in emergency care settings is given in 'Standards for Children and Young People in Emergency Care Settings' (RCPCH, 2012).*
IP-102 BI Visit MP&S CNR Doc	**Parental Access and Involvement** Parents should: a. Always have access to their child 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 *Note: The need for privacy and confidentiality for other children and families may, in some units, mean that families cannot be present during ward rounds or handovers between clinical teams.*
IP-103 BI Visit MP&S CNR Doc	**Information for Children & Young People** Children and young people should be offered age-appropriate information, encouragement and support to enable them to share in decisions about their care. Written information about common conditions should be available. *Notes:* *1 Information should be written in clear, simple language and should be available in formats and languages appropriate to the needs of the patients, including developmentally appropriate information for young people and people with learning disabilities. Information for young people should meet the 'Quality Criteria for Young People Friendly Health Services' (DH, 2011).* *2 Information may be in paper or electronic/e-learning formats or in the form of a website or other social media. Guidance on how to access information is sufficient for compliance so long as this points to easily available information of appropriate quality. If the information is provided only in individual patient letters, then examples will need to be seen by reviewers.* *3 This may be general Hospital-Wide (or equivalent) information. If so, services or clinics which are specific to one condition should be clearly identified. If the information is provided only in individual patient letters, then examples of these will need to be available to reviewers.*

Ref	Quality Standard
IP-104 BI Visit MP&S CNR Doc	**Information for Families** Information for families should be available covering, at least: a. The child's condition b. How decisions are made and how parents should be involved in decisions relating to 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 groups and voluntary organisations *Notes:* *1 As QS L1-103 notes 1 to 3* *2 Further information: 'PIC Families'*
IP-105 BI Visit MP&S CNR Doc	**Facilities and Support for Families** Facilities should be available for families, including: a. Somewhere to sit away from the ward b. Quiet room for sensitive discussions with healthcare professionals c. Kitchen, toilet and washing area d. Changing area for other young children e. Midwifery and breast-feeding support f. Breast feeding facilities g. Chair for parents to sit next to the child h. Access to psychological support *Notes:* *1 'e' is applicable only to services which admit neonates.* *2 Support for families should be sensitive to their cultural and faith needs.*
IP-196 BI Visit MP&S CNR Doc	**Discharge Information** On discharge home, children and families should be offered written information about: a. Care after discharge b. Early warning signs of problems and what to do if these occur c. Who to contact for advice including contact details *Notes:* *1 As QS IP-103 notes 1 to 3.* *2 Discharge information should be sent electronically to the patient's GP and other relevant healthcare professionals within 24 hours of discharge.*

Ref	Quality Standard
IP-197 BI Visit MP&S CNR Doc	**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 *Notes:* *1 'Availability' of support services is not defined but should be appropriate to the case mix and needs of the patients.* *2 As QS IP-103 notes 1 to 3.*
IP-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The service should have: a. Mechanisms for receiving feedback from children and families about the treatment and care they receive b. Mechanisms for involving children and families in decisions about the organisation of the service c. Examples of changes made as a result of feedback and involvement of children and families *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups, electronic media and / or other arrangements. They may be part of Hospital-Wide arrangements so long as issues relating to children's services can be identified.*
STAFFING	
IP-201 BI Visit MP&S CNR Doc	**Lead Consultant and Lead Nurse** A nominated lead consultant and 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 consultant and lead nurse should undertake regular clinical work within the service for which they are responsible.
IP-202 BI Visit MP&S CNR Doc	**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. 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 *Note: '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'.*

Ref	Quality Standard
IP-203 BI Visit MP&S CNR Doc	**'Middle Grade' Clinician** 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 A clinician with at least Level 1 RCPCH (or equivalent) competences and experience should be immediately available. Larger hospitals with several wards or departments caring for children will require more than one clinician with these competences on site 24/7. *Notes:* *1 'Immediately available' means able to attend within five minutes.* *2 RCPCH competence frameworks are available at: 'RCPCH Progress curriculum and generic syllabi'. 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.*
IP-205 BI Visit MP&S CNR Doc	**Medical Staff: Continuity of Care** Consultant rotas should be organised to deliver continuity of care. *Note: RCPCH (2015) recommends that 'all general paediatric inpatient units adopt an attending consultant system most often in the form of the 'consultant of the week' system'.*

Ref	Quality Standard
IP-206 BI Visit MP&S CNR Doc	**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 (QS IP-207) **and** expected input to the paediatric resuscitation team (QS HW-204) b. Care and rehabilitation of children with trauma (if applicable) c. Care of children needing surgery (if applicable) d. Use of equipment as expected for their role e. Care of children with acute mental health problems *Notes:* *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. 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.* *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 (QS N-206) will support maintenance of competences, especially in smaller units.* *5 'd' applies to general paediatric wards and not to specialty-specific wards or those accepting only elective admissions.* *6 Training and education surrounding CYP and self-harm can be found at 'Self harm: assessment, management and preventing recurrence'.*

Ref	Quality Standard
IP-207 BI Visit MP&S CNR Doc	**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. 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 *Note: '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. 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.*
IP-209 BI Visit MP&S CNR Doc	**Other Staffing** The following staff should be available: Appropriately qualified staff to provide support for play, mental stimulation and distraction during procedures (7/7) a. Access to a liaison health worker for children with mental health needs (7/7) b. Access to staff with competences in psychological support (at least 5/7) c. Pharmacist with paediatric competences (with time allocated at least 5/7 for work on the unit) d. Physiotherapist with paediatric competences (with time allocated at least 5/7 for work on the unit) e. On-call access to pharmacy and physiotherapy services able to support the care of children (24/7) f. Access to dietetic service (at least 5/7) g. Access to an educator for the training, education and continuing professional development of staff *Notes:* *1 Cover for absences of all staff should be available.* *2 At least one play specialist with a Level 4 Diploma in Specialised Play for Children and Young People, a Certificate in Hospital Play Specialism, a Foundation Degree in Healthcare Play Specialism or an equivalent qualification should provide advice and guidance to staff providing support for play, mental stimulation and distraction.*

Ref	Quality Standard
IP-220 BI Visit MP&S CNR Doc	**Staff Development & Well Being** The service should ensure: a. All staff have a direct line manager and access to an appropriate mentor, if needed, to help set a professional development plan (PDP) b. Staff should have access to psychological support and resources. This should include an embedded process facilitating a debrief after a significant event c. The service should have a plan to manage staff who consider themselves unfit to work after a challenging situation or cumulative effects of service demand d. A system (e.g. Mind 'Taking Care of You' campaign) is in place to assess individuals at the start and end of shift e. All staff should undergo regular appraisal f. Routine rest breaks should be facilitated with appropriate rest facilities available for staff to nap during shifts or sleep post-call g. All staff should receive teaching on fatigue and its impact on healthcare workers
IP-297 BI Visit MP&S CNR Doc	**Self-Harm/ Mental Health Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital, in mental health and self-harm in children; this should include, Mental Health First Aid, as a minimum b. Be aware of who to contact if they have concerns about any mental health issues c. Be aware of escalation pathway for CAMHS within their hospital d. Be aware of relevant risk assessments associated with mental health e. Have access to an appropriate support team if required *Resources:* *1 NHS England project report: 'Taking care of you - our work with emergency departments'.* *2 Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE) Instrument – 'Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments'.* *3 Our Care Through Our Eyes (e-learning resources for paediatric staff in caring for CYP in MH crisis): 'Our Care through Our Eyes'.*
IP-298 BI Visit MP&S CNR Doc	**Safeguarding Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital and local safeguarding Board in safeguarding children. 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. *Note:* *1 This QS is included because compliance with national safeguarding requirements is essential. Detailed consideration of safeguarding arrangements is covered by other review processes.* *2 See also: 'Looked After Children (LAC) - guidance', 'Child Protection and Safeguarding in the UK' and 'Safeguarding Children and Young People: Roles and Competencies for Healthcare Staff'.*

Ref	Quality Standard
IP-299 BI Visit MP&S CNR Doc	**Administrative, Clerical and Data Collection Support** Administrative, clerical and data collection support should be available. *Note: The amount of administrative, clerical and data collection support is not defined. Clinical staff should not, however, be spending unreasonable amounts of time which could be used for clinical work on administrative tasks.*
SUPPORT SERVICES	
IP-301 BI Visit MP&S CNR Doc	**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 and reporting 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. *Notes:* *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.*
IP-302 BI Visit MP&S CNR Doc	**Co-located Services** IP units that admit children with tracheostomies should ideally be co-located with ENT services for the support of these children. Where this is not possible a formal standard operating procedure to access a suitable network solution must be in place. *Note: More detail of co-location, 'integrated clinical service' and expectations of related services is given in 'Commissioning Safe and Sustainable Specialised Paediatric Services', (DH, 2008).*
FACILITIES AND EQUIPMENT	
IP-401 BI Visit MP&S CNR Doc	**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.
IP-402 BI Visit MP&S CNR Doc	**'Grab Bag'** Appropriate drugs and equipment for in-hospital and time-critical transfers should be immediately available and checked in accordance with local policy. *Note: A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website 'Quality Standards: Acute Care'*

Ref	Quality Standard
IP-405 BI Visit MP&S CNR Doc	**Equipment** Equipment, including disposables and monitoring, should be appropriate for the usual number and age of children and the critical care interventions provided. Alarms should be set for patients on physiological monitors and must always be audible (or relayed by other means) to a member of clinical staff. Equipment should be checked in accordance with local policy.
IP-406 BI Visit MP&S CNR Doc	**'Point of Care' Testing** 'Point of care' testing for blood gases, glucose, electrolytes and lactate should be easily available and should automatically upload result to the hospitals electronic patient record. *Note: 'Easily available' means within the unit or department or nearby.*
GUIDELINES AND PROTOCOLS	
IP-501 BI Visit MP&S CNR Doc	**Initial Assessment** A protocol should be in use which ensures a brief clinical assessment within 15 minutes of arrival, including a pain score (where appropriate), and a system of prioritisation for full assessment if waiting times for full assessment exceed 15 minutes. *Note: This QS is not applicable to services which take only elective admissions.*
IP-502 BI Visit MP&S CNR Doc	**Paediatric Early Warning System** The RCPCH SPOT (Systemwide Paediatric Observations Tracker) system should be in use, ideally on an electronic platform incorporating automated alerting. Where this is not available a system to provide early warning of deterioration of children must be in use. The system should cover observation, monitoring and escalation of care. Centres that do not deploy the SPOT system should complete a risk assessment to evaluate the impact of variation from the national system. 'Paediatric Early Warning System (PEWSystem) - developing a standardised tool for England'
IP-503 BI Visit MP&S CNR Doc	**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 *Note: This QS covers implementation of QS HW-501.* *The recognition and management of critically ill children in many hospitals is now facilitated through the deployment of paediatric outreach / rapid response/ medical emergency teams. Such teams work in conjunction with Early Warning Systems (QS IP-502) to rapidly bring staff with the correct skills to the deteriorating patient.*

Ref	Quality Standard
IP-504 BI Visit MP&S CNR Doc	**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. *Note: This QS applies to Emergency Departments, elective surgery wards and any other units where children are not under the care of a paediatrician. This QS is not applicable to services where care is managed by paediatric medical and nursing staff.*
IP-505 BI Visit MP&S CNR Doc	**Clinical Guidelines** The following clinical guidelines should be in use: a. 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. Burns and scalds vi. Cardiac arrhythmia vii. Upper airway obstruction viii. Management of the child with a tracheostomy b. Management of acutely distressed children, including the safe 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 The following clinical guidelines should be in use if applicable to unit practice: a. Non-invasive respiratory support (high flow nasal cannula and continuous positive airway pressure) b. Management of children undergoing surgery c. Trauma, including traumatic brain injury, spinal injury and rehabilitation of children following trauma d. Rehabilitation after critical illness *Notes:* *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 (QS L1-502).* *3 Where relevant, guidelines should be specific about the care of children with developmental delay, learning difficulties, multiple disabilities or co-morbidities.* *4 Guidelines on the treatment of trauma should be based on regional trauma guidelines.* *5 Appropriate guidelines should be informed by National Tracheostomy Safety Project: 'Get Trach Ready'* *6 Long Term Ventilation guidelines should be informed by issues raised by NCEPOD Report: Balancing the Pressures: A review of the quality of care provided to children and young people aged 0-24 years who were receiving long-term ventilation: 'Long Term Ventilation: Balancing the Pressures'*

Ref	Quality Standard
IP-506 BI Visit MP&S CNR Doc	**PCC Transfer Guidelines** Guidelines on referral to a Specialist Paediatric Transport Service should be in use, covering at least: a. Providing full clinical information to and accessing advice from a Specialist Paediatric Transport Service 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 SPTS arrives. *Notes:* *1 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 consultant will help supervise the care of the child and support the work of the Specialist Paediatric Transport Service while on-site.* *2 Criteria for admission to a GICU should be formally agreed and consistent with GPICS standards (section 4.11), 'Guidelines For The Provision Of Intensive Care Services' and also the agreed OD network criteria (QSs N-502 & 503).*
IP-507 BI Visit MP&S CNR Doc	**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. *Note: These guidelines may be combined with QS IP-506.*
IP-508 BI Visit MP&S CNR Doc	**Inter-hospital Transfer Guidelines** Guidelines on transfer of children between hospitals or between hospital sites should be in use covering at least: a. Use of a standardised risk assessment tool to guide urgency of transfer and suitable team composition b. Types of patients transferred c. Composition and expected competences of the escort team d. Drugs and equipment required e. Securing of children, equipment and staff during transfer f. Monitoring during transfer *Notes:* *1 Most hospitals will need to transfer children, for example for opinions, investigations and treatment. Guidelines should reflect local circumstances and should cover transfer of both stable and unstable children. 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.* *2 The guidelines may be combined with QS L1-506.*

Ref	Quality Standard
IP-509 BI Visit MP&S CNR Doc	**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. Arrangements regarding liaison with trauma team leader (if appropriate) b. Securing advice from the Specialist Paediatric Transport Service (QS L1-506) c. 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 a) care of the critically ill child, b) emergency transfer and c) advanced airway management d. Indemnity for escort team e. Availability of drugs and equipment, checked in accordance with local policy (QS L1-402) f. Arrangements for emergency transport with a local ambulance service and the air ambulance g. Arrangements for securing of children, equipment and staff during transfer *Notes:* *1 This QS is linked with QS HW-598 if in relation to staff acting outside their area of competence.* *2 Information about ambulance services should include contact information, vehicle specification (road ambulance) and response times.* *3 All children, equipment and staff in the ambulance should be restrained during transfer in accordance with European CEN 1789/2000 Standard. Age-appropriate devices to secure children should either be available either within the department or there should be an arrangement with the ambulance service for such devices to be provided. 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.*
IP-598 BI Visit MP&S CNR Doc	**Implementation of Hospital Guidelines** Staff should be aware of and follow hospital guidelines (QS HW-598) for: a. Surgery and anaesthesia for children b. Consent c. Organ and tissue donation d. Parallel/Advanced Care Planning and Palliative care e. Bereavement f. Child death review g. Staff acting outside their area of formally recognised competence

Ref	Quality Standard
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
IP-601 BI Visit MP&S CNR Doc	**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 and local hospital of their attendance / admission c. Competencies 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 admission within four hours of the decision to admit g. Types of patient admitted 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 one consultant-led clinical handover every 24 hours 'Implementation of the Facing the Future: Standards for Acute General Paediatric Services' 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 m. Arrangements for discharge within four hours of the decision to discharge n. Discharge of children with tracheostomies: i. Suitability for discharge ii. Staffing and monitoring facilities that should be in place prior to discharge iii. Process for planning and agreement of discharge o. Agreed contribution to the network-wide training and CPD programme (QS N-206) *Notes:* *1 Individualised management plans may be in the form of patient passports.* *2 Notifying other relevant members of the primary health care team is desirable.* *3 Operational policies should be based on the inclusion and exclusion criteria, interventions and key performance indicators for which the service is commissioned (QS C-603).* *4 Operational policies should be clear about the care of young people aged 16 to 18 transitioning to GICU and pre-term babies transitioning from neonatal units.* *5 RCPCH (2015) recommends that units work towards consultant presence 12 hours a day, seven days a week.*
GOVERNANCE	
IP-703 BI Visit MP&S CNR Doc	**Audit and Quality Improvement** The service should have a rolling programme of audit, including at least: a. Audit of implementation of evidence-based guidelines (QS IP-500s) b. Participation in agreed national and network-wide audits include the National Cardiac Arrest Audit 'About The National Cardiac Arrest Audit' c. Use of the 'Urgent and Emergency Care Clinical Audit Toolkit ' to review individual clinical consultations *Notes:* *1 The rolling programme should ensure that action plans are developed following audits and their implementation is monitored.* *2 'c' is not applicable to In-patient and L1 PCCUs which do not accept direct GP referrals.*

Ref	Quality Standard
IP-704 BI Visit MP&S CNR Doc	**Key Performance Indicators** Key performance indicators should be reviewed regularly with hospital (or equivalent) management and with commissioners.
IP-798 BI Visit MP&S CNR Doc	**Multi-disciplinary Review and Learning** The multi-disciplinary team should have arrangements for: a. Review of and implementing learning from positive feedback, complaints, outcomes including mortality, incidents and 'near misses' b. Review of and implementing learning from published scientific research and guidance c. Mortality review in line with national recommendations d. Annual Multi-disciplinary service review with key stakeholders *Notes:* *1 These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.* *2 This QS is additional to Paediatric Critical Care Network review and learning (QS N-798).* *3 This QS is additional to the requirement for reporting and formal review of the death of a child in hospital.*
IP-799 BI Visit MP&S CNR Doc	**Document Control** All policies, procedures and guidelines and should comply with hospital document control procedures. *Note: Specific documentary evidence of compliance is not required. This QS will be determined from the other documentary information provided. Copies of hospital document control policies are not required.*

LEVEL 1 PAEDIATRIC CRITICAL CARE SERVICES

These quality standards apply to all locations where Level 1 paediatric critical care is delivered for a period of more than 4 hours (e.g., short stay units, paediatric assessment units and paediatric inpatient wards).

Ref	Quality Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
L1-101 BI Visit MP&S CNR Doc	**Child-friendly Environment** Children should be cared for in a defined safe and secure child-friendly environment, with age-appropriate stimulation and distraction activities. *Note: The facility should have visual and sound separation from adult patients. More detail of recommendations for the environment in emergency care settings is given in 'Facing the Future: Standards for Children in Emergency Care Settings' (RCPCH, 2018).*
L1-102 BI Visit MP&S CNR Doc	**Parental Access and Involvement** Parents should: a. Always have access to their child 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 to fully participate in decisions about, and in the care of, their child *Note: The need for privacy and confidentiality for other children and families may, in some units, mean that families cannot be present during ward rounds or handovers between clinical teams.*
L1-103 BI Visit MP&S CNR Doc	**Information for Children & Young People** Children should be offered age-appropriate information, encouragement and support to enable them to share in decisions about their care. Written information about common conditions should be available. *Notes:* *1 Information should be written in clear, simple language and should be available in formats and languages appropriate to the needs of the patients, including developmentally appropriate information for young people and people with learning disabilities. Information for young people should meet the 'Quality Criteria for Young People Friendly Health Services' (DH, 2011).* *2 Information may be in paper or electronic/e-learning formats or in the form of a website or other social media. Guidance on how to access information is sufficient for compliance so long as this points to easily available information of appropriate quality. If the information is provided only in individual patient letters then examples will need to be seen by reviewers.* *3 This may be general Hospital-Wide (or equivalent) information. If so, services or clinics which are specific to one condition should be clearly identified. If the information is provided only in individual patient letters then examples of these will need to be available to reviewers.*

Ref	Quality Standard
L1-104 BI Visit MP&S CNR Doc	**Information for Families** Information for families should be available covering, at least: a. The child's condition b. How decisions are made and how parents should be involved in decisions relating to 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 groups and voluntary organisations *Notes:* *1 As QS L1-103 notes 1 to 3* *2 Further information: 'PIC Families'*
L1-105 BI Visit MP&S CNR Doc	**Facilities and Support for Families** Facilities should be available for families, including: a. Somewhere to sit away from the ward b. Quiet room for sensitive discussions with healthcare professionals c. Kitchen, toilet and washing area d. Changing area for other young children e. Midwifery and breastfeeding support f. Breast feeding facilities g. Chair for parents to sit next to the child h. Access to psychological support *Notes:* *1 'e' is applicable only to services which admit neonates.* *2 Support for families should be sensitive to their cultural and faith needs.*
L1-196 BI Visit MP&S CNR Doc	**Discharge Information** On discharge home, children and families should be offered a copy of their discharge letter and written information about: a. Care after discharge b. Early warning signs of problems and what to do if these occur c. Who to contact for advice including their contact details *Notes:* *1 As QS L1-103 notes 1 to 3.* *2 Discharge information should be sent electronically to the patient's GP and other relevant healthcare professionals within 24 hours of discharge.*

Ref	Quality Standard
L1-197 BI Visit MP&S CNR Doc	**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 *Notes:* *1 'Availability' of support services is not defined but should be appropriate to the case mix and needs of the patients.* *2 As QS L1-103 notes 1 to 3.*
L1-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The service should have: a. Mechanisms for receiving feedback from children and families about the treatment and care they receive b. Mechanisms for involving children and families in decisions about the organisation of the service c. Examples of changes made as a result of feedback and involvement of children and families *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups, electronic media and / or other arrangements. They may be part of Hospital-Wide arrangements so long as issues relating to children's services can be identified.*
STAFFING	
L1-201 BI Visit MP&S CNR Doc	**Lead Consultant and Lead Nurse** A nominated lead consultant and 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 consultant and lead nurse should undertake regular clinical work within the service for which they are responsible.
L1-202 BI Visit MP&S CNR Doc	**Consultant Staffing** a. A consultant who is able to attend the hospital within 30 minutes and must be available 24/7 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. This should be assured through annual appraisal and revalidation *Note: 'Facing the Future: A Standards for acute 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'.*

Ref	Quality Standard
L1-203 BI Visit MP&S CNR Doc	**'Middle Grade' Clinician** 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 critical 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 A clinician with at least Level 1 RCPCH (or equivalent) competences and experience should be immediately available. Larger hospitals with several wards or departments caring for children will require more than one clinician with these competences on site 24/7. *Notes:* *1 'Immediately available' means able to attend within five minutes.* *2 RCPCH competence frameworks are available at: 'RCPCH Progress curriculum and generic syllabi'. 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.*
L1-205 BI Visit MP&S CNR Doc	**Medical Staff: Continuity of Care** Consultant rotas should be organised to deliver continuity of care. *Note: 'RCPCH (2015)' recommends that 'all general paediatric inpatient units adopt an attending consultant system most often in the form of the 'consultant of the week' system'.*

Ref	Quality Standard
L1-206 BI Visit MP&S CNR Doc	**Competence Framework and Training Plan – Clinicians** A nominated education lead consultant and lead nurse (with appropriate administration support) should be responsible for organisation and delivery of training for PCC staff. Allocated time for the delivery & development of the team education should be provided. A competence framework and training plan should ensure that clinicians providing bedside care have or are working towards, and maintain, competences appropriate for their role in the service including regular updates, (minimum annual), covering: 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 (QS L1-207) and expected input to the paediatric resuscitation team (QS HW-204) b. Care and rehabilitation of children with trauma (if applicable) c. Care of children needing surgery (if applicable) d. Use of equipment as expected for their role e. Care of children with acute mental health problems (See note 6) f. Care of children with tracheostomies g. Appropriate level paediatric critical care competences: At least two nursing staff on each shift should have completed appropriate level competences in Level 1 paediatric critical care (see note 5) h. At least one nurse per shift should have qualification in Level 1 paediatric critical care (see note 7) *Notes:* *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. 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* *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 (QS N-206) will support maintenance of competences, especially in smaller units.* *5 Further detail of competences in paediatric critical care is available on Royal College of Paediatrics and Child Health website 'Paediatric intensive care medicine - sub-specialty' '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 Training and education surrounding CYP and self-harm can be found at 'Self harm: assessment, management and preventing recurrence'.* *7 PCCS accredited courses for level 1, 2and 3 PCC are being provided nationally. Details can be found at, 'Nurse/AHP Critical Care Specialist Education Course Centres'.*

Ref	Quality Standard
L1-207 BI Visit MP&S CNR Doc	**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. 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, including care of tracheostomies. b. At least two registered children's nurses on duty at all times in each area c. One nurse with appropriate level competences in paediatric critical care for every two children needing Level 1 critical care d. One nurse with Level 1 PCC course (HEI or PCCS accredited) *Notes:* *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. 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 Non-registered staff with appropriate competences may be included in calculations of staffing levels per child needing critical care so long as they are working under the direct supervision of a registered nurse at all times. The ratio of registered to non-registered staff should not fall below 85:15.* *3 Healthcare staff caring for children with tracheostomies may include non-registered health care staff who normally care for the child in the community. Parents who have received appropriate training may contribute to this care but the responsibility remains with the registered nurse.* *4 Nursing ratios determined by NHS England E07/S/b Level 2 Paediatric Critical Care. 'SCHEDULE 2 – THE SERVICES, Level 2 Paediatric Critical Care'.*
L1-208 BI Visit MP&S CNR Doc	**New Starters** Nurses and non-registered health care staff without previous paediatric critical care experience should undertake: a. A structured, competency-based induction programme including a minimum of 75 hours of supervised practice in the PCC Unit (or in a higher-level unit) b. A programme of theoretical and bedside education and training ensuring a defined level of competency is achieved within 12 months Nurses and non-registered health care staff with previous paediatric critical care experience should complete local induction and a review of competence for their expected role.

Ref	Quality Standard
L1-209 BI Visit MP&S CNR Doc	**Other Staffing** The following staff should be available: a. Appropriately qualified staff to provide support for play, psychological 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) g. Access to dietetic service (at least 5/7) h. Access to an occupational therapist (at least 5/7) i. Access to a speech and language therapist (at least 5/7) j. Access to an educator for the training, education and continuing professional development of staff that is external to nursing establishment for patient care, but who maintains their clinical competence *Notes:* *1 Cover for absences of all staff should be available.* *2 At least one play specialist with a Level 4 Diploma in Specialised Play for Children and Young People, a Certificate in Hospital Play Specialism, a Foundation Degree in Healthcare Play Specialism or an equivalent qualification should provide advice and guidance to staff providing support for play, mental stimulation and distraction.*
L1-220 BI Visit MP&S CNR Doc	**Staff Development & Well Being** The service should ensure: a. All staff have a direct line manager and access to an appropriate mentor, if needed, to help set a professional development plan (PDP) b. Staff should have access to psychological support and resources. This should include an embedded process facilitating a debrief after a significant event c. The service should have a plan to manage staff who consider themselves unfit to work after a challenging situation or cumulative effects of service demand d. A system (e.g. Mind 'Taking Care of You' campaign) is in place to assess individuals at the start and end of shift e. All staff should undergo regular appraisal f. Routine rest breaks should be facilitated with appropriate rest facilities available for staff to nap during shifts or sleep post-call g. All staff should receive teaching on fatigue and its impact on healthcare workers h. Consideration should be given to the maximum length of time on continuous duty

Ref	Quality Standard
L1-297 BI Visit MP&S CNR Doc	**Self-Harm/ Mental Health Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital, in mental health and self-harm in children; this should include Mental Health First Aid as a minimum b. Be aware of who to contact if they have concerns about any mental health issues c. Be aware of escalation pathway for CAMHS within their hospital d. Be aware of relevant risk assessments associated with mental health e. Have access to an appropriate support team if required *Resources:* *1 NHS England project report: 'Evaluating quality and impact of acute paediatric inpatient care'.* *2 Children and Young People-Mental Health Self-Harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE) Instrument – 'Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE)'.* *3 Our Care Through Our Eyes (e-learning resources for paediatric staff in caring for CYP in MH crisis): 'Our Care through Our Eyes'.*
L1-298 BI Visit MP&S CNR Doc	**Safeguarding Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital and local Safeguarding Board, in safeguarding children 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 *Notes:* *1 This QS is included because compliance with national safeguarding requirements is essential. Detailed consideration of safeguarding arrangements is covered by other review processes.* *2 See also: 'Looked After Children (LAC) - guidance', 'Child Protection and Safeguarding in the UK' and 'Safeguarding Children and Young People: Roles and Competencies for Healthcare Staff'.*
L1-299 BI Visit MP&S CNR Doc	**Administrative, Clerical and Data Collection Support** Administrative, clerical and data collection support should be available. *Note: The amount of administrative, clerical and data collection support are not defined. However, clinical staff should not be spending unreasonable amounts of time which could be used for clinical work on administrative tasks.*

Ref	Quality Standard
SUPPORT SERVICES	
L1-301 BI Visit MP&S CNR Doc	**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 and reporting 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. *Notes:* *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.*
L1-302 BI Visit MP&S CNR Doc	**Co-located Services** L1 PCC Units that admit children with tracheostomies should ideally be co-located with ENT services for the support of these children. Where this is not possible a formal standard operating procedure to access a suitable network solution must be in place. *Note: More detail of co-location, 'integrated clinical service' and expectations of related services is given in 'Commissioning Safe and Sustainable Specialised Paediatric Services', (DH, 2008).*
FACILITIES AND EQUIPMENT	
L1-401 BI Visit MP&S CNR Doc	**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.
L1-402 BI Visit MP&S CNR Doc	**'Grab Bag'** Appropriate drugs and equipment for in-hospital and time-critical transfers should be immediately available and checked in accordance with local policy. *Notes:* *1 Drugs and equipment for in-hospital and time-critical transfers may be different. Drugs for in-hospital and time-critical transfers may be collected so long as lists of required drugs are easily visible in or near the 'grab bag'.* *2 A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website 'Quality Standards: Acute Care'.*
L1-405 BI Visit MP&S CNR Doc	**Equipment** Equipment, including disposables and monitoring, should be appropriate for the usual number and age of children and the critical care interventions provided. Alarms should be set for patients on physiological monitors and must always be audible (or relayed by other means) to a member of clinical staff. Equipment should be checked in accordance with local policy.

Ref	Quality Standard
L1-406 BI Visit MP&S CNR Doc	**'Point of Care' Testing** 'Point of care' testing for blood gases, glucose, electrolytes and lactate should be easily available and should automatically upload result to the hospitals electronic patient record. *Note: 'Easily available' means within the unit or department or nearby.*
GUIDELINES AND PROTOCOLS	
L1-501 BI Visit MP&S CNR Doc	**Initial Assessment** A protocol should be in use which ensures a brief clinical assessment and triage within 15 minutes of arrival, including a pain score (where appropriate), and a system of prioritisation for full assessment if waiting times for full assessment exceed 15 minutes. *Note: This QS is not applicable to services which take only elective admissions.*
L1-502 BI Visit MP&S CNR Doc	**Paediatric Early Warning System** The RCPCH SPOT (Systemwide Paediatric Observations Tracker) system should be in use, ideally on an electronic platform incorporating automated alerting. Where this is not available a system to provide early warning of deterioration of children must be in use. The system should cover observation, monitoring and escalation of care. Centres that do not deploy the SPOT system should complete a risk assessment to evaluate the impact of variation from the national system. 'Paediatric Early Warning System (PEWSystem) - developing a standardised tool for England'.
L1-503 BI Visit MP&S CNR Doc	**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 *Note: This QS covers implementation of QS HW-501.* *The recognition and management of critically ill children in many hospitals is now facilitated through the deployment of paediatric outreach / rapid response/ medical emergency teams. Such teams work in conjunction with Early Warning Systems (QS IP-502) to rapidly bring staff with the correct skills to the deteriorating patient.*
L1-504 BI Visit MP&S CNR Doc	**Paediatric Advice** Guidelines on accessing advice from the local tertiary paediatric service and local paediatric critical care service should be in use in units where children are not under the care of a paediatrician. *Note: This QS applies to Emergency Departments, elective surgery wards and any other units where children are not under the care of a paediatrician. This QS is not applicable to services where care is managed by paediatric medical and nursing staff.*

Ref	Quality Standard
L1-505 BI Visit MP&S CNR Doc	**Clinical Guidelines** The following clinical guidelines should be in use: a. 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. burns and scalds vi. cardiac arrhythmia vii. upper airway obstruction viii. management of the child with a tracheostomy b. Management of acutely distressed children, including the safe 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 The following clinical guidelines should be in use if applicable to clinical pathway: Trauma, including traumatic brain injury, spinal injury and rehabilitation of children following trauma h. Non-invasive respiratory support (high flow nasal cannula and continuous positive airway pressure) i. Management of children undergoing surgery j. Rehabilitation after critical illness *Notes:* *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 (QS L1-502).* *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.* *5 Appropriate guidelines should be informed by National Tracheostomy Safety Project: 'Get Trach Ready'.* *6 Long Term Ventilation guidelines should be informed by issues raised by NCEPOD Report: Balancing the Pressures: A review of the quality of care provided to children and young people aged 0-24 years who were receiving long-term ventilation: 'Long Term Ventilation: Balancing the Pressures'.* *7 'a.v' applies only to services providing care for patients with major trauma.*

Ref	Quality Standard
L1-506 BI Visit MP&S CNR Doc	**PCC Transfer Guidelines** Guidelines on referral to a Specialist Paediatric Transport Service should be in use, covering at least: a. Providing full clinical information to and accessing advice from a Specialist Paediatric Transport Service. 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 SPTS arrives. *Notes:* *1 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 consultant will help supervise the care of the child and support the work of the Specialist Paediatric Transport Service while on-site.* *2 Criteria for admission to a GICU should be formally agreed and consistent with GPICS standards (section 4.11), 'Guidelines For The Provision Of Intensive Care Services' and also the agreed OD network criteria (QSs N-502 & 503).*
L1-507 BI Visit MP&S CNR Doc	**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. *Note: These guidelines may be combined with QS L1-506.*
L1-508 BI Visit MP&S CNR Doc	**Inter-hospital Transfer Guidelines** Guidelines on transfer of children between hospitals or between hospital sites should be in use covering at least: a. Use of a standardised risk assessment tool to guide urgency of transfer and suitable team composition b. Types of patients transferred c. Composition and expected competences of the escort team d. Drugs and equipment required e. Securing of children, equipment and staff during transfer f. Monitoring during transfer *Notes:* *1 Most hospitals will need to transfer children, for example for opinions, investigations and treatment. Guidelines should reflect local circumstances and should cover transfer of both stable and unstable children. 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.* *2 The guidelines may be combined with QS L1-506.*

Ref	Quality Standard
L1-509 BI Visit MP&S CNR Doc	**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. Arrangements regarding liaison with trauma team leader (if appropriate) b. Securing advice from the Specialist Paediatric Transport Service (QS L1-506) c. 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 a) care of the critically ill child, b) emergency transfer and c) advanced airway management d. Indemnity for escort team e. Availability of drugs and equipment, checked in accordance with local policy (QS L1-402) f. Arrangements for emergency transport with a local ambulance service and the air ambulance g. Arrangements for securing children, equipment and staff during transfer *Notes:* *1 This QS is linked with QS HW-598 if in relation to staff acting outside their area of competence.* *2 Information about ambulance services should include contact information, vehicle specification (road ambulance) and response times.* *3 All children, equipment and staff in the ambulance should be restrained during transfer in accordance with European CEN 1789/2000 Standard. Age-appropriate devices to secure children should either be available either within the department or there should be an arrangement with the ambulance service for such devices to be provided. 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.*
L1-598 BI Visit MP&S CNR Doc	**Implementation of Hospital Guidelines** Staff should be aware of and follow hospital guidelines (QS HW-598) for: a. Surgery and anaesthesia for children b. Consent c. Organ and tissue donation d. Parallel/Advanced Care Planning and Palliative care e. Bereavement f. Child death review g. Staff acting outside their area of formally recognised competence

Ref	Quality Standard
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
L1-601 BI Visit MP&S CNR Doc	**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 and local hospital of their attendance / admission c. Competencies 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 admission within four hours of the decision to admit g. Types of patients admitted h. Review by a senior clinician (Grid Trainee, Advanced PCC Practitioner or Consultant) within one hour of admission i. Discussion and plan agreed with a consultant within two hours of admission j. Review by a consultant as soon as possible but certainly within 14 hours of admission and at least two consultant-led clinical handovers every 24 hours 'Implementation of the Facing the Future: Standards for Acute General Paediatric Services' 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 m. Arrangements for discharge within four hours of the decision to discharge In addition (where applicable): n. Discharge of children with tracheostomies: i. Suitability for discharge ii. Staffing and monitoring facilities that should be in place prior to discharge iii. Process for planning and agreement of discharge o. Discharge of children on long-term ventilation p. Agreed contribution to the network-wide training and CPD programme (QS N-206) *Notes:* *1 Individualised management plans may be in the form of patient passports.* *2 Notifying other relevant members of the primary health care team is desirable.* *3 Operational policies should be based on the inclusion and exclusion criteria, interventions and key performance indicators for which the service is commissioned (QS C-603).* *4 Operational policies should be clear about the care of young people aged 16 to 18 transitioning to GICU and pre-term babies transitioning from neonatal units.* *5 RCPCH (2015) recommends that units work towards consultant presence 12 hours a day, seven days a week.* *6 Guidelines for admission to PCC Units should cover admissions from the unit's host hospital as well as from referring hospitals.* *7 The NHS Standard Contract for Paediatric Critical Care (Schedule 2) gives additional detail on criteria for admission to paediatric critical care.* *8 The operational policy should ensure discharges do not normally occur between 20.00 and 07.59. This is monitored in QS L2-702.*

Ref	Quality Standard
GOVERNANCE	
L1-702 BI Visit MP&S CNR Doc	**Data Collection** There should be a nominated lead individual for the collection and submission of: a. Paediatric Critical Care Minimum Data Set for submission to Secondary Uses Service (SUS) b. Paediatric Intensive Care Audit Network (PICAnet) data for submission to PICANet as soon as possible and no later than two months after discharge from the PCC Unit c. 'Quality Dashboard' data as recommended by the PCC CRG These data should cover: a. Activity levels b. Types of patients cared for c. Outcomes of children cared for d. Transfers out to Level 2/3 PCC facilities *Note: Implementation of this QS for L1 and L2 PCCUs is dependent on PICANet being contracted and funded for handling these data.*
L1-703 BI Visit MP&S CNR Doc	**Audit and Quality Improvement** The service should have a rolling programme of audit, including at least: a. Audit of implementation of evidence-based guidelines (QS L1-500s) b. Participation in agreed national and network-wide audits including the National Cardiac Arrest Audit (NCAA). c. Use of the 'Urgent and Emergency Care Clinical Audit Toolkit' to review individual clinical consultations *Notes:* *1 The rolling programme should ensure that action plans are developed following audits and their implementation is monitored.* *2 'c' is not applicable to In-patient and L1 PCCUs which do not accept direct GP referrals.*
L1-704 BI Visit MP&S CNR Doc	**Key Performance Indicators** Key performance indicators should be reviewed regularly with hospital (or equivalent) management and with commissioners.
L1-798 BI Visit MP&S CNR Doc	**Multi-disciplinary Review and Learning** The multidisciplinary team should have arrangements for: a. Review of and implementing learning from positive feedback, complaints, outcomes including mortality, incidents and 'near misses' b. Review of and implementing learning from published scientific research and guidance c. Mortality review in line with national recommendations d. Annual Multi-disciplinary service review with key stakeholders *Notes:* *1 These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.* *2 This QS is additional to Paediatric Critical Care Network review and learning (QS N-798).* *3 This QS is additional to the requirement for reporting and formal review of the death of a child in hospital.*

Ref	Quality Standard
L1-799 BI Visit MP&S CNR Doc	**Document Control** All policies, procedures and guidelines and should comply with hospital document control procedures. *Note: Specific documentary evidence of compliance is not required. This QS will be determined from the other documentary information provided. Copies of hospital document control policies are not required.*
EDUCATION	
L1-801 BI Visit MP&S CNR Doc	**Regional & Network Education** The service should actively participate in the regional Paediatric Critical Care Network (which should include representatives from all regional Level 1,2 and 3 units) and have links with any other relevant paediatric, neonatal or adult networks in region to ensure: a. Involvement in outreach education for medical, nursing and allied health professional staff b. Involvement with governance and dissemination of learning from excellence reports and critical incidents involving the stabilisation, resuscitation and transfer of critically ill and injured children c. Shared learning from mortality reviews d. Feedback from transfer is available to the referring hospitals e. Feedback from referring and receiving hospitals is available to Specialist Paediatric Critical Care Transport Service f. Shared learning between neonatal and paediatric services

LEVEL 2 PAEDIATRIC CRITICAL CARE UNITS

Ref	Quality Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
L2-101 BI Visit MP&S CNR Doc	**Child-friendly Environment** Children should be cared for in a defined safe and secure child-friendly environment, with age-appropriate stimulation and distraction activities. *Note: The facility should have visual and sound separation from adult patients. More detail of recommendations for the environment in emergency care settings is given in 'Facing the Future: Standards for Children in Emergency Care Settings' (RCPCH, 2018).*
L2-102 BI Visit MP&S CNR Doc	**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 to fully participate in decisions about, and in the care of, their child *Note: The need for privacy and confidentiality for other children and families may, in some units, mean that families cannot be present during ward rounds or handovers between clinical teams.*
L2-103 BI Visit MP&S CNR Doc	**Information for Children** Children should be offered age-appropriate information, encouragement and support to enable them to share in decisions about their care. Written information about common conditions should be available. *Notes:* *1 Information should be written in clear, simple language and should be available in formats and languages appropriate to the needs of the patients, including developmentally appropriate information for young people and people with learning disabilities. Information for young people should meet the 'Quality Criteria for Young People Friendly Health Services' (DH, 2011).* *2 Information may be in paper or electronic/e-learning formats or in the form of a website or other social media. Guidance on how to access information is sufficient for compliance so long as this points to easily available information of appropriate quality. If the information is provided only in individual patient letters, then examples will need to be seen by reviewers.* *3 This may be general Hospital-Wide (or equivalent) information. If so, services or clinics which are specific to one condition should be clearly identified. If the information is provided only in individual patient letters, then examples of these will need to be available to reviewers.*

Ref	Quality Standard
L2-104 BI Visit MP&S CNR Doc	**Information for Families** Information for families should be available covering, at least: a. The child's condition b. How decisions are made and how parents should be involved in decisions relating to 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 groups and voluntary organisations *Notes:* *1 As QS L1-103 notes 1 to 3* *2 Further information: 'PIC Families'*
L2-105 BI Visit MP&S CNR Doc	**Facilities and Support for Families** Facilities should be available for families, including: a. Somewhere to sit away from the ward b. Quiet room for sensitive discussions with healthcare professionals c. Kitchen, toilet and washing area d. Changing area for other young children e. Midwifery and breastfeeding support f. Breast feeding facilities g. Chair for parents to sit next to the child h. Accommodation on site but away from the ward/unit i. Access to psychological support *Notes:* *1 'e' is applicable only to services which admit neonates.* *2 Support for families should be sensitive to their cultural and faith needs.*
L2-196 BI Visit MP&S CNR Doc	**Discharge Information** On discharge home, children and families should be offered a copy of their discharge letter and written information about: a. Care after discharge b. Early warning signs of problems and what to do if these occur c. Who to contact for advice and their contact details *Notes:* *1 As QS L1-103 notes 1 to 3.* *2 Discharge information should be sent electronically to the patient's GP and other relevant healthcare professionals within 24 hours of discharge.* *3 This QS is applicable only to patients discharged directly home from PCC and does not apply to patients discharged to other ward areas.*

Ref	Quality Standard
L2-197 BI Visit MP&S CNR Doc	**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 *Notes:* *1 'Availability' of support services is not defined but should be appropriate to the case mix and needs of the patients.* *2 As QS L1-103 notes 1 to 3.*
L2-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The service should have: a. Mechanisms for receiving feedback from children and families about the treatment and care they receive b. Mechanisms for involving children and families in decisions about the organisation of the service c. Examples of changes made as a result of feedback and involvement of children and families *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups, electronic media and / or other arrangements. They may be part of Hospital-Wide arrangements so long as issues relating to children's services can be identified.*
STAFFING	
L2-201 BI Visit MP&S CNR Doc	**Lead Consultant and Lead Nurse** A nominated lead consultant and 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 consultant and lead nurse should undertake regular clinical work within the service for which they are responsible.
L2-202 BI Visit MP&S CNR Doc	**Consultant Staffing** a. A consultant who has undertaken relevant training in paediatric critical care, 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. If the consultant providing cover for the L2 PCC Unit is not a paediatrician, 24 hour cover by a consultant paediatrician who is able to attend the hospital within 30 minutes and who does not have responsibilities to other hospital sites is also required b. New appointments to consultant posts, with a major commitment to deliver service within L2 PCCUs, should have completed the RCPCH 'Framework of Competences for a Special Study Module in Paediatric Critical Care' (or equivalent) and should have worked for at least six months in a training Level 2 PCCU and for at least six months in a Level 3 PCCU (or equivalent) c. 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. This should be assured through annual appraisal and revalidation *Note: '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'.*

Ref	Quality Standard
L2-203 BI Visit MP&S CNR Doc	**'Middle Grade' Clinician** 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 At least one clinician should be immediately available who is either: 1. A paediatric trainee with at least Level 2 RCPCH (or equivalent) competences. Doctors in training should normally be ST6 or above, OR 2. A paediatric trainee (at any RCPCH level) who has completed at least 6 months working in a Level 3 Unit, OR 3. An anaesthetic specialty trainee, OR 4. An advanced paediatric critical care practitioner or Hospital / Specialty Doctor with equivalent competences Larger hospitals with several wards or departments caring for children will require more than one clinician with these competences on site 24/7. *Notes:* *1 'Immediately available' means able to attend within five minutes.* *2 RCPCH competence frameworks are available at: 'RCPCH Progress curriculum and generic syllabi'. 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.*
L2-205 BI Visit MP&S CNR Doc	**Medical Staff: Continuity of Care** Consultant rotas should be organised to deliver continuity of care. Patients expected to stay on the unit for longer than 10 days should be allocated a lead consultant as soon as their long stay status is recognised. *Note: RCPCH (2015) recommends that 'all general paediatric inpatient units adopt an attending consultant system most often in the form of the 'consultant of the week' system'.*

Ref	Quality Standard
L2-206 BI Visit MP&S CNR Doc	**Clinician Competence Framework and Training Plan** A nominated education lead consultant and lead nurse (with appropriate administration support) should be responsible for organisation and delivery of training for PCC staff. Allocated time for the delivery & development of the team education should be provided. A competence framework and training plan should ensure that clinicians providing bedside care have or are working towards, and maintain, competences appropriate for their role in the service including regular updates, (minimum annual), covering: a. Paediatric resuscitation: All staff must 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 (QS L2-207) and expected input to the paediatric resuscitation team (QS HW-204) b. Care and rehabilitation of children with trauma (if applicable) c. Care of children needing surgery (if applicable) d. Use of equipment as expected for their role e. Care of children with acute mental health problems (See note 6) f. Care of children with tracheostomies (if appropriate) g. Appropriate level paediatric critical care competences: Appropriate level paediatric critical care competences: 70% of nursing staff working on each shift should have appropriate level competences in paediatric critical care (see notes 5, 7, 8) h. Care of children needing acute and chronic non-invasive ventilation, and tracheostomy ventilation *Notes:* *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. 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.* *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 (QS N-206) will support maintenance of competences, especially in smaller units.* *5 Further details of competences in paediatric critical care is available on Royal College of Paediatrics and Child Health website 'Paediatric intensive care medicine - sub-specialty'. '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 'High Dependency Care for Children - Time To Move On'.* *6 Training and education surrounding CYP and self-harm can be found at 'Self harm: assessment, management and preventing recurrence'.* *7 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. Competences in paediatric critical care should be assessed through a validated/accredited education and training programme.* *8 PCCS accredited courses for level 1, 2 and 3 PCC are provided nationally. Details can be found at, 'Nurse/AHP Critical Care Specialist Education Course Centres'.*

Ref	Quality Standard
L2-207 BI Visit MP&S CNR Doc	**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. 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 e. At least one nurse per shift with competences in care of children with tracheostomies and those requiring non-invasive or tracheostomy ventilation f. At least one nurse per shift with a course accredited to level 2 PCC (see note 5) *Notes:* *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. 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 All PCC: Non-registered staff with appropriate competences may be included in calculations of staffing levels per child needing critical care so long as they are working under the direct supervision of a registered nurse at all times. The ratio of registered to non-registered staff should not fall below 85:15.* *3 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: 'Paediatric Critical Care Society'.* *4 Healthcare staff caring for children with tracheostomies may include non-registered health care staff who normally care for the child in the community. Parents who have received appropriate training may also contribute to this care.* *5 PCCS accredited courses for level 1, 2and 3 PCC are provided nationally. Details can be found at, 'Nurse/AHP Critical Care Specialist Education Course Centres'.*

Ref	Quality Standard
L2-208 BI Visit MP&S CNR Doc	**New Starters** Nurses and non-registered health care staff without previous paediatric critical care experience should undertake: a. A structured, competency-based induction programme including a minimum of 75 hours of supervised practice in a ward delivering PCC (or in a higher level unit) b. A programme of theoretical and bedside education and training ensuring a defined level of competency is achieved within 12 months Nurses and non-registered health care staff with previous paediatric critical care experience should complete local induction and a review of competence for their expected role. *Notes:* *1 Additional information and support materials relating to this QS are available on The Paediatric Intensive Care Society website 'Paediatric Critical Care Society'.*
L2-209 BI Visit MP&S CNR Doc	**Other Staffing** The following staff should be available: a. Appropriately qualified staff to provide support for play, mental stimulation and distraction during procedures (7/7) b. Pharmacist with paediatric competences (with specific time allocated to unit activity on 5/7) c. Physiotherapist with paediatric competences (with specific time allocated to unit activity on 5/7) d. Access to an educator for the training, education and continuing professional development of staff e. Access to a discharge coordinator responsible for managing the discharge of children with complex care needs f. On-call access to pharmacy and physiotherapy services able to support the care of children (24/7) g. Dietetic staff (with time allocated 5/7 for work on the unit) h. Access to an occupational therapist (at least 5/7) i. Access to a speech and language therapist (at least 5/7) j. Staff with competences in psychological support with time allocated in their job plan for work with: i. Families ii. Staff *Notes:* *1 Cover for absences of all staff should be available.* *2 At least one play specialist with a Level 4 Diploma in Specialised Play for Children and Young People, a Certificate in Hospital Play Specialism, a Foundation Degree in Healthcare Play Specialism or an equivalent qualification should provide advice and guidance to staff providing support for play, mental stimulation and distraction.* *3 The discharge coordinator may have other responsibilities so long as sufficient time is available for managing discharges from paediatric critical care.* *4 Pharmacy, physiotherapy, dietetic, psychological support and health care scientist staff: The amount of time should be appropriate for the usual number and case mix of patients.*

Ref	Quality Standard
L2-220 BI Visit MP&S CNR Doc	**Staff Development & Well Being** The service should ensure: a. All staff have a direct line manager and access to an appropriate mentor, if needed, to help set a professional development plan (PDP) b. Staff should have access to psychological support and resources. This should include an embedded process facilitating a debrief after a significant event c. The service should have a plan to manage staff who consider themselves unfit to work after a challenging situation or cumulative effects of service demand d. A system (e.g., Mind 'Taking Care of You' campaign) is in place to assess individuals at the start and end of shift e. All staff should undergo regular appraisal f. Routine rest breaks should be facilitated with appropriate rest facilities available for staff to nap during shifts or sleep post-call g. All staff should receive teaching on fatigue and its impact on healthcare workers h. Consideration should be given to the maximum length of time on continuous duty
L2-297 BI Visit MP&S CNR Doc	**Self-Harm/ Mental Health Training** All staff involved with the care of children should: a. Have training, appropriate to their role, as agreed by the hospital, in mental health and self-harm in children; this should include Mental Health First Aid, as a minimum b. Be aware of who to contact if they have concerns about any mental health issues c. Be aware of escalation pathway for CAMHS within their hospital d. Be aware of relevant risk assessments associated with mental health e. Have access to an appropriate support team if required *Resources:* *1 NHS England project report: 'Evaluating quality and impact of acute paediatric inpatient care: Defining the domains for a Person Centred Outcome Measure (PCOM) in children and young people admitted with self-harm or eating disorders'.* *2 Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE) Instrument – 'Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE)'.* *3 Our Care Through Our Eyes (e-learning resources for paediatric staff in caring for CYP in MH crisis): 'Our Care through Our Eyes'.*
L2-298 BI Visit MP&S CNR Doc	**Safeguarding Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital and local Safeguarding Board, in safeguarding children 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 *Note:* *1 This QS is included because compliance with national safeguarding requirements is essential. Detailed consideration of safeguarding arrangements is covered by other review processes.* *2 See also: 'Looked After Children (LAC) - guidance', 'Child Protection and Safeguarding in the UK' and 'Safeguarding Children and Young People: Roles and Competencies for Healthcare Staff'.*

Ref	Quality Standard
L2-299 BI Visit MP&S CNR Doc	**Administrative, Clerical and Data Collection Support** Administrative, clerical and data collection support should be available. *Note: The amount of administrative, clerical and data collection support is not defined. Clinical staff should not, however, be spending unreasonable amounts of time which could be used for clinical work on administrative tasks.*
SUPPORT SERVICES	
L2-301 BI Visit MP&S CNR Doc	**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. *Notes:* *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 and reporting through network arrangements with another hospital.*
L2-302 BI Visit MP&S CNR Doc	**Co-located Services** L2 PCC Units should ideally be co-located with ENT services for the support of children with tracheostomies. Where this is not possible a formal standard operating procedure to access a suitable network solution must be in place. *Note: More detail of co-location, 'integrated clinical service' and expectations of related services is given in 'Commissioning Safe and Sustainable Specialised Paediatric Services', (DH, 2008).*
FACILITIES AND EQUIPMENT	
L2-401 BI Visit MP&S CNR Doc	**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. *Note: A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website 'Quality Standards: Acute Care'*
L2-402 BI Visit MP&S CNR Doc	**'Grab Bag'** Appropriate drugs and equipment for in-hospital and time-critical transfers should be immediately available and checked in accordance with local policy. *Notes:* *1 Drugs and equipment for in-hospital and time-critical transfers may be different. Drugs for in-hospital and time-critical transfers may be collected so long as lists of required drugs are easily visible in or near the 'grab bag'.* *2 A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website 'Quality Standards: Acute Care'*

Ref	Quality Standard
L2-404 BI Visit MP&S CNR Doc	**Facilities** Paediatric critical care should be provided in a designated area, distinct from children needing general paediatric care. *Note: Latest Health Building notes (HBN) guidance should be taken into account in the design of these facilities.*
L2-405 BI Visit MP&S CNR Doc	**Equipment** Equipment, including disposables, should be appropriate for the usual number and age of children and the critical care interventions provided. Equipment should be checked in accordance with local policy. As a minimum, each bed space should have the capacity for: a. ECG, EtCO2, pulse-oximetry and non-invasive blood pressure monitoring b. Transducing two pressure traces c. Temperature monitoring at two sites d. Ultrasound for line access Alarms should be set for patients on physiological monitors and must always be audible (or relayed by other means) to a member of clinical staff. These monitors should be available in a modular unit capable of integration with monitors used in the Emergency Department, theatres and portable monitoring systems. Equipment should be checked in accordance with local policy.
L2-406 BI Visit MP&S CNR Doc	**'Point of Care' Testing** 'Point of care' testing for blood gases, glucose, electrolytes and lactate must be immediately available and should automatically upload result to the hospitals electronic patient record.
GUIDELINES AND PROTOCOLS	
L2-501 BI Visit MP&S CNR Doc	**Initial Assessment** A protocol should be in use which ensures a clinical assessment & triage within 15 minutes of arrival, including a pain score (where appropriate), and a system of prioritisation for full assessment if waiting times for full assessment exceed 15 minutes. *Note: This QS is not applicable to services which take only elective admissions.*
L2-502 BI Visit MP&S CNR Doc	**Paediatric Early Warning System** The RCPCH SPOT (Systemwide Paediatric Observations Tracker) system should be in use, ideally on an electronic platform incorporating automated alerting. Where this is not available a system to provide early warning of deterioration of children must be in use. The system should cover observation, monitoring and escalation of care. Centres that do not deploy the SPOT system should complete a risk assessment to evaluate the impact of variation from the national system. 'Paediatric Early Warning System (PEWSystem) - developing a standardised tool for England'

Ref	Quality Standard
L2-503 BI Visit MP&S CNR Doc	**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 *Note: This QS covers implementation of QS HW-501.* *The recognition and management of critically ill children in many hospitals should be facilitated through the deployment of paediatric outreach / rapid response/ medical emergency teams. Such teams work in conjunction with Early Warning Systems (QS IP-502) to rapidly bring staff with the correct skills to the deteriorating patient.*
L2-504 BI Visit MP&S CNR Doc	**Paediatric Advice** Guidelines on accessing advice from the local specialist paediatric service and local paediatric critical care service should be in use in units where children are not under the care of a paediatrician. *Note: This QS applies to Emergency Departments, elective surgery wards and any other units where children are not under the care of a paediatrician. This QS is not applicable to services where care is managed by paediatric medical and nursing staff.*

Ref	Quality Standard
L2-505 BI Visit MP&S CNR Doc	**Clinical Guidelines** The following clinical guidelines should be in use: a. 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. burns and scalds vi. cardiac arrhythmia vii. upper airway obstruction viii. management of the child with a tracheostomy b. Management of acutely distressed children, including the safe 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. Tracheostomy care, including management of a tracheostomy emergency i. Care of children on long-term ventilation (tracheostomy and mask) j. Acute non-invasive ventilation (CPAP and BiPAP) k. Referral and transfer of patients to services which are not available on site The following clinical guidelines should be in use if applicable to unit practice: a. Treatment of trauma, including traumatic brain injury, spinal injury and rehabilitation of children following major trauma b. Non-invasive respiratory support (high flow nasal cannula and continuous positive airway pressure) c. Management of children undergoing surgery d. Rehabilitation after critical illness *Notes:* *1 Guidelines should be clear on the roles and responsibilities of all members of the multi-disciplinary team, including anaesthetic services, as appropriate to site.* *2 Guidelines should include actions to prevent / prepare for deterioration and may link with 'early warning' guidelines (QS L2-502).* *3 Where relevant, guidelines should be specific about the care of children with developmental delay, learning disabilities or co-morbidities.* *4 Guidelines on the treatment of trauma should be based on regional trauma guidelines.* *5 Appropriate guidelines should be informed by National Tracheostomy Safety Project: 'Get Trach Ready'* *6 Long Term Ventilation guidelines should be informed by issues raised by NCEPOD Report: Balancing the Pressures: A review of the quality of care provided to children and young people aged 0-24 years who were receiving long-term ventilation: 'Long Term Ventilation: Balancing the Pressures'*

Ref	Quality Standard
L2-506 BI Visit MP&S CNR Doc	**PCC Transfer Guidelines** Guidelines on referral to a Specialist Paediatric Transport Service should be in use, covering at least: a. Providing full clinical information to and accessing advice from a Specialist Paediatric Transport Service 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 SPTS arrives *Notes:* *1 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 consultant will help supervise the care of the child and support the work of the Specialist Paediatric Transport Service while on-site.* *2 Criteria for admission to a GICU should be formally agreed and consistent with GPICS standards (section 4.11), 'Guidelines For The Provision Of Intensive Care Services' and also the agreed OD network criteria (QSs N-502 & 503).*
L2-507 BI Visit MP&S CNR Doc	**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. *Notes:* *1 These guidelines may be combined with QS L2-506.* *2 In hospitals with both L2 and L3 PCCUs, the guidelines should cover transfer between L2 and L3 Units.*
L2-508 BI Visit MP&S CNR Doc	**Inter-hospital Transfer Guidelines** Guidelines on transfer of children between hospitals or between hospital sites should be in use covering at least: a. Use of a standardised risk assessment tool to guide urgency of transfer and suitable team composition b. Types of patients transferred c. Composition and expected competences of the escort team d. Drugs and equipment required e. Safe securing of children, equipment and staff during transfer f. Monitoring during transfer *Notes:* *1 Most hospitals will need to transfer children, for example for opinions, investigations and treatment. Guidelines should reflect local circumstances and should cover transfer of both stable and unstable children. 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.* *2 The guidelines may be combined with QS L2-506.*

Ref	Quality Standard
L2-509 BI Visit MP&S CNR Doc	**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 (QS L2-506) 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 a) care of the critically ill child, b) emergency transfer and c) advanced airway management c. Indemnity for escort team d. Availability of drugs and equipment, checked in accordance with local policy (QS L2-402) e. Arrangements for emergency transport with a local ambulance service and the air ambulance f. Arrangements for ensuring safe securing of children, equipment and staff during transfer *Notes:* *1 This QS is linked with QS HW-598 if in relation to staff acting outside their area of competence.* *2 Information about ambulance services should include contact information, vehicle specification (road ambulance) and response times.* *3 All children, equipment and staff in the ambulance should be restrained during transfer in accordance with European CEN 1789/2000 Standard. Age-appropriate devices to secure children should either be available either within the department or there should be an arrangement with the ambulance service for such devices to be provided. 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.*
L2-598 BI Visit MP&S CNR Doc	**Implementation of Hospital Guidelines** Staff should be aware of and follow hospital guidelines (QS HW-598) for: a. Surgery and anaesthesia for children b. Consent c. Organ and tissue donation d. Parallel/Advanced Care Planning and Palliative care e. Bereavement f. Child death review g. Staff acting outside their area of formally recognised competence

Ref	Quality Standard
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
L2-601 BI Visit MP&S CNR Doc	**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 and local hospital of their attendance / admission c. Competencies 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 admission within four hours of the decision to admit g. Types of patient admitted h. Review by a senior clinician (Grid Trainee, Advanced PCC Practitioner or Consultant) within one hour of admission i. Discussion and plan agreed with a consultant within two hours of admission j. Review by a consultant as soon as possible but certainly within 14 hours of admission and at least two consultant-led clinical handovers every 24 hours 'Implementation of the Facing the Future: Standards for Acute General Paediatric Services' 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 m. Arrangements for discharge within four hours of the decision to discharge n. Discharge of children with tracheostomies: i. Suitability for discharge ii. Staffing and monitoring facilities that should be in place prior to discharge iii. Process for planning and agreement of discharge o. Discharge of children on long-term ventilation p. Agreed contribution to the network-wide training and CPD programme (QS N-206) *Notes:* *1 Individualised management plans may be in the form of patient passports.* *2 Notifying other relevant members of the primary health care team is desirable.* *3 Operational policies should be based on the inclusion and exclusion criteria, interventions and key performance indicators for which the service is commissioned (QS C-603).* *4 Operational policies should be clear about the care of young people aged 16 to 18 transitioning to GICU and pre-term babies transitioning from neonatal units.* *5 RCPCH (2015) recommends that units work towards consultant presence 12 hours a day, seven days a week.* *6 Guidelines for admission to PCC Units should cover admissions from the unit's host hospital as well as from referring hospitals.* *7 The NHS Standard Contract for Paediatric Critical Care (Schedule 2) gives additional detail on criteria for admission to paediatric critical care.* *8 The operational policy should ensure discharges do not normally occur between 20.00 and 07.59. This is monitored in QS L2-702.*

Ref	Quality Standard
GOVERNANCE	
L2-702 BI Visit MP&S CNR Doc	**Data Collection** The service should collect and submit: a. Paediatric Intensive Care Audit Network (PICANet) data for submission to PICANet as soon as possible and no later than two months after discharge from the PCC Unit b. Paediatric Critical Care Minimum Data Set for submission to PICANet and Secondary Uses Service (SUS) c. 'Quality Dashboard' data as recommended by the PCC CRG *Notes:* *1 Implementation of this QS for patients receiving standalone L2 care is dependent on PICANet being contracted and funded for handling these data.* *2 The PICANet Annual Report provides the documentation required for showing compliance with 'a'.*
L2-703 BI Visit MP&S CNR Doc	**Audit and Quality Improvement** The service should have a rolling programme of audit, including at least: a. Audit of implementation of evidence-based guidelines (QS L2-500s) b. Participation in agreed national and network-wide audits including: i. National Cardiac Arrest Audit (NCAA) ii. Infection in Critical Care Quality Improvement Programme (ICCQIP) c. Discharges between teams or wards between 20.00 and 07.59. d. Number of operations cancelled on the day of surgery due to the lack of a paediatric critical care bed e. Delayed discharges *Note: The rolling programme should ensure that action plans are developed following audits and their implementation is monitored.*
L2-704 BI Visit MP&S CNR Doc	**Key Performance Indicators** Key performance indicators should be reviewed regularly with hospital (or equivalent) management and with commissioners, including 'Quality Dashboard' data as recommended by the PCC CRG.
L2-798 BI Visit MP&S CNR Doc	**Multi-disciplinary Review and Learning** The multidisciplinary team should have arrangements for: a. Review of and implementing learning from positive feedback, complaints, outcomes including mortality, incidents and 'near misses' b. Review of and implementing learning from published scientific research and guidance c. Mortality review in line with national recommendations d. Annual Multi-disciplinary service review with key stakeholders *Notes:* *1 These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.* *2 This QS is additional to Paediatric Critical Care Network review and learning (QS N-798).* *3 This QS is additional to the requirement for reporting and formal review of the death of a child in hospital.*

Ref	Quality Standard
L2-799 BI Visit MP&S CNR Doc	**Document Control** All policies, procedures and guidelines and should comply with hospital document control procedures. *Note: Specific documentary evidence of compliance is not required. This QS will be determined from the other documentary information provided. Copies of hospital document control policies are not required.*
EDUCATION	
L2-801 BI Visit MP&S CNR Doc	**Regional & Network Education** The service should actively participate in the regional Paediatric Critical Care Network (which should include representatives from all regional Level 1,2 and 3 units) and have links with any other relevant paediatric, neonatal or adult networks in region to ensure: a. Involvement in outreach education for medical, nursing and allied health professional staff b. Involvement with governance and dissemination of learning from excellence reports and critical incidents involving the stabilisation, resuscitation and transfer of critically ill and injured children c. Shared learning from mortality reviews d. Feedback from transfer is available to the referring hospitals e. Feedback from referring and receiving hospitals is available to Specialist Paediatric Critical Care Transport Service f. Shared learning between neonatal and paediatric services
INFORMATICS	
L2-901 BI Visit MP&S CNR Doc	**Informatics Lead** A nominated lead clinician should be identified to lead the deployment and governance of informatics systems within PCC.
L2-902 BI Visit MP&S CNR Doc	**Patient Records** All patient observations and clinical notes should be stored in an electronic patient record (EPR) system that is available at every bedside and via the intranet within the hospital. Where possible, the EPR should electronically capture and record vital signs and device settings (eg. ventilator) to minimise the need for manual data entry and thereby reduce error. Double entry of any data should not be permitted at any time: The system should be designed to ensure that information automatically populates equivalent fields.
L2-903 BI Visit MP&S CNR Doc	**Investigation Results** The laboratory information system should be directly linked to the critical care EPR and provide real time access to results as soon as they are authorised. Abnormal results should generate appropriate alerts and require bedside staff to acknowledge receipt with their digital signature. Compliance with local guidance for results review should be audited regularly.

Ref	Quality Standard
L2-904 BI Visit MP&S CNR Doc	**Trending** The EPR should be capable of displaying all numerical results as both tabulated and graphical trends.
L2-905 BI Visit MP&S CNR Doc	**Discharge Summaries** The EPR should automatically upload discharge summaries to the local EPR and GP record simultaneously at the point a patient is discharged. If the receiving service does not have an EPR a printed summary or pdf file should accompany the patient on discharge.
L2-906 BI Visit MP&S CNR Doc	**Colleague Access** Clinical colleagues should be able to access the full critical care EPR from any clinical workstations in the hospital.
L2-907 BI Visit MP&S CNR Doc	**Patient / Family Access** Where possible patients and families should be facilitated to access appropriate sections of the patient records via a Patient/Family app or portal.
L2-997 BI Visit MP&S CNR Doc	**Coding** All EPR coding should use standard UK SNOMED codes. *Note: NHS SNOMED position statement 'SNOMED CT'*
L2-998 BI Visit MP&S CNR Doc	**Information Standard Notice (ISN) & Fast Healthcare Interoperability Resources (FHIR) Compliance** The EPR system must be fully compliant with current NHS ISNs and should communicate with other electronic systems using UK FHIR. *Notes:* *1 Information Standards Notices: 'Information Standards Notices'* *2 FHIR Resources: 'Fast Healthcare Interoperability Resources'*
L2-999 BI Visit MP&S CNR Doc	**Continuity Plans** A service continuity plan (SCP) should be available to ensure ongoing safe delivery of care during EPR downtimes. All staff should be aware of the SCP. The SCP should be tested at least annually (usually synchronised with an EPR system upgrade). *Note: DCB0160: Clinical Risk Management its application in the Deployment and use of Health IT Systems: 'DCB0160: Clinical Risk Management: its Application in the Deployment and Use of Health IT Systems'*

LEVEL 3 PAEDIATRIC CRITICAL CARE UNITS

Ref	Quality Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
L3-101 BI Visit MP&S CNR Doc	**Child-friendly Environment** Children should be cared for in a defined safe and secure child-friendly environment, with age-appropriate stimulation and distraction activities. *Note: The facility should have visual and sound separation from adult patients. More detail of recommendations for the environment in emergency care settings is given in 'Facing the Future: Standards for Children in Emergency Care Settings' (RCPCH, 2018).*
L3-102 BI Visit MP&S CNR Doc	**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 to fully participate in decisions about, and in the care of, their child *Note: The need for privacy and confidentiality for other children and families may, in some units, mean that families cannot be present during ward rounds or handovers between clinical teams.*
L3-103 BI Visit MP&S CNR Doc	**Information for Children** Children should be offered age-appropriate information, encouragement and support to enable them to share in decisions about their care. Written information about common conditions should be available. *Notes:* *1 Information should be written in clear, simple language and should be available in formats and languages appropriate to the needs of the patients, including developmentally appropriate information for young people and people with learning disabilities. Information for young people should meet the 'Quality Criteria for Young People Friendly Health Services' (DH, 2011).* *2 Information may be in paper or electronic/e-learning formats or in the form of a website or other social media. Guidance on how to access information is sufficient for compliance so long as this points to easily available information of appropriate quality. If the information is provided only in individual patient letters then examples will need to be seen by reviewers.* *3 This may be general Hospital-Wide (or equivalent) information. If so, services or clinics which are specific to one condition should be clearly identified. If the information is provided only in individual patient letters then examples of these will need to be available to reviewers.*

Ref	Quality Standard
L3-104 BI Visit MP&S CNR Doc	**Information for Families** Information for families should be available covering, at least: a. The child's condition b. How decisions are made and how parents should be involved in decisions relating to 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 groups and voluntary organisations *Notes:* *1 As QS L1-103 notes 1 to 3* *2 Further information: 'PIC Families'*
L3-105 BI Visit MP&S CNR Doc	**Facilities and Support for Families** Facilities should be available for families, including: a. Somewhere to sit away from the ward b. Quiet room for sensitive discussions with healthcare professionals c. Kitchen, toilet and washing area d. Changing area for other young children e. Midwifery and breast feeding support f. Breast feeding facilities g. Chair for parents to sit next to the child h. Accommodation on site but away from the ward/unit i. Access to psychological support *Notes:* *1 'e' is applicable only to services which admit neonates.* *2 Support for families should be sensitive to their cultural and faith needs.*
L3-196 BI Visit MP&S CNR Doc	**Discharge Information** On discharge home, children and families should be offered a copy of their discharge letter and written information about: a. Care after discharge b. Early warning signs of problems and what to do if these occur c. Who to contact for advice and their contact details *Notes:* *1 As QS L1-103 notes 1 to 3.* *2 Discharge information should be sent electronically to the patient's GP and other relevant healthcare professionals within 24 hours of discharge.* *3 This QS is applicable only to patients discharged directly home from PCC and does not apply to patients discharged to other ward areas.*

Ref	Quality Standard
L3-197 BI Visit MP&S CNR Doc	**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 *Notes:* *1 'Availability' of support services is not defined but should be appropriate to the case mix and needs of the patients.* *2 As QS L1-103 notes 1 to 3.*
L3-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The service should have: a. Mechanisms for receiving feedback from children and families about the treatment and care they receive b. Mechanisms for involving children and families in decisions about the organisation of the service c. Examples of changes made as a result of feedback and involvement of children and families *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups, electronic media and / or other arrangements. They may be part of Hospital-Wide arrangements so long as issues relating to children's services can be identified.*
STAFFING	
L3-201 BI Visit MP&S CNR Doc	**Lead Consultant and Lead Nurse** A nominated lead consultant and 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 consultant and lead nurse should undertake regular clinical work within the service for which they are responsible.

Ref	Quality Standard
L3-202 BI Visit MP&S CNR Doc	**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. 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 c. All consultants should have completed relevant training in paediatric intensive care medicine as described by the Paediatric Intensive Care Medicine Specialty Advisory Committee (PICM ISAC) or an equivalent national organisation, including at least two years of L3 PCCU training and a period of anaesthesia training (paediatric trainees) or paediatric training (anaesthesia trainees). They should undertake CPD of relevance to their work with critically ill and critically injured children. This should be assured through annual appraisal and revalidation d. A consultant should be available 24/7. When on duty for the L3 PCC Unit consultants should not have clinical responsibilities elsewhere. The following consultant staffing should be available: i. **'Normal working hours':** At least one consultant for up to 12 beds for children needing Level 3 critical care and for each subsequent 12 beds ii. **Outside 'normal working hours':** At least one consultant for up to 20 critical care beds and for each subsequent 20 beds. All consultants should have regular day-time commitments on the unit *Notes:* *1 'Available' means that the consultant can attend the unit if required.* *2 An increasing amount of consultants' time should be allocated to working on the unit as the number of PICU beds increases within each 'cell' of up to 12 beds. For example, units of 16 to 24 beds should normally have two consultants working on the unit during normal working hours. Patient case mix and complexity / acuity will also need to be taken into account and units that admit more patients needing L2 PCC will not require the same staffing level.* *3 The training requirements do not apply to consultants appointed prior to 2010 who have achieved equivalent competences through experience.* *4 The definition of 'normal working hours' should include recognised periods of peak activity.* *5 'Facing the Future: Standards for acute general 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'.*

Ref	Quality Standard
L3-203 BI Visit MP&S CNR Doc	**'Middle Grade' Clinician** 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 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 paediatric critical care practitioner or Hospital / Specialty Doctor with equivalent competences Staffing levels should be: a. During normal working hours: one clinician for every five beds b. Outside normal working hours: one clinician for every eight beds *Notes:* *1 'Immediately available' means able to attend within five minutes.* *2 RCPCH competence frameworks are available at: 'RCPCH Progress curriculum and generic syllabi'. 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.* *4 This clinician should not be covering the Specialist Paediatric Transport Service. Specialist Paediatric Transport Service staff may support L3 PCCU if not required for an emergency transfer so long as they are immediately available to the Specialist Paediatric Transport Service when required. The clinician may have responsibility for critical care 'outreach' to other wards within the same hospital site.* *5 The definition of 'normal working hours' should take into account times of peak activity.*

Ref	Quality Standard
L3-204 BI Visit MP&S CNR Doc	**Consultants with Lead Responsibility** The lead consultant should be supported by consultants with lead responsibility for the following areas: a. Clinical governance b. Organ donation c. Research d. Medical education and training e. Medical Staff Rotas f. ECMO/ECLS (if appropriate) g. Child death review h. Staff wellbeing *Note: A consultant may have responsibility for more than one area. These roles should be recognised in consultants' job plans.*
L3-205 BI Visit MP&S CNR Doc	**Medical Staff: Continuity of Care** Consultant rotas should be organised to give reasonable continuity of care. Patients expected to stay on the unit for longer than 10 days should be allocated a lead consultant as soon as their long stay status is recognised. *Note: RCPCH (2015) recommends that 'all general paediatric inpatient units adopt an attending consultant system most often in the form of the 'consultant of the week' system'.*

Ref	Quality Standard
L3-206 BI Visit MP&S CNR Doc	**Clinician Competence Framework and Training Plan** A nominated education lead consultant and lead nurse (with appropriate administration support) should be responsible for organisation and delivery of training for PCC staff. Allocated time for the delivery & development of the team education should be provided. A competence framework and training plan should ensure that clinicians providing bedside care have or are working towards, and maintain, competences appropriate for their role in the service including regular updates, (minimum annual), covering: a. Paediatric resuscitation: All staff must 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 (QS L3-207) and expected input to the paediatric resuscitation team (QS HW-204) b. Care and rehabilitation of children with trauma (if applicable) c. Care of children needing surgery (if applicable) d. Use of equipment as expected for their role e. Care of children with acute mental health problems (See note 6) f. Care of children with tracheostomies (if appropriate) g. Appropriate level paediatric critical care competences: Appropriate level paediatric critical care competences: 70% of nursing staff working on each shift should have appropriate level competences in paediatric critical care (see note 5, 7, 8) h. Care of children needing acute and chronic non-invasive ventilation, and tracheostomy ventilation i. Care of the intubated child, invasive mechanical ventilation, blood gas interpretation, monitoring and management of analgesia and sedation, haemodynamic monitoring and inotropic support, and care of arterial and central venous lines *Notes:* *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. 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* *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 (QS N-206) will support maintenance of competences, especially in smaller units.* *5 Further detail of competences in paediatric critical care is available on The Royal College of Paediatrics and Child Health website 'Paediatric intensive care medicine - sub-specialty'.* *6 Training and education surrounding CYP and self-harm can be found at 'Self harm: assessment, management and preventing recurrence'.* *7 Competences in paediatric critical care should be assessed through a validated/accredited education and training programme.* *8 PCCS accredited courses for level 1, 2and 3 PCC are provided nationally. Details can be found at, 'Nurse/AHP Critical Care Specialist Education Course Centres'.*

Ref	Quality Standard
L3-207 BI Visit MP&S CNR Doc	**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. 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 e. At least one nurse per shift with competences in care of children with tracheostomies and those requiring non-invasive or tracheostomy ventilation f. One nurse with appropriate level competences in paediatric critical care for every child needing Level 3 critical care g. Supernumerary shift leader h. Supernumerary nurse for every eight to ten beds for children needing Level 3 care *Notes:* *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. 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 Non-registered staff with appropriate competences may be included in calculations of staffing levels per child needing critical care so long as they are working under the direct supervision of a registered nurse at all times. The ratio of registered to non-registered staff should not fall below 85:15.* *3 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 Critical Care Society website: 'Paediatric Critical Care Society'.* *4 Healthcare staff caring for children with tracheostomies may include non-registered health care staff who normally care for the child in the community. Parents who have received appropriate training may also contribute to this care.* *5 An establishment of at least 7.06 nurses and non-registered health care staff per bed for children needing Level 3 care will be required to achieve this QS (PICS, 2015). This includes an allowance of 25% non-patient contact time for annual, maternity, sickness, special and study leave. Further details are available on The Paediatric Critical Care Society website: 'NURSE WORKFORCE PLANNING for LEVEL 3 Paediatric Critical Care Units (PICU)'.* *6 PCCS accredited courses for level 1, 2and 3 PCC are provided nationally. Details can be found at, 'Nurse/AHP Critical Care Specialist Education Course Centres'.*

Ref	Quality Standard
L3-208 BI Visit MP&S CNR Doc	**New Starters** Nurses and non-registered health care staff without previous paediatric critical care experience should undertake: a. A structured, competency-based induction programme including a minimum of 75 hours of supervised practice in the PCC Unit (or in a higher level unit) b. A programme of theoretical and bedside education and training ensuring a defined level of competency is achieved within 12 months Nurses and non-registered health care staff with previous paediatric critical care experience should complete local induction and a review of competence for their expected role. *Note: Additional information and support materials relating to this QS are available on The Paediatric Intensive Care Society website 'Paediatric Critical Care Society'.*
L3-209 BI Visit MP&S CNR Doc	**Other Staffing** The following staff should be available: a. Appropriately qualified staff to provide support for play, mental stimulation and distraction during procedures (7/7) b. A discharge coordinator responsible for managing the discharge of children with complex care needs c. An educator for the training, education and continuing professional development of staff d. Pharmacist with competences in paediatric critical care (with time allocated at least 5/7 for work on the unit) e. Physiotherapist with competences in paediatric critical care (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) g. Dietetic staff (with time allocated 5/7 for work on the unit) h. Staff with competences in psychological support with time allocated in their job plan for work with: i. Families ii. Staff i. Access to an occupational therapist (at least 5/7) j. Access to a speech and language therapist (at least 5/7) k. At least one whole time equivalent (WTE) educator for each 50 nurses, non-registered health care staff and allied health professionals within the L3 PCCU l. An educator for families of children with complex and / or equipment needs who are going home m. Health care scientist or other technical support arrangements for the management of equipment n. Operating Department Practitioners (or equivalent staff) with competences in assisting with advanced airway interventions (24/7) *Notes:* *1 Cover for absences of all staff should be available.* *2 At least one play specialist with a Level 4 Diploma in Specialised Play for Children and Young People, a Certificate in Hospital Play Specialism, a Foundation Degree in Healthcare Play Specialism or an equivalent qualification should provide advice and guidance to staff providing support for play, mental stimulation and distraction.* *3 The discharge coordinator may have other responsibilities so long as sufficient time is available for managing discharges from paediatric critical care.* *4 Pharmacy, physiotherapy, dietetic, psychological support and health care scientist staff: The amount of time should be appropriate for the usual number and case mix of patients.*

Ref	Quality Standard
L3-220 BI Visit MP&S CNR Doc	**Staff Development & Well Being** The service should ensure: a. All staff have a direct line manager and access to an appropriate mentor, if needed, to help set a professional development plan (PDP) b. Staff should have access to psychological support and resources. This should include an embedded process facilitating a debrief after a significant event c. The service should have a plan to manage staff who consider themselves unfit to work after a challenging situation or cumulative effects of service demand d. A system (e.g. Mind 'Taking Care of You' campaign) is in place to assess individuals at the start and end of shift e. All staff should undergo regular appraisal f. Routine rest breaks should be facilitated with appropriate rest facilities available for staff to nap during shifts or sleep post-call g. All staff should receive teaching on fatigue and its impact on healthcare workers h. Consideration should be given to the maximum length of time on continuous duty
L3-297 BI Visit MP&S CNR Doc	**Self-Harm/ Mental Health Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital, in mental health and self-harm in children; this should include Mental Health First Aid, as a minimum b. Be aware of who to contact if they have concerns about any mental health issues c. Be aware of escalation pathway for CAMHS within their hospital d. Be aware of relevant risk assessments associated with mental health e. Have access to an appropriate support team if required *Resources:* *1 NHS England project report: 'Evaluating quality and impact of acute paediatric inpatient care: Defining the domains for a Person Centred Outcome Measure (PCOM) in children and young people admitted with self-harm or eating disorders'* *2 Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE) Instrument – 'Children and Young People-Mental Health Self-harm Assessment in Paediatric healthcare Environments (CYP-MH SAPhE)'* *3 Our Care Through Our Eyes (e-learning resources for paediatric staff in caring for CYP in MH crisis): 'Our Care through Our Eyes'*
L3-298 BI Visit MP&S CNR Doc	**Safeguarding Training** All staff involved with the care of children should: a. Have training, appropriate to their role as agreed by the hospital and local Safeguarding Board, in safeguarding children 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 *Note:* *1 This QS is included because compliance with national safeguarding requirements is essential. Detailed consideration of safeguarding arrangements is covered by other review processes.* *2 See also: 'Looked After Children (LAC) - guidance', 'Child Protection and Safeguarding in the UK' and 'Safeguarding Children and Young People: Roles and Competencies for Healthcare Staff'*

Ref	Quality Standard
L3-299 BI Visit MP&S CNR Doc	**Administrative, Clerical and Data Collection Support** Administrative, clerical and data collection support should be available. *Note: The amount of administrative, clerical and data collection support is not defined. Clinical staff should not, however, be spending unreasonable amounts of time which could be used for clinical work on administrative tasks.*
SUPPORT SERVICES	
L3-301 BI Visit MP&S CNR Doc	**Imaging Services** 24-hour on-site access to imaging services should be available including ultrasound and CT and MR scanning, with reporting available within one hour. 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. *Notes:* *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.*
L3-302 BI Visit MP&S CNR Doc	**Co-located Services** Level 3 PCC Units should be co-located with the following services: a. ENT (Airway) b. Specialised paediatric surgery c. Specialised paediatric anaesthesia Level 3 PCC Units should be co-located or work as an 'integrated clinical service' with the following paediatric services: d. Clinical haematology e. Respiratory medicine f. Cardiology g. Congenital cardiac surgery h. Neurosurgery *Note: More detail of co-location, 'integrated clinical service' and expectations of related services is given in 'Commissioning Safe and Sustainable Specialised Paediatric Services', (DH, 2008).*
FACILITIES AND EQUIPMENT	
L3-401 BI Visit MP&S CNR Doc	**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. *Note: A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website 'Quality Standards: Acute Care'*

Ref	Quality Standard
L3-402 BI Visit MP&S CNR Doc	**'Grab Bag'** Appropriate drugs and equipment for in-hospital and time-critical transfers should be immediately available and checked in accordance with local policy. *Notes:* *1 Drugs and equipment for in-hospital and time-critical transfers may be different. Drugs for in-hospital and time-critical transfers may be collected so long as lists of required drugs are easily visible in or near the 'grab bag'.* *2 Note: A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website 'Quality Standards: Acute Care'*
L3-404 BI Visit MP&S CNR Doc	**Facilities** Paediatric critical care should be provided in a designated area, distinct from children needing general paediatric care. *Note: Latest HBN guidance should be taken into account in the design of these facilities.*
L3-405 BI Visit MP&S CNR Doc	**Equipment** Equipment, including disposables, should be appropriate for the usual number and age of children and the critical care interventions provided. Equipment should be checked in accordance with local policy. As a minimum, each bed space should have the capacity for: a. ECG, EtCO2, pulse-oximetry and non-invasive blood pressure monitoring b. Transducing two pressure traces c. Temperature monitoring at two sites d. Ultrasound for line access Alarms should be set for patients on physiological monitors and must always be audible (or relayed by other means) to a member of clinical staff. These monitors should be available in a modular unit capable of integration with monitors used in the Emergency Department, theatres and portable monitoring systems. Equipment should be checked in accordance with local policy.
L3-406 BI Visit MP&S CNR Doc	**'Point of Care' Testing** 'Point of care' testing for blood gases, glucose, electrolytes and lactate should be easily available.
GUIDELINES AND PROTOCOLS	
L3-501 BI Visit MP&S CNR Doc	**Initial Assessment** A protocol should be in use which ensures a clinical assessment & triage within 15 minutes of arrival, including a pain score (where appropriate), and a system of prioritisation for full assessment if waiting times for full assessment exceed 15 minutes.

Ref	Quality Standard
L3-503 BI Visit MP&S CNR Doc	**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 *Note: This QS covers implementation of QS HW-501.* *The recognition and management of critically ill children in many hospitals should be facilitated through the deployment of paediatric outreach / rapid response/ medical emergency teams. Such teams work in conjunction with Early Warning Systems (QS IP-502) to rapidly bring staff with the correct skills to the deteriorating patient.*
L3-505 BI Visit MP&S CNR Doc	**Clinical Guidelines** The following clinical guidelines should be in use: a. 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. burns and scalds vi. cardiac arrhythmia vii. upper airway obstruction viii. management of the child with a tracheostomy b. Management of acutely distressed children, including the safe use of restraint c. Management of children undergoing surgery d. Drug administration and medicines management e. Pain management f. Procedural sedation and analgesia g. Infection control and antibiotic prescribing h. Tissue viability, including extravasation i. Nasal high flow therapy j. Acute non-invasive ventilation (CPAP and BiPAP) k. Tracheostomy care, including management of a tracheostomy emergency l. Care of children on long-term ventilation (tracheostomy and mask) m. Haemofiltration / haemodiafiltration n. HFOV o. Rehabilitation after critical illness p. Referral and transfer of patients to services which are not available on site q. Brain stem death and organ and tissue donation r. Palliative care s. End of life care, including withdrawal of treatment t. Bereavement The following clinical guidelines should be in use if applicable to unit practice u. Treatment of trauma, including traumatic brain injury, spinal injury and rehabilitation of children following trauma (if applicable) v. ECMO

Ref	Quality Standard
	Notes: *1 Guidelines should be clear on the roles and responsibilities of all members of the multi-disciplinary team, including anaesthetic services, as appropriate to site.* *2 Guidelines should include actions to prevent / prepare for deterioration and may link with 'early warning' guidelines (QS L3-503).* *3 Where relevant, guidelines should be specific about the care of children with developmental delay, learning disabilities, multiple disabilities or co-morbidities.* *4 Guidelines on the treatment of trauma should be based on regional trauma guidelines.* *5 Appropriate guidelines should be informed by National Tracheostomy Safety Project: 'Get Trach Ready'* *6 Long Term Ventilation guidelines should be informed by issues raised by NCEPOD Report: Balancing the Pressures: A review of the quality of care provided to children and young people aged 0-24 years who were receiving long-term ventilation: 'Long Term Ventilation: Balancing the Pressures'* *7 'v' should cover access to ECMO, transplantation and other services for which 'integrated care', 'next working day' or 'access as required' is expected IF these are not available on site. Further details of these services is given in 'Commissioning Safe and Sustainable Specialised Paediatric Services', (DH, 2008).* *8 Guidelines on palliative care, organ and tissue donation, end of life care and bereavement should be specific to the needs of children and their families. RCPCH guidance 'Making decisions to limit treatment in life-threatening and life-limiting conditions in children: a framework for practice' (2015) may be helpful in developing local guidelines.*
L3-506 BI Visit MP&S CNR Doc	**PCC Transfer Guidelines** Guidelines on referral to a Specialist Paediatric Transport Service should be in use, covering at least: a. Providing full clinical information to and accessing advice from a Specialist Paediatric Transport Service 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 SPTS arrives *Notes:* *1 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 consultant will help supervise the care of the child and support the work of the Specialist Paediatric Transport Service while on-site.* *2 Criteria for admission to a GICU should be formally agreed and consistent with GPICS standards (section 4.11), 'Guidelines For The Provision Of Intensive Care Services' and also the agreed OD network criteria (QSs N-502 & 503).*
L3-507 BI Visit MP&S CNR Doc	**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. *Notes:* *1 These guidelines may be combined with QS L3-506.* *2 In hospitals with both L2 and L3 PCCUs, the guidelines should cover transfer between L2 and L3 Units.*

Ref	Quality Standard
L3-508 BI Visit MP&S CNR Doc	**Inter-hospital Transfer Guidelines** Guidelines on transfer of children between hospitals or between hospital sites should be in use covering at least: a. Use of a standardised risk assessment tool to guide urgency of transfer and suitable team composition b. Types of patients transferred c. Composition and expected competences of the escort team d. Drugs and equipment required e. Securing of children, equipment and staff during transfer f. Monitoring during transfer *Notes:* *1 Most hospitals will need to transfer children, for example for opinions, investigations and treatment. Guidelines should reflect local circumstances and should cover transfer of both stable and unstable children. 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.* *2 The guidelines may be combined with QS L3-506.*
L3-509 BI Visit MP&S CNR Doc	**Time-Critical Transfer Guidelines (To specialised services not available on site)** 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, time-sensitive cardiac pathology. The guidelines should include: a. Securing advice from the Specialist Paediatric Transport Service (QS L3-506) 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 a) care of the critically ill child, b) emergency transfer and c) advanced airway management c. Indemnity for escort team d. Availability of drugs and equipment, checked in accordance with local policy (QS L3-402) e. Arrangements for emergency transport with a local ambulance service and the air ambulance f. Arrangements for ensuring securing of children, equipment and staff during transfer *Notes:* *1 This QS is linked with QS HW-598 if in relation to staff acting outside their area of competence.* *2 Information about ambulance services should include contact information, vehicle specification (road ambulance) and response times.* *3 All children, equipment and staff in the ambulance should be restrained during transfer in accordance with European CEN 1789/2000 Standard. Age-appropriate devices for securing children should either be available either within the department or there should be an arrangement with the ambulance service for such devices to be provided. 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.* *5 This Qs is applicable to L3 PCC Units in hospitals which host a SPTS as time-critical transfers to other specialist services may be required.*

Ref	Quality Standard
L3-598 BI Visit MP&S CNR Doc	**Implementation of Hospital Guidelines** Staff should be aware of and follow hospital guidelines (QS HW-598) for: a. Surgery and anaesthesia for children b. Consent c. Organ and tissue donation d. Parallel/Advanced Care Planning and Palliative care e. Bereavement f. Child death review g. Staff acting outside their area of formally recognised competence

Ref	Quality Standard
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
L3-601 BI Visit MP&S CNR Doc	**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. Servicing and maintaining equipment, including 24 hour call out where appropriate e. Arrangements for admission within four hours of the decision to admit f. Types of patients admitted g. Review by a senior clinician (Grid Trainee, Advanced PCC Practitioner or Consultant) within one hour of admission h. Discussion and plan agreed with a consultant within two hours of admission i. Review by a consultant as soon as possible but certainly within 14 hours of admission and at least two consultant-led clinical handovers every 24 hours 'Implementation of the Facing the Future: Standards for Acute General Paediatric Services' j. Handover of patients at each change of responsible consultant, non-consultant medical staff, nursing staff and other staff k. Discussion with a senior clinician prior to discharge l. Arrangements for discharge within four hours of the decision to discharge m. Arrangements for critical care 'outreach' to other wards within the hospital n. Discharge of children with tracheostomies: i. Suitability for discharge ii. Staffing and monitoring facilities that should be in place prior to discharge iii. Process for planning and agreement of discharge o. Discharge of children on long-term ventilation p. Agreed contribution to the network-wide training and CPD programme (QS N-206) *Notes:* *1 Individualised management plans may be in the form of patient passports.* *2 Notifying other relevant members of the primary health care team is desirable.* *3 Operational policies should be based on the inclusion and exclusion criteria, interventions and key performance indicators for which the service is commissioned (QS C-603).* *4 Operational policies should be clear about the care of young people aged 16 to 18 transitioning to GICU and pre-term babies transitioning from neonatal units.* *5 RCPCH (2015) recommends that units work towards consultant presence 12 hours a day, seven days a week.* *6 Guidelines for admission to PCC Units should cover admissions from the unit's host hospital as well as from referring hospitals.* *7 The NHS Standard Contract for Paediatric Critical Care (Schedule 2) gives additional detail on criteria for admission to paediatric critical care.* *8 The operational policy should ensure discharges do not normally occur between 20.00 and 07.59. This is monitored in QS L3-702.*

Ref	Quality Standard
GOVERNANCE	
L3-702 BI Visit MP&S CNR Doc	**Data Collection** The service should collect and submit: a. Paediatric Intensive Care Audit Network (PICANet) data for submission to PICANet as soon as possible and no later than two months after discharge from the PCC Unit b. Paediatric Critical Care Minimum Data Set for submission to PICANet and Secondary User Service (SUS) c. 'Quality Dashboard' data as recommended by the PCC CRG d. NHSE&I data to support national PCC bed monitoring systems e. Metrics over and above those above, as recommended in PCC GIRFT recommendations (In publication) *Note: The PICANet Annual Report provides the documentation required for showing compliance with 'a'.*
L3-703 BI Visit MP&S CNR Doc	**Audit and Quality Improvement** The service should have a rolling programme of audit, including at least: a. Audit of implementation of evidence-based guidelines (QS L3-500s) b. Participation in agreed national and network-wide audits including: i. National Cardiac Arrest Audit (NCAA) ii. Infection in Critical Care Quality Improvement Programme (ICCQIP). c. Discharges between 20:00 and 07.59 d. Number of operations cancelled on the day of surgery due to the lack of a paediatric critical care bed *Note: The rolling programme should ensure that action plans are developed following audits and their implementation is monitored.*
L3-704 BI Visit MP&S CNR Doc	**Key Performance Indicators** Key performance indicators should be reviewed regularly with hospital (or equivalent) management and with commissioners: a. 'Quality Dashboard' data as recommended by the PCC CRG b. Average occupancy exceeding 85% for more than two successive months should be escalated to hospital management and to commissioners and should be specifically reviewed
L3-705 BI Visit MP&S CNR Doc	**Research** The service should actively participate in research relating to paediatric critical care. *Note: This is a desirable Quality Standard and may be not applicable if appropriate support for research is not available locally.*
L3-706 BI Visit MP&S CNR Doc	**Annual Report** The service should produce an annual report summarising activity, compliance with quality standards, 'Quality Dashboard' and clinical outcomes. The report should identify actions required to meet the expected Quality Standards and progress since the previous year's annual report. The report should be shared with referring hospitals.

Ref	Quality Standard
L3-798 BI Visit MP&S CNR Doc	**Multi-disciplinary Review and Learning** The multidisciplinary team should have arrangements for: a. Review of and implementing learning from positive feedback, complaints, outcomes including mortality, incidents and 'near misses' b. Review of and implementing learning from published scientific research and guidance c. Mortality review in line with national recommendations d. Annual Multi-disciplinary service review with key stakeholders *Notes:* *1 These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.* *2 This QS is additional to Paediatric Critical Care Network review and learning (QS N-798).* *3 This QS is additional to the requirement for reporting and formal review of the death of a child in hospital.*
L3-799 BI Visit MP&S CNR Doc	**Document Control** All policies, procedures and guidelines and should comply with hospital document control procedures. Note: Specific documentary evidence of compliance is not required. This QS will be determined from the other documentary information provided. Copies of hospital document control policies are not required.
EDUCATION	
L3-801 BI Visit MP&S CNR Doc	**Regional & Network Education** The service should actively participate in the regional Paediatric Critical Care Network (which should include representatives from all regional Level 1,2 and 3 units) and have links with any other relevant paediatric, neonatal or adult networks in region to ensure: a. Involvement in outreach education for medical, nursing and allied health professional staff b. Involvement with governance and dissemination of learning from excellence reports and critical incidents involving the stabilisation, resuscitation and transfer of critically ill and injured children c. Shared learning from mortality reviews d. Feedback from transfer is available to the referring hospitals e. Feedback from referring and receiving hospitals is available to Specialist Paediatric Critical Care Transport Service. f. Shared learning between neonatal and paediatric services.
INFORMATICS	
L3-901 BI Visit MP&S CNR Doc	**Informatics Lead** A nominated lead clinician should be identified to lead the deployment and governance of informatics systems within PCC.

Ref	Quality Standard
L3-902 BI Visit MP&S CNR Doc	**Patient Records** All patient observations and clinical notes should be stored in an electronic patient record (EPR) system that is available at every bedside and via the intranet within the hospital. Where possible, the EPR should electronically capture and record vital signs and device settings (eg. ventilator) to minimise the need for manual data entry and thereby reduce error. Double entry of any data should not be permitted at any time: The system should be designed to ensure that information automatically populates equivalent fields.
L3-903 BI Visit MP&S CNR Doc	**Investigation Results** The laboratory information system should be directly linked to the critical care EPR and provide real time access to results as soon as they are authorised. Abnormal results should generate appropriate alerts and require bedside staff to acknowledge receipt with their digital signature. Compliance with local guidance for results review should be audited regularly.
L3-904 BI Visit MP&S CNR Doc	**Trending** The EPR should be capable of displaying all numerical results as both tabulated and graphical trends.
L3-905 BI Visit MP&S CNR Doc	**Discharge Summaries** The EPR should automatically upload discharge summaries to the local EPR and GP record simultaneously at the point a patient is discharged. If the receiving service does not have an EPR a printed summary or pdf file should accompany the patient on discharge.
L3-906 BI Visit MP&S CNR Doc	**Colleague Access** Clinical colleagues should be able to access the full critical care EPR from any clinical workstations in the hospital.
L3-907 BI Visit MP&S CNR Doc	**Patient / Family Access** Where possible patients and families should be facilitated to access appropriate sections of the patient records via a Patient/Family app or portal.
L3-997 BI Visit MP&S CNR Doc	**Coding** All EPR coding should use standard UK SNOMED codes. *Note: NHS SNOMED position statement 'SNOMED CT'*

Ref	Quality Standard
L3-998 BI Visit MP&S CNR Doc	**Information Standard Notice (ISN) & Fast Healthcare Interoperability Resources (FHIR) Compliance** The EPR system must be fully compliant with current NHS ISNs and should communicate with other electronic systems using UK FHIR. *Notes:* *Information Standards Notices: 'Information Standards Notices'* *FHIR Resources: 'Fast Healthcare Interoperability Resources'*
L3-999 BI Visit MP&S CNR Doc	**Continuity Plans** A service continuity plan (SCP) should be available to ensure ongoing safe delivery of care during EPR downtimes. All staff should be aware of the SCP. The SCP should be tested at least annually (usually synchronised with an EPR system upgrade). *Note: DCB0160: Clinical Risk Management its application in the Deployment and use of Health IT Systems: 'DCB0160: Clinical Risk Management: its Application in the Deployment and Use of Health IT Systems'*

SPECIALIST PAEDIATRIC CRITICAL CARE TRANSPORT SERVICES

These Standards are additional to the Hospital-Wide Standards and apply to Specialist Paediatric Critical Care Transport Services (SPTS) that are commissioned to undertake the transfer of critically ill children by road and/or air. Specialist Paediatric Critical Care Transport Services may be delivered independently to a Level 3 PCCU or as an integrated service with a Level 3 PCCU. Aeromedical transfers include those undertaken using rotary wing or fixed wing aircraft.

Ref	Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
T-101 BI Visit MP&S CNR Doc	**Information for Parents** Parents of children needing transfer should be given information regarding transport options, directions, car parking, and accommodation and contact numbers for both the hospital and the unit to which their child is being transferred.
T-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The SPTS should have mechanisms for: a. Receiving feedback from children and families about the treatment and care they received. b. Receiving feedback from both referring and receiving hospitals. c. Involving children and families, referring hospitals and L2 and L3 PCC receiving units in decisions about the organisation of the SPTS. d. Examples of changes made as a result of feedback and involvement of children and families, referring hospitals and receiving units should be made publicly available. *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups and / social media or other arrangements. They may be part of Hospital-Wide arrangements so long as issues relating to the SPTS can be identified.*
STAFFING	
T-201 BI Visit MP&S CNR Doc	**Lead Consultant/s and Lead Nurse/s** A nominated lead consultant and lead nurse for the SPTS should be responsible for staffing, training, guidelines and protocols, governance and for liaison with other services for ground and for air transport (as applicable). The lead nurse should be a senior children's nurse. The lead consultant and lead nurse should undertake regular clinical work within the SPTS. *Note: If the SPTS provides both air and ground transport, the lead consultant and lead nurse may take responsibility for both services or there may be nominated staff to oversee the air transport.*
T-202 BI Visit MP&S CNR Doc	**Staff Authorised to Undertake Emergency Transfers** The nominated lead consultant and lead nurse for the SPTS should specify which staff are appropriately trained and experienced to carry out emergency transfers and whether direct consultant supervision is required. *Note: In compiling the list of authorised staff, account should be taken of the extent of recent experience of individual members of staff, whether appropriate Continuing Professional Development has been undertaken and whether staff are competent with the equipment currently used by the SPTS. The National Generic Paediatric Critical Care Transport Passport, available on the PCCS website 'Paediatric Critical Care Society', may be helpful in compiling the list of authorised staff.*

Ref	Standard
T-203 BI Visit MP&S CNR Doc	**Service Competences and Training Plan** The competences expected for each role in the service should be identified. Staff should be competent in providing Level 3 paediatric critical care and emergency transfer. A training and development plan for achieving and maintaining competency should be in place. All staff working on the SPTS should be undertaking Continuing Professional Development of relevance to their work. *Notes:* *1 Competencies in providing Level 3 paediatric critical care are described in QSs -202,203,206 and 208. QS - 203 gives more detail of the expected competences for the clinician with Level 2 RCPCH competences and equivalent staffing models.* *2 This QS is about the needs of the service and cannot be met solely by individual staff appraisals and personal development reviews. Reviewers may 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* *4 Training may be delivered through a variety of mechanisms, including e-learning, Trust wide training and departmental training.* *5 The National Generic Paediatric Critical Care Transport Passport, available on the PCCS website 'Paediatric Critical Care Society', and RCN 'Nursing on the move – specialist nursing for patients requiring repatriation and retrieval' (2013 or updated version) provide guidance on appropriate transport competences.*
T-204 BI Visit MP&S CNR Doc	**Staffing Levels and Skill Mix** Sufficient staff with competences in providing Level 3 paediatric critical care and appropriate competences in emergency transfer should be available for the: a. Types of emergency transfers for which the service is commissioned b. Number of patients usually cared for by the service c. Usual case mix of patients As a minimum, the following staff with appropriate competences who have been authorised to undertake emergency transfers should be immediately available at all times: i. Consultant for advice and to join the emergency transfer team if necessary (24/7) ii. A clinician competent to lead the emergency transport iii. A nurse or other registered healthcare professional *Notes:* *1 SPTS staff may support L3 PCCU if not required for an emergency transfer so long as they are immediately available to the SPTS when required. The consultant on call for the SPTS should not be providing cover for L3 PCCU at the same time.* *2 If 'ii' is achieved by a consultant based with the SPTS then a second consultant to provide advice to referring services for the duration of the emergency transfer is required.*

Ref	Standard
T-205 BI Visit MP&S CNR Doc	**Indemnity** Staff working on the SPTS must be: a. Indemnified for their practice in all environments in which they work b. Insured for death and personal injury sustained in the course of their professional work *Notes:* *1 Hospitals are responsible for ensuring this QS is met. At the time of publication, additional cover is provided by PCCS membership.* *2 If the service provides aeromedical transport, then this must be specifically referenced within the insurance documentation.*
T-206 BI Visit MP&S CNR Doc	**Clinician Competence Framework and Training Plan** A nominated education lead consultant and lead nurse (with appropriate administration support) should be responsible for organisation and delivery of training for the SPTS staff. Allocated time for the delivery & development of the team education should be provided. A competence framework and training plan that includes regular updates (minimum annually) should ensure that clinicians have or are working towards, and maintain, competences appropriate for their role in the service covering: a. Equipment (as per Trust specification) b. Vehicles (including aircraft if appropriate to operations) c. Emergency management of clinical situations including full immersion simulation in appropriate settings d. Emergency drills for vehicle and aircraft safety and evacuation e. Lessons learnt from excellence and adverse incident reporting, and morbidity and mortality reviews f. Case review g. Changes to SOPs and clinical guidelines (All SPTS should have a process in place to ensure staff are made aware of any changes in a timely manner) SPTS clinical leads and clinical staff leading the transport team should be APLS/EPLS providers. Transport nursing staff should attain and maintain APLS/EPLS or PILS. The SPTS should ensure all staff have opportunity to maintain practical clinical skills/procedures depending on job role. This may be achieved by working on a Level 3 PCCU or in anaesthesia. Record of annual training and appraisal to demonstrate knowledge and skills in keeping with transport medicine practice using the PCCS-ATG passport or equivalent to highlight learning needs.

Ref	Standard
T-220 BI Visit MP&S CNR Doc	**Staff Development & Well Being** The service should ensure: a. All staff have a direct line manager and access to an appropriate mentor to help set a professional development plan with respect to transport b. Debrief and access to trauma risk management support to ensure appropriate signposting to resources to help staff after a traumatic event c. There is a plan to manage staff of all grades/roles who have been subject to a particularly challenging situation or the accumulative effects of the demands of the service and consider themselves unfit to continue work d. Appraisals are held for all staff, ensuring transport competencies are maintained (the PCCS-ATG Passport or equivalent could be used to help) e. A system (e.g. Mind 'Taking Care of You' campaign) to assess individuals at the start and end of shift f. Routine rest breaks should be implemented with appropriate rest facilities and on-call rooms available for staff to nap during shifts or sleep post-call g. Education on fatigue, its causes, mitigating factors, and its impact on healthcare should be a priority for SPTS and training undertaken on this for teams h. Fatigue policy must be in place for drivers with appropriate risk assessment undertaken for each transfer
T-299 BI Visit MP&S CNR Doc	**Administrative, Clerical and Data Collection Support** Administrative, clerical and data collection support should be available. *Note: The amount of administrative, clerical and data collection support is not defined. Clinical staff should not, however, be spending unreasonable amounts of time which could be used for clinical work on administrative tasks.*
FACILITIES AND EQUIPMENT	
T-401 BI Visit MP&S CNR Doc	**Voice Communication** The SPTS should have 24/7: a. A dedicated phone line for referrals from referring hospitals with the facility to record calls b. Conference call facility c. Facilities to contact specialist teams throughout the emergency transfer, including during transport

Ref	Standard
T-402 BI Visit MP&S CNR Doc	**Emergency Transport Arrangements** The SPTS should have arrangements for emergency transport covering at least: a. Road ambulance providers: i. CQC registered ii. Contact arrangements and response times iii. Vehicle specification iv. Securing of children, equipment, staff and parents during transfer. v. Competence of drivers vi. Use of traffic law exemptions and duty hours limitations b. Aircraft Providers: i. CQC registered ii. Air Operator Certificate (AOC) granted for aircraft equipment and operated with approved medical configuration iii. Compliant with all other PCCS standards All vehicles' stretchers, trolleys and medical equipment should comply with the most recent regulations and standards. *Notes:* *1 If parents travel with their child in the ambulance or aircraft then the Service Level Agreement with the provider must include insurance of parents.* *3 All drivers should be trained to the core competences in the Driving Standard Agency 'Blue Light Expectations' or to the Royal Society for the Prevention of Accidents or equivalent standard.*
T-403 BI Visit MP&S CNR Doc	**Equipment** The equipment used by SPTS should be appropriate for the age, weight, therapies and monitoring needs of the children transported. Drugs and equipment should be checked in accordance with local policy. Staff should receive training on all the equipment used in transport at induction. A record should be maintained to demonstrate on-going competence and any updated training, where relevant.
GUIDELINES AND PROTOCOLS	
T-501 BI Visit MP&S CNR Doc	**Referral Handling** Guidelines on handling of referrals should be in use covering at least: a. Advice b. Decision support and triage c. Documenting and recording of advice given and triage decision d. Follow-up of patients including those within scope of care not transferred

Ref	Standard
T-502 BI Visit MP&S CNR Doc	**Service Guidelines** Guidelines should be in use covering at least: a. Staff fatigue (especially single driver operations) b. Moving and handling c. Health and safety d. Securing of equipment, patient, staff and parents e. Infection control f. Uniform and Personal Protective Equipment. The PPE may include: i. Suitable re-enforced footwear ii. High-visibility reflective jackets iii. Reflective material on uniforms iv. Flame retardant clothing
T-503 BI Visit MP&S CNR Doc	**Clinical Guidelines** Each SPTS should provide clinical guidelines covering at least: a. Emergency drug calculations based on a child's age and weight b. Clinical guidelines to cover the recognition and acute management of a range of common paediatric emergencies c. Website with resources for education, outreach and feedback *Note: All clinical guidelines and drug calculators should be reviewed annually*
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
T-601 BI Visit MP&S CNR Doc	**Operational Policy** The SPTS should have an operation policy covering at least: a. Normal catchment population for the service and any inclusions / exclusions in terms of age and conditions of children to be transferred b. Types of transfer for which the service is commissioned including level of critical care and mode of transport c. How to make a referral d. Admission pathways incorporating recommendations from PCC GIRFT review. Notably, child should be admitted to closest PICU to family home where clinically appropriate and to a 'linked principal hub' PICU associated with the spoke hospital. (PCC GIRFT Programme National speciality Report, 2021) e. Key performance indicators for mobilisation of a team and arrival at the patient's bedside (decision response time) f. Authorisation of staff to undertake emergency transfers g. Roles within the emergency transfer team h. Risk assessment of each journey i. 'Blue light' use and Traffic Law exemptions j. Clinical handover to receiving units k. Arrangements for transfer of at least one parent or carer l. Staff rostering to minimise fatigue and unplanned overtime m. Duty status during illness and pregnancy n. 'Surge' plan for days when the SPTS is not available or local capacity is exceeded o. Vehicle breakdown and accidents p. Incident reporting q. Agreed contribution to the network-wide training and CPD programme (QS N-206)

Ref	Standard
	r. Consideration of team role & service in event of a major incident s. Insurance & indemnity for all staff in all environments in which they work, and for parents traveling t. Post Accident or Incident Plan with an annual (minimum) drill for all modes of transport within the scope of care of the SPTS undertaken jointly with air and/or land providers. Evidence of the drill along with any actions for the organisation that result should be recorded and addressed *Notes:* *1 The normal catchment population and service inclusions / exclusions should be consistent with the contract for the service (QS C-603).* *2 Wherever possible and appropriate, one parent or carer should be given the option to accompany their child during emergency transfers. Where this is not possible or appropriate, other arrangements should be made to transfer parents.* *3 The policy on reporting of untoward clinical incidents should ensure that, where appropriate, clinical incidents should be reported to both the host organisation, referring/receiving hospital and transport vehicle provider. Incident reporting arrangements should be consistent with network-agreed arrangements (QS N-601).*
GOVERNANCE	
T-701 BI Visit MP&S CNR Doc	**Data Collection** The SPTS should be collecting and digitally archiving details on all referrals to the service including a. Referrals where requirement for transfer is agreed: i. Those transferred by the SPTS ii. Those that require transfer, undertaken by another team b. Advice to referring hospitals c. Network bed requests for critical care admission The recorded dataset should include: a. Pre-transfer patient condition and management b. Untoward clinical incidents c. Mortality and morbidity d. 'Quality Dashboard' data as recommended by the PCC CRG This data should be submitted to Paediatric Intensive Care Audit Network (PICANet) as soon as possible and no later than two months after the transfer. Compliance with completeness & timeliness of returns should also be captured and reported. (The PICANet Annual Report provides the documentation for submitted data). *Notes:* *1 Data on referrals to which the service cannot respond should include data on referrals which are outside the remit for which the service is commissioned*

Ref	Standard
T-702 BI Visit MP&S CNR Doc	**Audit and Quality Improvement** The SPTS should have a rolling programme of audit, including: a. All activity undertaken including all referrals, transfers, mode of transport, staffing, education and training, and referral and patient transport outcomes b. Timing related to referrals and transfers including time from decision to transfer to arrival at referring unit, decision time (time from referral to agreement needs transfer, independent of bed availability), mobilisation time, stabilisation times, and time back to base c. Transfers involving more than one transfer of the same patient within the acute episode d. Transfers involving the same patient within a 24 hour period e. Completeness of referral information f. Accuracy and completeness of transport records g. The SPTS should collect and respond to user feedback (including patient/ parents and DGH teams) relating to service quality and performance Service audit should be reported and shared with the team and network on a regular basis.
T-703 BI Visit MP&S CNR Doc	**Key Performance Indicators** Key performance indicators should be reviewed regularly with hospital (or equivalent) management and with commissioners including: a. Departure of team from base or re-tasking within 30 minutes of decision that a critical care transport is required b. Arrival at referring unit within three hours of the decision to transfer the child c. 'Quality Dashboard' data relating to transport as recommended by PCC CRG and / or the PCCS Acute Transport Group d. Inability to accommodate emergency critical care admission within the designated critical care network *Notes:* *1 These KPIs refer only to emergency paediatric transfers by the SPTS.* *2 The current evidence does not support a further reduction in the 3-hour time to bedside target to improve patient outcome 'Does time taken by paediatric critical care transport teams to reach the bedside of critically ill children affect survival? A retrospective cohort study from England and Wales and Impact on 30-day survival of time taken by a critical care transport team to reach the bedside of critically ill children'* *3 Paediatric Critical Care Operational Delivery Networks may agree local variation to target arrival times for particular referring units in remote areas when the SPTS has a considerable distance to travel.*
T-704 BI Visit MP&S CNR Doc	**Annual Report** The SPTS should produce an annual report summarising activity, compliance with quality standards, and clinical outcomes. The report should identify actions required to meet expected quality standards and progress since the previous year's annual report. This report should be publicly available. *Note: The annual report may form part of the L3 PCCU annual report or may be separate. The annual report should cover ground and air transport as relevant to the operation of the SPTS.*

Ref	Standard
T-798 BI Visit MP&S CNR Doc	**Multi-disciplinary Review and Learning** The SPTS should have multi-disciplinary arrangements for: a. Review of and implementing learning from positive feedback, complaints, outcomes including mortality, incidents and 'near misses' b. Review of and implementing learning from published scientific research and guidance c. Mortality review in line with national recommendations d. Annual Multi-disciplinary service review with key stakeholders *Notes:* *1 These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.* *2 This QS is additional to Paediatric Critical Care Network review and learning (QS N-798).* *3 This QS is additional to the requirement for reporting and formal review of the death of a child in hospital.*
T-799 BI Visit MP&S CNR Doc	**Document Control** All policies, procedures and guidelines should comply with host Trust document control procedures. Up to date documentation regarding the SPTS policies, procedures and guidelines should be available to staff electronically
EDUCATION	
T-801 BI Visit MP&S CNR Doc	**Regional & Network Education** The service should actively participate in the regional Paediatric Critical Care Network (which should include representatives from all regional Level 1,2 and 3 units) and have links with any other relevant paediatric, neonatal or adult networks in region to ensure: a. Involvement in outreach education for medical, nursing and allied health professional staff b. Involvement with governance and dissemination of learning from excellence reports and critical incidents involving the stabilisation, resuscitation and transfer of critically ill and injured children c. Shared learning from mortality reviews d. Feedback from transfer is available to the referring hospitals e. Feedback from referring and receiving hospitals is available to Specialist Paediatric Critical Care Transport Service f. Shared learning between neonatal and paediatric transport services

SPECIALIST PAEDIATRIC CRITICAL CARE TRANSPORT SERVICES - AEROMEDICAL

The PCCS Standards for SPTS not only apply to ground transport but also to transfer of patients by rotary wing and fixed wing aircraft.

Ref	Standard
STAFFING	
TA-204 BI Visit MP&S CNR Doc	**Consultant Staffing** There must be an accountable individual, with dedicated time in their job plan, who should be trained, experienced and competent to lead the air transport component of a STPS.
FACILITIES AND EQUIPMENT	
TA-451 BI Visit MP&S CNR Doc	**Flight Equipment** a. All medical equipment taken on flights must be approved by the manufacturer for use in the aviation environment and carriage must be agreed by the air operator b. All air transport platforms (stretcher / incubator) must comply with the most recent regulations and standards c. The SPTS must have a policy detailing securing of the air transport platform in road ambulances d. SPTS must have facilities to contact transport teams throughout the transfer process, including during aeromedical transport e. Personal Protective Equipment appropriate to the scope of air operations should be available. This may include: i. Suitable re-enforced footwear ii. Helmets iii. Flame retardant clothing iv. Reflective clothing v. Hearing protection f. The SPTS must agree with its aircraft provider an operating procedure to cover the carriage and use of hazardous materials (including nitric oxide). For Nitric Oxide, the policy must describe how the risks of carriage and cylinder leak will be mitigated

Ref	Standard
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
TA-6 BI Visit MP&S CNR Doc	**Operations** a. All aeromedical transport flights that take place with a SPTS team on board should be Multi Crew Operations. Two pilots operating an aircraft certified for single pilot operations must be appropriately trained in Multi Crew Cooperation in order to operate the flight Multi Crew whilst the transport team is on board b. All fixed wing aircraft used by the SPTS should be capable of being pressurised with a cabin altitude not greater than 8000ft (2440m) c. In exceptional circumstances the SPTS may use an unfamiliar aircraft, but there will be a policy detailing steps to mitigate this risk including the team being accompanied by someone trained and competent with the particular equipment and in-flight environment related to that specific aircraft d. The SPTS has a 'turn-down' and 're-referral' policy that details the information that must be provided to other aircraft providers and transport services. This is intended to prevent 'weather shopping' between aircraft providers and SPTS e. The SPTS must have a policy to describe the separation between clinical and aviation decision making. This is intended to prevent pilot decision making being influenced by an emotional response to the clinical aspects of the transport f. The SPTS must have a policy for aircraft diversion for aviation or clinical reasons g. The SPTS must have a policy for assessing the 'fitness to fly' of parents h. There must be a policy covering the medical escort of patients on scheduled flights, if these are undertaken
GOVERNANCE	
TA-706 BI Visit MP&S CNR Doc	**Reporting & Review** a. The SPTS must contribute to an annual review of air transport provision facilitated by PCCS ATG b. Utilisation data on flights performed including acuity and outcomes must be provided in the SPTS annual report c. The SPTS must engage in internal governance meetings with aircraft providers including review of utilisation, safety, guidelines and audit on a yearly (minimum) basis for which records must be kept d. There should be documented evidence of regular governance meetings with action plans leading to enhanced safety or quality The SPTS must participate in shared risk reporting with air providers and other transport
TA-707 BI Visit MP&S CNR Doc	**Responsibilities** a. The host NHS Trust of the SPTS must support the aeromedical activity and hold responsibility for safety and quality under their clinical governance arrangements b. The service must have a series of formal agreed documents with aircraft providers that include operating procedures, quality and safety systems c. If an air transport is passed onto another service (neonatal, paediatric, commercial or charitable), the SPTS is responsible for ensuring they are an appropriate provider d. Local guidelines for when to consider air transport should reflect the PCCS ATG Flight Tasking Criteria

Ref	Standard
TA-708 BI Visit MP&S CNR Doc	**Safety** The service must develop and maintain a service specific Safety Management System (SMS) which covers aeromedical activity.
EDUCATION	
TA-801 BI Visit MP&S CNR Doc	**Induction and Annual Update should include** a. Altitude physiology b. Survival training/techniques/equipment c. Hazardous materials d. Safety in and around the aircraft e. CRM/Human Factors
TA-802 BI Visit MP&S CNR Doc	**Regional and network education** The SPTS should jointly deliver an annual training programme with aircraft providers which include simulation education with the medical team and pilots in the actual aircraft or a realistic simulated environment, incorporating a range of medical and aviation scenarios, including in-flight emergencies and aircraft evacuation.
TA-850 BI Visit MP&S CNR Doc	**Water egress survival training** This should be provided if appropriate to operations and/or required by the aircraft operator.

Transport Of Paediatric Patients Supported By Extracorporeal Membrane Oxygenation (ECMO)

The PCCS Quality Standards for Specialist Paediatric Critical Care Transport Service apply to all transports including those involving ECMO. These are additional standards for transporting a patient on ECMO; all other transport standards apply in addition. These standards are based on Extracorporeal Life Support Organisation (ELSO) guidelines and consensus opinion.

Ref	Standard
Information and Support for Children and their Families	
TE-102 BI Visit MP&S CNR Doc	**Parental Access and Involvement** Patient or parents should be informed of the potential risks and benefits and consent to transfer. Families are unlikely to be able to travel with the child on ECMO transfers due to space constraints. Where parents are unable to travel with their child, timely alternative transport to the ECMO centre must be arranged.
Staffing	
TE-210 BI Visit MP&S CNR Doc	**ECMO Clinical Lead** The ECMO lead must undertake regular clinical work within a centre that performs ECMO and have the competencies to deliver ECMO, defined by that centre. They should have the transport competencies and skills required by a UK Specialist Paediatric Critical Care Transport Service. The ECMO lead has primary responsibility for the overall management of the patient and transfer. If a single professional does not have substantial experience in transport and ECMO then two competent specialists may fulfil these requirements.
TE-211 BI Visit MP&S CNR Doc	**Perfusionist** A perfusionist, or person with required perfusion competencies, with experience of paediatric ECMO must be present throughout the transfer. Their responsibilities include: a. Primary responsibility for ensuring all ECMO equipment on checklist is available and functional b. Primary responsibility for management of ECMO circuit during all phases of transport
TE-212 BI Visit MP&S CNR Doc	**Transport nurse** The nurse must have paediatric transport competencies in addition to being competent in the management of a patient on ECMO and the circuit itself. The nurse has primary responsibility for nursing care of the patient throughout the transfer.
TE-213 BI Visit MP&S CNR Doc	**Surgeon** If a patient requires transfer having been centrally cannulated through a sternotomy, then an ECMO-competent surgeon should be present for the entire transport. Surgical presence is desirable for other transfers unless the patient has been percutaneously cannulated. If a surgeon is not present, a risk assessment should be performed and documented.

Ref	Standard
FACILITIES AND EQUIPMENT	
TE-410 BI Visit MP&S CNR Doc	**Equipment** **All additional equipment for ECMO must be appropriately secured and should be tested for the mode of transport undertaken** A mobile ECMO system should consist of the following minimum components: a. Centrifugal blood pump b. Membrane oxygenator, appropriate for the patient size c. Device(s) for heating and regulating circuit blood temperature (less critical for larger patients) d. Medical gas tanks, regulators, hoses, connectors, flow meters, and blenders for provision and adjustment of blended sweep gas to the oxygenator e. Circuit pressure monitoring device(s), core temperature monitoring f. Emergency pump and console in the event of pump failure or power failure unless using system with back up hand crank g. Back-up power source(s) capable of meeting the electrical power needs of all equipment during transfer between vehicles and in the event of vehicle power source failure h. Equipment required in event of circuit emergency: clamps, syringe and fluid for de-airing circuit, bridge (if not already in situ) i. An additional light source e.g., torch j. Patient trolley must accommodate the additional equipment and supplies required for ECMO. The circuit must be secured to avoid kinking and damage. The whole of the circuit should be visible. All equipment must be safely secured at all stages of transfer: on the trolley, in transit to the vehicle, in the vehicle, and during transfer from the vehicle to the destination unit k. Available blood and blood products as required by patient status and length of transfer l. Resuscitation drugs and infusions including adrenaline infusion and vasodilator m. Separate oxygen/gas supplies for both the patient ventilator and the ECMO circuit *Notes:* *1. Transfer via air may require some modifications to the ECMO circuit*
TE-411 BI Visit MP&S CNR Doc	**Vehicles** ECMO transport requires special consideration of vehicle capabilities and characteristics. Transitions between hospital and ambulance, and ambulance and aircraft, represent unique risk and require expert co-ordination to mitigate these risks. Potential complications include: a. Sudden vertical or horizontal movement, altering patient position b. Cannula movement, affecting surgical site integrity or cannula tip position c. Circuit kinking, compression, or catching d. Equipment movement or trauma e. Accidental decannulation Transport should be optimised to minimise the above risks. The vehicle should provide a power source with the voltage, current, and wattage needed to sustain all electrical components throughout the transport. The ECMO team must be familiar with the power requirements of their equipment. Separate oxygen/gas supplies for both the patient ventilator and the ECMO circuit are required.

Ref	Standard
GUIDELINES AND PROTOCOLS	
TE-520 BI Visit MP&S CNR Doc	The transport team should have a guideline in place for the transfer of patient on ECMO, which advises staff on how to fulfil the above standards. There should be clear guidance for transfer of blood products between hospitals.
TE-521 BI Visit MP&S CNR Doc	**Indications for transport on ECMO** Transferring a patient on ECMO should only be undertaken after performing a risk assessment. Indications for transferring a patient between hospitals include: a. Patient was cannulated in an ECMO centre which cannot support an extended run on ECMO b. Patient needs assessment or continuing care at a heart or lung transplant centre c. Patient requires diagnostic or therapeutic intervention that is only available in another centre
TE-522 BI Visit MP&S CNR Doc	**Preparing patient for transfer** Once the patient is on ECMO, stabilisation of the patient in the referring centre is almost always the priority over rapid transfer: a. Control of bleeding should be achieved, and coagulation optimised b. Any ECMO circuit problems should be resolved c. ECMO cannula must be well secured and position confirmed by radiography and echocardiography, if available Patients should be cardiovascularly stable.

PAEDIATRIC ANAESTHESIA AND GENERAL (ADULT) INTENSIVE CARE (GICU)

These Standards are additional to the Hospital-Wide Standards and apply to all services providing anaesthesia for children and to General (adult) Intensive Care Units into which children may be transferred for short periods until their condition improves or the Specialist Paediatric Transport Service arrives. Specialist children's hospitals with a L3 PCCU are expected to meet the paediatric anaesthesia Standards but not the Standards for General Intensive Care Units.

Ref	Quality Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
A-101 BI Visit MP&S CNR Doc	**Information on Anaesthesia** Age-appropriate information about anaesthesia should be available for children and families. *Note: Information should be written in clear, simple language and should be available in formats and languages appropriate to the needs of the patients, including developmentally appropriate information for young people and people with learning disabilities. Information for young people should meet the 'Quality Criteria for Young People Friendly Health Services' (DH, 2011).*
A-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The service should have mechanisms for: a. Receiving feedback from children and families about the treatment and care they receive b. Involving children and families in decisions about the organisation of the service *Note: The arrangements for receiving feedback from children and families may involve surveys, focus groups and / or other arrangements. They may be part of Hospital-Wide arrangements so long as issues relating to children's services can be identified.*
STAFFING	
A-201 BI Visit MP&S CNR Doc	**Lead Anaesthetist** A nominated consultant anaesthetist should be responsible for policies and procedures relating to emergency and elective anaesthesia of children. This consultant should be involved in the delivery of anaesthetic services to children. *Note: The requirement for involvement in the delivery of anaesthetic services for children does not apply to hospital sites providing emergency services for adults and no other services for children.*
A-202 BI Visit MP&S CNR Doc	**Lead Anaesthetist for Paediatric Critical Care (PCC Units only)** A nominated consultant anaesthetist or intensivist should have lead responsibility for support to paediatric critical care *Note: This consultant may be the same as the lead anaesthetist (QS A- 201) or the GICU lead consultant (QS A-203) or may be different.*

Ref	Quality Standard
A-203 BI Visit MP&S CNR Doc	**GICU Lead Consultant and Lead Nurse for Children** A nominated lead intensive care consultant and lead nurse should be responsible for Intensive Care Unit policies, procedures and training relating to the care of children. *Notes:* *1 This QS is not applicable if a General Intensive Care Unit is not one of the possible areas for maintenance of paediatric critical care (QS -506).* *2 It is desirable in all units that the lead nurse is a senior nurse with specific competences in paediatric critical care.*
A-204 BI Visit MP&S CNR Doc	**On Site Anaesthetist** An anaesthetist, intensivist or other practitioner, with up-to-date competences in advanced paediatric resuscitation and life support and advanced airway management should be immediately available at all times. *Notes:* *1 'Immediately available' means able to attend within five minutes.* *2 This QS duplicates QS HW-204. It is included so that a full picture of paediatric anaesthesia responsibilities can be gathered. Notes to HW-204 also apply, in particular, note 4 explains that paediatric medical staff may provide the competences in advanced airway management of neonates.* *3 Achievement and maintenance of competences may be through appropriate in-house or other resuscitation and stabilisation courses or training related to children. The Royal College of Anaesthetists 'Guidance on the provision of paediatric anaesthesia services' (2020) states that:* *a. "Anaesthetists who care for children should have received appropriate training and must ensure that their competency in anaesthesia and resuscitation is adequate for the management of the children in their care." and* *b. "Unless there is no requirement to anaesthetise children, either for elective or emergency procedures, it is expected that the competence and confidence to treat children will be maintained. This may be via direct care, continuing professional development (CPD) activities, refresher courses or visits to other centres. This should be assured through annual appraisal and revalidation." and* c. *"Anaesthetists who do not have regular children's lists but who do have both daytime and out of hours responsibility for providing care for children requiring emergency surgery should maintain appropriate clinical skills. There should be arrangements for undertaking regular supernumerary attachments to lists or secondments to specialist centres. The Certificate for Honorary Practice may facilitate such placements and provides a relatively simple system for updates in specialist centres. Paediatric simulation work may also be useful in helping to maintain paediatric knowledge and skills. There should be evidence of appropriate and relevant paediatric CPD in the five-year Revalidation cycle."*
A-205 BI Visit MP&S CNR Doc	**Consultant Anaesthetist 24 Hour Cover** A consultant anaesthetist or intensivist with up to date competences in advanced paediatric resuscitation and life support and advanced paediatric airway management who is able to attend the hospital within 30 minutes and does not have responsibilities to other hospital sites should be available 24/7. *Notes:* *1 This QS duplicates QS HW-205. It is included so that a full picture of paediatric anaesthesia responsibilities can be gathered.* *2 As QS A-204 note 3.*

Ref	Quality Standard
A-206 BI Visit MP&S CNR Doc	**Medical Staff Caring for Children** All anaesthetists or intensivists with emergency and / or elective paediatric responsibility should have up to date competences in advanced paediatric resuscitation and life support and advanced paediatric airway management. *Note: As QS A-204 note 3.*
A-207 BI Visit MP&S CNR Doc	**Elective Anaesthesia** All anaesthetists involved in the elective surgical management of children should be familiar with current practice and the techniques necessary to provide safe care for children, including acute pain management. *Note: Relevant CPD may include participation in departmental audit programmes.*
A-208 BI Visit MP&S CNR Doc	**Operating Department Assistance** Operating department assistance from personnel trained and familiar with paediatric work and competences in basic paediatric resuscitation and life support should be available for all emergency and elective children's surgery. For hospitals accepting children with trauma, this includes competences in the care of children with trauma. *Note: For hospitals accepting children with trauma, this QS may be achieved through work with adults with trauma as well as elective paediatric surgery, or through rotational work in a Major Trauma Centre for children.*
A-209 BI Visit MP&S CNR Doc	**Recovery Staff** At least one member of the recovery room staff with paediatric resuscitation and life support competences should be available for all children's surgery.
FACILITIES AND EQUIPMENT	
A-401 BI Visit MP&S CNR Doc	**Induction and Recovery Areas** Child-friendly paediatric induction and recovery areas should be available within the theatre environment. *Note: 'Child-friendly' should include visual and, ideally, sound separation from adult patients.*
A-403 BI Visit MP&S CNR Doc	**Drugs and Equipment** Appropriate drugs and equipment should be available in each area in which anaesthesia is delivered to children. Drugs and equipment should be checked in accordance with local policy. *Note: A list of drugs and equipment needed for paediatric resuscitation is available on The Resuscitation Council UK website Quality Standards: Acute Care.*
A-404 BI Visit MP&S CNR Doc	**GICU Paediatric Area** The General Intensive Care Unit should have an appropriately designed and equipped area for providing paediatric critical care for children. Drugs and equipment appropriate to the age and condition of children who may be admitted (QS -506) should be available and checked in accordance with local policy. *Note: This QS is not applicable if a General Intensive Care Unit is not one of the possible areas for maintenance of paediatric critical care (QS -506).*

Ref	Quality Standard
GUIDELINES AND PROTOCOLS	
A-501 BI Visit MP&S CNR Doc	**Role of Anaesthetic Service in Care of Critically Ill Children** Protocols for resuscitation, stabilisation, accessing advice, maintenance and transfer and of critically ill children and the provision of paediatric critical care should be clear about the role of the anaesthetic service and General Intensive Care Unit (if applicable) in each stage of the child's care.
A-502 BI Visit MP&S CNR Doc	**GICU Care of Children** If the maintenance guidelines in QS -506 include the use of a General Intensive Care Unit, they should specify: a. Critically Ill or injured patients less than 16 years of age should usually only be admitted, and stay, on an adult ICU if no bed is available in a suitable PCCU Exceptions to the above, for reasons of the patient's pathophysiology or social circumstances, should only be sanctioned with the documented agreement of both the adult and local PCC consultant at the time of admission b. Availability of a registered children's nurse to support the care of the child and to review the child at least every 12 hours c. Discussion with a L3 PCC consultant about the child's condition prior to admission and regularly during their stay on the General Intensive Care Unit d. Agreement by a local paediatrician to the child being moved to the Intensive Care Unit e. Availability of a local paediatrician for advice f. Review of the child by a senior member of the paediatric team at least every 12 hours during their stay on the General Intensive Care Unit g. 24 hour access for parents to visit their child *Notes:* *1 This QS is not applicable if a General Intensive Care Unit is not one of the possible areas for maintenance of paediatric critical care (QS -506). The criteria for admission should be consistent with the agreed network criteria (QSs N-502 & 503).* *2 The requirement for discussion with L3 PCCU does not apply to children aged over 16 for whom use of adult facilities is considered appropriate.* *3 The frequency of discussions with a L3 PCC consultant is not specified but should be agreed between the GICU consultant and the L3 PCC consultant. More frequent discussions are likely to be needed for younger or sicker patients.* *4 The PCC consultant noted above may be either the consultant on-duty on the local PCC or supervising the specialist paediatric transport service.*

Ref	Quality Standard
A-503 BI Visit MP&S CNR Doc	**Clinical Guidelines - Anaesthesia** Evidence based clinical guidelines should be in use covering: a. Management of pain, nausea and vomiting b. Fluid fasting c. Intravenous fluid management d. Prevention of perioperative venous thromboembolism e. Death of a child in theatre f. Anaesthetic emergencies including: i. Anaphylaxis ii. Malignant hyperthermia iii. Difficult airway management iv. Airway obstruction v. Resuscitation vi. Local anaesthetic toxicity vii. Major haemorrhage viii. Emergency paediatric tracheostomy management
A-598 BI Visit MP&S CNR Doc	**Implementation of Hospital Guidelines** Staff should be aware of and following hospital guidelines: a. Surgery and anaesthesia for children (QS HW-502) b. Consent c. Organ and tissue donation d. Staff acting outside their area of competence *Note: As QSs HW-502 and HW-598.*
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
A-601 BI Visit MP&S CNR Doc	**Liaison with Theatre Manager** There should be close liaison between the lead consultant for paediatric anaesthesia (QS A-201) and the Theatre Manager with regard to the training and mentoring of support staff.
A-602 BI Visit MP&S CNR Doc	**Children's Lists** Wherever possible, elective surgery on children should be undertaken on dedicated operating lists for children. If dedicated lists are not feasible, children should be put at the start of lists with appropriately trained staff in the reception, anaesthetic room, theatre and recovery areas.
GOVERNANCE	
A-701 BI Visit MP&S CNR Doc	**GICU Critical Care Minimum Data Set** The critical care minimum data set collected and submitted to SUS should include data on children and young people admitted to the unit. Note: This QS is not applicable if a General Intensive Care Unit is not one of the possible areas for maintenance of paediatric critical care (QS -506).

Ref	Quality Standard
A-798 BI Visit MP&S CNR Doc	**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'. *Notes:* *1 These arrangements should include feedback to operational staff and should link with Hospital-Wide governance arrangements.* *2 This QS is additional to paediatric critical care network review and learning (QS N-798).* *3 This QS is additional to the requirement for reporting and formal review of the death of a child in hospital.*
A-799 BI Visit MP&S CNR Doc	**Document Control** All policies, procedures and guidelines and should comply with hospital document control procedures. *Note: Specific documentary evidence of compliance is not required. This QS will be determined from the other documentary information provided. Copies of hospital document control policies are not required.*

PAEDIATRIC CRITICAL CARE OPERATIONAL DELIVERY NETWORKS

This section covers operational delivery of paediatric critical care across a network of hospitals with at least one Level 3 Paediatric Critical Care Unit and at least one Specialist Paediatric Transport Service. Integrating the operational delivery of urgent care, trauma care, neonatal care and other children's services (including cardiac, neurosciences and surgery) will be undertaken by other networks and is not covered here. Paediatric Critical Care Operational Delivery Networks will work in liaison with these networks.

A typical paediatric critical care network will comprise a number of L1 PCCUs (at least one in each hospital with in-patient paediatrics), L2 PCCUs (in larger or more geographically isolated hospitals) and one or more L3 PCCUs. It will also have one Specialist Paediatric Transport Service.

Ref	Standard
INFORMATION AND SUPPORT FOR CHILDREN AND THEIR FAMILIES	
N-199 BI Visit MP&S CNR Doc	**Involving Children and Families** The network should have mechanisms for: a. Receiving feedback from children and families about the treatment and care they receive across patient pathways b. Involving children and families in decisions about the organisation of the network c. Examples of changes made as a result of feedback and involvement of children and families *Note: The arrangements for receiving feedback from patients and carers may involve surveys, focus groups and / or other arrangements.*
STAFFING	
N-201 BI Visit MP&S CNR Doc	**Network Lead Consultant and Lead Nurse** The network should have an identified lead consultant and lead nurse with time identified in their job plans for their work in the network. The lead consultant and lead nurse should undertake regular clinical work in a Paediatric Critical Care Unit or the Specialist Paediatric Transport Service.
N-202 BI Visit MP&S CNR Doc	**Network Manager** The network should have an identified Network Manager with time allocated for this work. *Note: Network Manager posts may be shared with other neonatal or paediatric networks or with adult critical care networks.*
N-203 BI Visit MP&S CNR Doc	**Educator** The network should have an identified team of educators to support the delivery of the network training and CPD programme (QS N-206). *Note: Educator posts may be shared with other neonatal or paediatric networks or with adult critical care networks. Larger networks will require more than one educator and a lead should be identified.* *The (Lead) educator should have allocated time in their job plan to work across the network.*

Ref	Standard
N-204 BI Visit MP&S CNR Doc	**Competence Framework** The network should have agreed a competence framework giving guidance to constituent PCC Units on the competences needed by staff providing paediatric critical care. *Notes:* *1 'High Dependency Care for Children - Time to Move On' (RCPCH, 2014) gives more detail of the expected paediatric critical care competences which should be achieved within 12 months of starting work on a PCCU.* *2 Further detail of competences in paediatric critical care is available on The Paediatric Intensive Care Society website. PCCS accredited courses for level 1, 2and 3 PCC are provided nationally. Details can be found at Nurse/AHP Critical Care Specialist Education Course Centres*
N-205 BI Visit MP&S CNR Doc	**Network Training Needs Analysis** The network should have undertaken an analysis of the training needs of constituent services in order for staff to achieve the expected competences (QS -207).
N-206 BI Visit MP&S CNR Doc	**Network-wide Training and CPD Programme** The network should ensure availability of a range of opportunities for network-wide training and CPD covering, at least: a. Resuscitation and stabilisation of the sick child and maintenance until arrival of the Specialist Paediatric Transport Service b. Emergency transfer c. Paediatric critical care (Level 1 and 2) d. Opportunities for supernumerary clinical practice in other services within the network e. Achievement and maintenance of competences through CPD *Notes:* *1 Opportunities for supernumerary clinical practice will normally be in high volume or more specialist services. These may be supported by the use of 'Certificates of Fitness for Honorary Practice' and 'NHS Education Passports'.* *2 Network Training and CPD opportunities should cover the needs of paediatric, anaesthetic, general / adult critical care and Emergency Department staff as well as those of staff working in paediatric critical care services.*
N-299 BI Visit MP&S CNR Doc	**Administrative, Clerical and Data Collection Support** Administrative, clerical and data collection support for the work of the network should be available. *Note: The amount of administrative, clerical and data collection support is not strictly defined but should be sufficient to ensure that clinical staff are not spending inappropriate amounts of time on administrative and data collection work.*

Ref	Standard
GUIDELINES AND PROTOCOLS	
N-501 BI Visit MP&S CNR Doc	**Patient Pathways** The network should agree patient pathways, including trigger points for discussion of patients with the network Specialist Paediatric Transport Service, covering at least: a. Acute respiratory failure (including bronchiolitis and asthma) b. Sepsis (including septic shock and meningococcal infection) c. Management of diabetic ketoacidosis d. Seizures and status epilepticus e. Trauma, including traumatic brain injury, spinal injury and rehabilitation of children following trauma (if applicable) f. Cardiac arrhythmia g. Upper airway obstruction h. Long-term ventilation i. Care of young people aged 16 to 18 j. Rehabilitation after critical illness *Notes:* *1 Long-term ventilation pathways should be developed in collaboration with Children's Long-Term Ventilation Networks (or equivalent).* *2 Collaboration with SPTSs will be needed to ensure development of clinical guidelines and delivery of education is coordinated.* *3 Collaboration with other networks will be needed for the development of some patient pathways, for example, with trauma, neonatal and adult critical care networks.*
N-502 BI Visit MP&S CNR Doc	**Network Capacity Plan** The network should have an agreed capacity plan covering times when need for L2 and/or L3 PCC exceeds the capacity available. This plan should be updated annually and should be developed in conjunction with paediatric critical care providers, SPTSs, and commissioners.
N-503 BI Visit MP&S CNR Doc	**Network Guidance** The network should have agreed guidance for its constituent organisations on at least: a. Access to neuroradiology and specialist paediatric reporting, including arrangements for image transfer b. Arrangements for 'back transfers' from Level 3 and Level 2 PCC Units to other units within the network c. Criteria for admission of children to General (adult) Intensive Care Units
N-504 BI Visit MP&S CNR Doc	**Paediatric Early Warning System** The RCPCH SPOT (Systemwide Paediatric Observations Tracker) system should be deployed in all centres, ideally on an electronic platform incorporating automated alerting. Where this is not available a system to provide early warning of deterioration of children must be in use. The system should cover observation, monitoring and escalation of care. Centres that do not deploy the SPOT system should complete a risk assessment to evaluate the impact of variation from the national system. Paediatric Early Warning System (PEWSystem) - developing a standardised tool for England

Ref	Standard
SERVICE ORGANISATION AND LIAISON WITH OTHER SERVICES	
N-601 BI Visit MP&S CNR Doc	**Network Establishment and Operational Policy** Organisations participating in the network should have agreed the membership, roles, responsibilities and accountability of the network. The network operational policy should cover: a. Agreed terms of reference b. Defined host organisation for the network c. Organisations who are part of the network including, at least, all PCC Units and the Specialist Paediatric Transport Service/s d. Involvement of anaesthetic and general (adult) critical care services of the network e. Involvement of patients and carers in the work of the network f. Mechanism for reporting, dealing with and learning from critical incidents involving more than one service within the network g. Mechanisms for linking with the work of other relevant networks *Notes:* *1 Examples of other relevant networks are trauma, children's surgery, adult critical care, neonatal critical care, paediatric neurosciences, paediatric cardiac and burns networks.* *2 Networks may be accountable to one organisation on behalf of others or to constituent organisations' Chief Executives with one organisation taking a lead role.*
N-602 BI Visit MP&S CNR Doc	**Network Service Configuration** The network should agree advice to commissioners on: a. Configuration of Paediatric Critical Care Services across the network b. Interventions offered by each Level 1 and Level 2 PCC Unit c. Names to be used for each type of PCC Unit within the network d. Network Specialist Paediatric Transport Service/s *Notes:* *1 The 'configuration of paediatric critical care services' means which units within the network should be providing L1, L2 and L3 paediatric critical care. Formal designation will be undertaken by commissioners (QS C-603).* *2 Level 2 Units should all provide acute (and chronic) non-invasive ventilation (both CPAP and BiPAP support) and care for children with tracheostomies and children on long-term ventilation. Some Level 2 Units, typically within a specialist children's hospital, may provide additional interventions such as care of children undergoing intracranial pressure monitoring or acute renal replacement therapy. Some Level 1 Units may be designated to provide CPAP to certain patient groups, for example, patients with bronchiolitis.*
N-603 BI Visit MP&S CNR Doc	**Annual Service Provision** a. A flexible approach to managing bed capacity within the ODN, over the year should be deployed. This should incorporate differential activity targets (beds or bed-days) to match anticipated seasonal demands within contracts. b. The ODN should support coordination of services to enable Level 3 providers to deliver appropriate numbers of Level 3 (and Level 2) beds to deal with anticipated changes in seasonal demand.

Ref	Standard
GOVERNANCE	
N-701 BI Visit MP&S CNR Doc	**Network Data Collection** The network should ensure that all L2 and L3 PCC Units are collecting and submitting: a. Paediatric Intensive Care Audit Network data for submission to PICANet in accordance with PICANet quality standards for collection and submission b. Paediatric Critical Care Minimum Data Set for submission to PICANet and SUS c. Quality Dashboard data as recommended by the PCC Clinical Reference Group d. NHSE&I data to support national PCC bed monitoring systems (L3 PCCUs only) e. Metrics over and above those above recommended in PCC GIRFT recommendations (In publication) Note: Implementation of this QS for L2 PCCUs is dependent on PICANet being contracted and funded for handling these data. Collection by L1 Units is desirable but not yet expected for compliance with this QS.
N-702 BI Visit MP&S CNR Doc	**Network Audit** The network should have an ongoing programme of audit covering at least: a. Activity and outcomes as shown by PICANet, PCC Minimum Data Set and 'Quality Dashboard' data b. Adherence to network-agreed patient pathways (QS C-501)
N-703 BI Visit MP&S CNR Doc	**Network Quality Assurance** The network should manage a programme of assurance of compliance with Quality Standards for the Care of Critically Ill Children covering services across the network. The assurance process should also examine and identify: a. Variations in care quality e.g. i. Admission criteria ii. Thresholds for intervention iii. Variation in outcomes b. Opportunities for improved collaboration and joined up working to: i. Deliver PCC in an appropriate setting and location for the child with optimal safety ii. Maximise efficiency and minimise unwarranted duplication of services iii. Optimise workforce sustainability Data gathered in the above process should be published and quality improvement plans to address any issues identified should be presented (and progress updated) annually. *Note: Paediatric critical care and surgery in children review .*
N-704 BI Visit MP&S CNR Doc	**Network Annual Meeting and Annual Report** The network should hold an Annual Meeting to agree the annual work plan and discuss the network Annual Report. Parent and young people's representatives should be invited to attend this meeting.

Ref	Standard
N-705 BI Visit MP&S CNR Doc	**Network Governance** The network should maintain a record of issues raised through governance processes. Responsibility for managing risks will fall to hospital Trusts. Unresolved issues will be highlighted to Commissioners.
N-797 BI Visit MP&S CNR Doc	**Network Collaboration** The network should share audit and assurance data with adjacent ODNs: Variations should be examined to ensure that these only exist in order to serve geographic variation and do not impact on equity of care availability for children and families.
N-798 BI Visit MP&S CNR Doc	**Network Multi-disciplinary Review and Learning** The network should have arrangements for multi-disciplinary review of, and implementing learning from, positive feedback, complaints, morbidity, mortality, transfers and clinical incidents and 'near misses'. *Note: Network review and learning arrangements should specifically cover care across patient pathways within the network.*
N-799 BI Visit MP&S CNR Doc	**Network Document Control** All network pathways, guidelines and protocols should meet reasonable standards of document control. *Note: Specific documentary evidence of compliance is not required. This QS will be determined from the other documentary information provided. Copies of hospital document control policies are not required.*

COMMISSIONING

In England these Quality Standards should be met by NHS England commissioners of specialised services or Clinical Commissioning Groups or by commissioners working together. NHS England commissioners of specialised services are responsible for commissioning Levels 2 and 3 paediatric critical care. Clinical Commissioning Groups are responsible for commissioning Level 1 paediatric critical care. 'High Dependency Care for Children - Time to Move On' (RCPCH, 2014) recommends that NHS England commissioners of specialised services have overall responsibility for the entire pathway for children needing critical care.

Ref	Standard
C-601 BI Visit MP&S CNR Doc	**Paediatric Critical Care Needs Assessment and Strategy** Commissioners should have an agreed paediatric critical care: a. Needs assessment b. Strategy for the development of services across the Paediatric Critical Care Operational Delivery Network
C-602 BI Visit MP&S CNR Doc	**Commissioning: Urgent Care for Children** Urgent care for children from the network's population should be commissioned including: a. Emergency Centres b. Trauma services for children and their designation c. Children's Assessment Services *Notes:* *1 Hospitals accepting children with trauma should also provide on the same hospital site:* *a. Either: A Level 1 or Level 2 PCC Unit and a General Intensive Care Unit which admits children needing a short period of post-anaesthetic care or maintenance prior to transfer to L3 PCC (QS **-506)* ***Or:** Level 3 PCCU* *b. Acute pain service.* *2 Children's assessment services should be sited alongside either an Emergency Department or an in-patient children's service (or PCCU).*
C-603 BI Visit MP&S CNR Doc	**Commissioning: National Alignment & Coordination of PCC** The PCC GIRFT Programme National Speciality Report recommends the establishment of a National Oversight Group (NOG) to provide commissioning recommendations to NHSE regional teams and ODNs including the following: a. ODN configuration should ensure that: i. Spoke hospitals sit within the most appropriate ODN ii. Operational procedures and pathways for children are aligned across specialist ODNs (e.g., PCC & Congenital Cardiac ODNs) b. Level 3 bed distribution: Capacity in each hub is appropriate to demand, including unmet demand c. Level 2 bed distribution is sufficient and appropriate across ODNs, within both hub and spoke hospitals *Note: This standard is included on the assumption that PCC GIRFT recommendations are adopted by NHSE&I.*

Ref	Standard
C-604 BI Visit MP&S CNR Doc	**Commissioning: Regional PCC Overview** Paediatric critical care services for the network population should be commissioned including: a. Level 1 paediatric critical care service/s b. Level 2 paediatric critical care service/s c. Level 3 paediatric critical care services/s d. Specialist Paediatric Transport Service, including whether commissioned for aeromedical transfers e. Extracorporeal membrane oxygenation f. Services for children needing long-term ventilation g. Paediatric Critical Care Operational Delivery Network/s The specification for each service should cover: i. Inclusions and exclusions in terms of age and conditions of children for which the service is responsible ii. Interventions to be offered in each PCCU iii. Key performance indicators Funding for all commissioned services should take account of the complexity of care delivered in each service and the appropriate alignment of this resource should be reviewed on an annual basis. *Notes:* *1 This QS may be met by NHS England and Improvement (NHSE/I) commissioners of specialised services or by NHSE/I commissioners and Clinical Commissioning Group commissioners working together. 'High Dependency Care for Children - Time to Move On' (RCPCH, 2014) recommends that NHS England commissioners of specialised services have responsibility for oversight of the whole paediatric critical care pathway.* *2 Hospitals with in-patient paediatric facilities including hospitals providing elective in-patient or emergency surgery should have a unit providing at least Level 1 paediatric critical care on the same hospital site.* *3 Level 2 Units should all provide acute (and chronic) non-invasive ventilation (both CPAP and BiPAP support) and care for children with tracheostomies and children on long-term ventilation. Some Level 2 Units, typically within a specialised children's hospital, may provide additional interventions such as care of children undergoing intracranial pressure monitoring or acute renal replacement therapy. A number of L1 Units may be designated by their network to deliver CPAP to certain patient groups, for example, patients with bronchiolitis.* *4 The Specialist Paediatric Transport Service should be commissioned separately from L3 PCC with separately identified activity and funding. Combined paediatric and neonatal specialist transport services are acceptable for compliance with this QS. Specialist Paediatric Transport Services should be commissioned to undertake transfers of children to Level 2 and Level 3 PCCUs.* *5 ECMO may be commissioned from the network L3 PCCU or may be separately commissioned.* *6 Specifications should be clear about the care of young people aged 16 to 18, who should normally be given the choice of care in a paediatric or adult facility, and about the care of pre-term babies who have been discharged from neonatal units.* *7 It is desirable that specifications for L3 PCCUs and SPTS include their expected contribution to the network-wide training and CPD programme (QS N-206).*

Ref	Standard
C-605 BI Visit MP&S CNR Doc	**Commissioning Structure for Regional PCC** a. Every Level 3 provider should have a commissioning contract with their NHSE regional team that captures commissioning of both L2 and L3 beds. The specification should capture both activity (bed-days) and the corresponding number of beds. b. A minimum one L2 bed should be commissioned in Level 3 provider for every two Level 3 beds. This should be considered a minimum and will need to be higher where data supports the need for additional Level 2 beds. c. Each ODN should have 3-4 hospitals that are designated as Level 2 providers (fewer in a small ODN). Each designated Level 2 provider should be commissioned for a minimum number of 4 beds (to deliver efficient staffing given nurse:patient ratio of 1:2 for Level 2 beds). d. Each ODN, through their PCC Network Board, should be commissioned to establish a clear plan and strategy for delivery of PCC across the ODN, at both hub and spoke level, including how this will be commissioned and funded.
C-606 BI Visit MP&S CNR Doc	**Paediatric Critical Care** Commissioners should agree the catchment population, organisations involved and host organisation for the Paediatric Critical Care Operational Delivery Network/s within the area for which they are responsible.
GOVERNANCE	
C-701 BI Visit MP&S CNR Doc	**Paediatric Critical Care Quality Monitoring** Commissioners should monitor at least annually key performance indicators and aggregate data on activity and outcomes from each paediatric critical care service, including: **L 2 & L3 PCCU:** All instances of average occupancy exceeding 85% for more than two successive months. **SPTS:** Arrival at referring unit within three hours of the decision to transfer the child. *Note: Clinical Quality Review Meetings are sufficient for compliance with this QS only if there is evidence of discussion of the specific service.*

APPENDIX 1 ACKNOWLEDGEMENTS

STEERING GROUP

Name	Organisation
John Alexander	Royal College of Paediatrics and Child Health
Margarita Burmester	Paediatric Critical Care Society (Medical Vice President)
Simon Clark	Royal College of Paediatrics and Child Health (Vice President)
Peter-Marc Fortune (Chair & Editor)	Paediatric Critical Care Society (Past President)
James Fraser	Paediatric Critical Care Society (President)
Simon Gates	Paediatric Critical Care Society
Chris Gildersleve	Association of Paediatric Anaesthetists (President)
Jennifer Gray	Paediatric Critical Care Pharmacists
Michael Griksaitis	Paediatric Critical Care Society Acute Transport Group
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Caroline Lamming	Paediatric Intensive Care Audit Network
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APPENDIX 2 GUIDANCE / REFERENCE SOURCES

Year	Publisher	Title
Undated	College of Emergency Medicine/ Royal College of Paediatrics and Child Health/ Royal College of General Practitioners	Urgent and Emergency Care Clinical Audit Toolkit
Undated	NHS Digital	SNOMED CT
Undated	NHS England	Service Specification E07/s/a: level 3 Paediatric Critical Care
Undated	NHS England	Service Specification E07/S/b: Level 2 Paediatric Critical Care
Undated	NHS England	Service Specification E07/S/d: Paediatric Critical Care Transport
In-press (2021)	NHS England and Improvement	Paediatric Critical Care: GIRFT Programme National Speciality Report
2021	Royal College of Paediatrics & Child Health	Paediatric Early Warning System (PEWSystem) – developing a standardised too for England
2020	National Children's Hospitals Bereavement Network	Bereavement support standards for children's hospitals within the UK or district general hospitals that offer services to children and families
2020	National Confidential Enquiry into Patient Outcome and Death	Balancing the Pressures: A review of the quality of care provided to children and young people aged 0-24 years who were receiving long term ventilation
2020	NHS England and Improvement	Transformation of Urgent and emergency care: models of care and measurement
2020	Paediatric Intensive Care Audit Network	2020 Annual Report
2019	Faculty of Intensive Care Medicine	Guidelines for the provision of intensive care services
2018	NHS England & Improvement	Paediatric critical care and surgery in children review
2018	NHS Digital	DCB0160: Clinical Risk Management: its application in the Deployment and Use of Health IT Systems
2018	Royal College of Paediatrics and Child Health	Facing the Future: Standards for Children in emergency care settings
2016	Paediatric Critical Care Society	Nurse Workforce Planning for Level 3 Paediatric Critical Care Units (PICU)
2015	NHS England	Transforming urgent and emergency care services in England

Year	Publisher	Title
2015	Royal College of Paediatrics and Child Health	Facing the Future: Standards for acute general paediatric services
2015	Royal College of Paediatrics and Child Health	Making decisions to limit treatment in life-limiting and life-threatening conditions in children: a framework for practice
2015	Royal College of Paediatrics and Child Health	The diagnosis of death by neurological criteria in infants less than two months old
2015	Royal College of Surgeons of England	Standards for Non-Specialist Emergency Surgical Care of Children
2015	The National Institute for Health and Care Excellence	NICE safe staffing guideline Draft for consultation, 16 January to 12 February 2015
2015	The Royal College of Anaesthetists	Guidelines for the Provision of Paediatric Anaesthetic Services
2014	National Confidential Enquiry into Patient Outcome and Death	On the Right Trach? A review of the care received by patients who underwent a tracheostomy
2014	NHS England	Safer Staffing: A Guide to Care Contact Time
2014	Royal College of Paediatrics and Child Health	High Dependency Care for Children - Time To Move On
2013	Children's Surgical Forum	Standards for Children's Surgery
2013	Resuscitation Council UK	Quality Standards Acute Care
2013	Royal College of Nursing	Defining staffing levels for children and young people's services
2013	Royal College of Nursing	Nursing on the move - specialist nursing for patients requiring repatriation and retrieval
2012	Academy of Medical Royal Colleges	Seven Day Consultant Present Care
2012	Royal College of Paediatrics and Child Health	Consultant Delivered Care. An evaluation of new ways of working in Paediatrics
2012	Royal College of Paediatrics and Child Health	Standards for Children and Young People in Emergency Care Settings
2012	Royal College of Paediatrics and Child Health	Bringing Networks to Life - An RCPCH guide to implementing Clinical Networks
2011	Royal College of Paediatrics and Child Health	Facing the Future: A Review of Paediatric Services
2011	Department of Health	Quality Criteria for Young People Friendly Health Services
2011	The College of Emergency Medicine	Emergency Medicine Operational Handbook: The Way Ahead. Version 2
2011	Royal College of Paediatrics and Child Health	Quality and Safety Standards for Small and Remote Paediatric Units

Year	Publisher	Title
2011	Royal College of General Practitioners, The College of Emergency Medicine, Royal College of Paediatrics and Child Health	Urgent and Emergency Care Clinical Audit Toolkit
2010	Royal College of Surgeons of England	Ensuring the Provision of General Paediatric Surgery in the District General Hospital - Guidance to Commissioners and Service Planners
2010	Royal College of Paediatrics and Child Health, Royal College of Nursing	Maximising Nursing Skills in Caring for Children in Emergency Departments
2009	Department of Health, Department for Children, Schools and Families	Healthy lives, brighter future: The strategy for children and young people's health
2009	Royal College of Paediatrics and Child Health	A Framework of Competences es for the Level 3 Special Study Module in Paediatric High dependency Care
2009	Royal College of Paediatrics and Child Health	RCPCH guidance on the role of the consultant paediatrician in providing acute care in hospital
2009	Royal College of Paediatrics and Child Health	Short Stay Paediatric Assessment Units: Advice for Commissioners and Providers
2008	Department of Health	Commissioning Safe and Sustainable Specialised Paediatric Services
2008	Royal College of Paediatrics and Child Health	Supporting Paediatric Reconfiguration: A Framework for Standards
2008	Royal College of Paediatrics and Child Health	The Role of the Consultant Paediatrician with Subspecialty Training in Paediatric Emergency Medicine
2008	Confidential Enquiry into Maternal and Child Health	Why Children Die: A Pilot Study
2008	NHS Institute for Innovation and Improvement	Focus on: Children and Young People Emergency and Urgent Care Pathway
2007	General Medical Council	0 - 18 Years: Guidance for all Doctors
2007	Royal College of Paediatrics and Child Health	Direction of Travel for Urgent Care: Response from the Royal College of Paediatrics and Child Health
2007	Commission for Healthcare Audit and Inspection	Improving Services for Children in Hospital
2007	Royal College of Paediatrics and Child Health	Modelling the Future: A consultation paper on the future of children's health services
2007	Royal College of Paediatrics and Child Health	Services for Children in Emergency Departments: Report of the Intercollegiate Committee for Services for Children in Emergency Departments
2007	Royal College of Surgeons of England	Surgery for Children - Delivering a First Class Service
2006	Scottish Executive	Emergency Care Framework for Children & Young People in Scotland
2006	Department of Health	The acutely or critically sick or injured child in the district general hospital. A team response
2005	Welsh Assembly	Children's National Service Framework for Wales. Acute and Chronic Illness or Injury

Year	Publisher	Title
2004	Department of Health	National Service Framework for Children, Young People and Maternity Services
2003	Department of Health	Getting the right start: National Service Framework for Children. Standard for Hospital Service
2002	Department of Health	Learning from Bristol: The Department of Health's response to the report of the Public Inquiry into children's heart surgery at the Bristol Royal Infirmary
2002	Paediatric Intensive Care Society	Standards for Bereavement Care
2000	Department of Health	Framework for the Assessment of Children in Need and their Families
1999	Department of Health	Working Together to Safeguard Children
1997	Action for Sick Children	Emergency Health Services for Children and Young People
1997	NHS England	Paediatric Intensive Care - "A Bridge to the Future"
1997	NHS England	Paediatric Intensive Care - "Framework for the Future"
1994	Her Majesty's Stationery Office	The Allitt Inquiry: The Clothier Report
1992	Her Majesty's Stationery Office	The United Nations Convention on the Right of the Child
1989	Her Majesty's Stationery Office	Children Act
1989	Department of Health	The Children Act - an Introductory Guide

APPENDIX 3 GLOSSARY OF ABBREVIATIONS

The following abbreviations are used within the Quality Standards:

ACCP	Advanced Critical Care Practitioner
ANP	Advanced Nurse Practitioner
AOC	Air Operator Certificate
AP	Advanced Practitioner
APLS	Advanced Paediatric Life Support
ARS	Advanced Respiratory Support
ATMIST	Age, Time, Mechanism of injury, Injuries, Signs, Treatment
BI	Background information for the review team
BiPAP	Bi-level Positive Airway Pressure
CAMTS	Commission on Accreditation of Medical Transport Systems
CAS	Children's Assessment Service
CNR	Case note review or clinical observation
CPAP	Continuous Positive Airway Pressure
CPD	Continuing Professional Development
CQC	Care Quality Commission
CRG	Clinical Reference Group
CT	Computerised Tomography
Doc	Documentation should be available
DH	Department of Health
ECG	Electrocardiogram
ECLS	Extracorporeal Life Support
ECMO	Extracorporeal membrane oxygenation
ED	Emergency Department
ENT	Ear Nose and Throat
EPLS	European Paediatric Life Support
EPR	Electronic Patient Record
EWTD	European Working Time Directive
FHIR	Fast Healthcare Interoperability Resources
GICU	General (Adult) Intensive Care Unit
GCS	Glasgow Coma Scale
HBN	Health Building Notes
HFOV	High Frequency Oscillatory Ventilation
HRG	Healthcare Resource Group

ICU	Intensive Care Unit
ICP	Intracranial Pressure
IMV	Invasive Mechanical Ventilation
iNO	Inhaled Nitric Oxide
IP	In-patient
ISN	Information Standard Notice
IV	Intravenous
L1	Level 1 Critical Care Unit
L2	Level 2 Critical Care Unit
L3	Level 3 Critical Care Unit
MARS	Molecular Adsorbent Recirculating System
MP&S	Meeting patients, carers and staff
NCAA	National Cardiac Arrest Audit
NHSLA	National Health Service Litigation Authority
PCC	Paediatric Critical Care
PCC MDS	Paediatric Critical Care Minimum Dataset
PCCS	Paediatric Critical Care Society
PCCU	Paediatric Critical Care Unit
PDR	Personal Development Review
PICANet	Paediatric Intensive Care Audit Network
PICM ISAC	Paediatric Intensive Care Medicine Intercollegiate Specialty Advisory Committee
PICU	Paediatric Intensive Care Unit
PILS	Paediatric Intermediate Life Support
QS	Quality Standard
RCN	Royal College of Nursing
RCPCH	Royal College of Paediatrics and Child Health
SPOT	Systemwide Paediatric Observation Tracker
SPTS	Specialist Paediatric Transport Service
ST	Specialist Trainee
SUS	Secondary Uses Service
VAD	Ventricular Assist Device
Visit	Visiting facilities
WMQRS	West Midlands Quality Review Service
WTE	Whole time equivalent

APPENDIX 4 PRESENTATION OF EVIDENCE FOR PEER REVIEW VISITS

Each Quality Standard reference column includes a box which illustrates how compliance will be reviewed.

Background information	This information should be included in the background report or self-assessment.
Visiting facilities	Reviewers will look for the information while they are visiting the service.
Meeting patients, carers and staff	These Standards will be discussed with patients, carers and /or staff as appropriate.
Case note (or EPR) review or clinical observation	A few Quality Standards require reviewers to look at case notes or other clinical information.
Documentation	These are policies, guidelines and other documentation that reviewers will need to see. Documentation may be in the form of a website or other social media.

The following table summarises the evidence needed for each Quality Standard.

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
HW- STANDARDS							
HW-201	Board-Level Lead for Children						
HW-202	Clinical Leads						
HW-203	Hospital-Wide Group						Terms of reference, membership, notes of recent meetings
HW-204	Paediatric Resuscitation Team						Operational policy
HW-205	Consultant Anaesthetist 24 Hour Cover						Recent rota
HW-206	Other Clinical Areas						
HW-401	Paediatric Resuscitation Team – Equipment						
HW-501	Resuscitation and Stabilisation						Operational policy
HW-502	Surgery and Anaesthesia Criteria						Clinical guidelines
HW-598	Hospital-Wide Guidelines						Guidelines
HW-602	Paediatric Critical Care Operational Delivery Network Involvement						Notes of meetings attended. Examples of dissemination
IP-, L1-, L2- & L3- STANDARDS							
-101	Child-friendly Environment						

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
-102	Parental Access and Involvement						
-103	Information for Children						
-104	Information for Families						
-105	Facilities and Support for Families						
-196	Discharge Information						
-197	Additional Support for Families						
-199	Involving Children and Families						Examples of changes made as a result of feedback
-201	Lead Consultant and Lead Nurse						
-202	Consultant Staffing						List of staff with details of paediatric resuscitation & life support competences
-203	'Middle Grade' Clinician						
-204	Consultants with Lead Responsibility (L3 PCC Units only)						
-205	Medical Staff: Continuity of Care						Recent rota
-206	Competence Framework and Training Plan – Staff Providing Bedside Care						Competence framework describing the competences expected for roles within the service. Training and development plan to show how staff will achieve and maintain competences
-207	Staffing Levels: Bedside Care						Recent rotas Details of competences of staff on rotas Escalation policy

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
-208	New Starters (PCC Units only)						
-209	Other Staffing						
-220	Staff Development and Wellbeing						Details of training undertaken by staff
-297	Mental Health Training						Details of training undertaken by staff
-298	Safeguarding Training						Details of training undertaken by staff
-299	Administrative, Clerical and Data Collection Support						
-301	Imaging Services						
-302	Co-located Services (L2 & L3 PCC Units only)						
-401	Resuscitation Equipment						
-402	'Grab Bag'						
-404	Facilities (PCC Units only)						
-405	Equipment (PCC Units only)						
-406	'Point of Care' Testing						
-501	Initial Assessment (N/A to L3 PCC Units)						Clinical guidelines or protocol
-502	Paediatric Early Warning System (N/A to L3 PCC)						Early warning system documentation
-503	Resuscitation and Stabilisation						Clinical guidelines or protocol
-504	Paediatric Advice (N/A to L3 PCC Units)						Clinical guidelines
-505	Clinical Guidelines						Clinical guidelines
-506	PCC Transfer Guidelines (N/A to L3 PCC Units)						Clinical guidelines
-507	In-hospital Transfer Guidelines						Clinical guidelines
-508	Inter-hospital Transfer Guidelines						Clinical guidelines
-509	Time-Critical or Unsafe Delay Transfer Guidelines						Clinical guidelines

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
-598	Implementation of Trust Guidelines						
-601	Operational Policy						Operational policy
-702	Data Collection (L2 & L3 PCC Units only)						Examples of data submitted. PICANet Annual Report
-703	Audit and Quality Improvement						Audit programme or plan. Examples of completed audits
-704	Key Performance Indicators						Recent monitoring reports
-705	Research (L3 PCC Units only)						
-706	Annual Report (L3 PCC Units only)						Annual Report
-798	Review and Learning						Documentation depends on local arrangements, for example, minutes or reports
-799	Document Control						Compliance determined from other documentation presented
-801	Regional and Network Education (PCC units only)						Details of outreach education undertaken. Examples of excellence reports and shared learning
-901	Informatics Lead (L2 and L3 PCC only)						
-902	Patient Records (L2 and L3 PCC only)						View EPR
-903	Investigation Results (L2 and L3 PCC only)						Audit results if undertaken
-904	Trending (L2 and L3 PCC only)						
-905	Discharge Summaries L2 and L3 PCC only)						Examples of discharge summaries

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
-906	Colleague Access L2 and L3 PCC only)						
-907	Patient and Family Access L2 and L3 PCC only)						
-997	Coding (L2 and L3 PCC only)						
-998	Information Standards (L2 and L3 PCC only)						
-999	Continuity Plans (L2 and L3 PCC only)						SCP plan
T- STANDARDS							
T-101	Information for Parents						
T-199	Involving Children and Families						Examples of changes made as a result of feedback
T-201	Lead Consultant/s and Lead Nurse/s						
T-202	Staff Authorised to Undertake Emergency Transfers						List of authorised staff
T-203	Service Competences and Training Plan						Competence framework describing the competences expected for roles within the service. Training and development plan to show how staff will achieve and maintain competences
T-204	Staffing Levels and Skill Mix						Recent rotas
T-205	Indemnity						Details of indemnity arrangements
T-206	Clinician Competence Framework and Training Plan						
T-220	Staff Development and Wellbeing						
T-299	Administrative, Clerical and Data Collection Support						
T-401	Voice Communication						

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
T-402	Emergency Transport Arrangements						Specification or similar documentation
T-403	Equipment						
T-501	Referral Handling						Guidelines or policy
T-502	Service Guidelines						Guidelines or policy
T-503	Clinical guidelines						Clinical guidelines
T-601	Operational Policy						Operational policy
T-701	Data Collection						Examples of data collected
T-702	Audit and Quality Improvement						Audit programme or plan. Examples of completed audits
T-703	Key Performance Indicators						Recent monitoring reports
T-704	Annual Report						Annual Report
T-798	Multi-disciplinary Review and Learning						Documentation depends on local arrangements, for example, minutes or reports
T-799	Document Control						Compliance determined from other documentation presented
T-801	Regional and Network Education						
Additional TA- STANDARDS							
TA-204	Consultant Staffing						
TA-451	Flight Equipment						Equipment lists and SOPs
TA-601	Operational Policy						Details of the operational policy
TA-706	Reporting and Review						Evidence of meetings and outputs

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
TA-707	Responsibilities						Evidence of governance arrangements and operating procedures
TA-708	Safety						
TA-801	Induction and Annual Update						Register of attendees + examples of content
TA-802	Regional and Network Education						
TA-850	Survival Training						Register of training undertaken
Additional TE-STANDARDS							
TE-102	Parental Involvement						
TE-210	ECMO Lead						
TE-211	Perfusionist						
TE-212	Transport Nurse						
TE-213	Surgeon						
TE-410	Equipment						Equipment lists and checklists
TE-411	Vehicles						
TE-520	Service Guidelines						Guidelines
TE-521	Indications for Transport						Examples of risk assessments
TE-522	Patient Preparation						
A- STANDARDS							
A-101	Information on Anaesthesia						
A-199	Involving Children and Families						Examples of changes made as a result of feedback
A-201	Lead Anaesthetist						
A-202	Lead Anaesthetist for Paediatric Critical Care (PCC Units only)						
A-203	GICU Lead Consultant and Lead Nurse for Children						

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
A-204	On Site Anaesthetist						Recent rotas
A-205	Consultant Anaesthetist 24 Hour Cover						Recent rotas
A-206	Medical Staff Caring for Children						List of staff with details of paediatric resuscitation & life support competences
A-207	Elective Anaesthesia						
A-208	Operating Department Assistance						List of staff with details of paediatric resuscitation & life support competences
A-209	Recovery Staff						
A-401	Induction and Recovery Areas						
A-403	Drugs and Equipment						
A-404	GICU Paediatric Area						
A-501	Role of Anaesthetic Service in Care of Critically Ill Children						Clinical guidelines
A-502	GICU Care of Children						Clinical guidelines
A-503	Clinical Guidelines - Anaesthesia						Clinical guidelines
A-598	Implementation of Trust Guidelines						
A-601	Liaison with Theatre Manager						
A-602	Children's Lists						
A-701	GICU Critical Care Minimum Data Set						Examples of data collected
A-798	Review and Learning						Documentation depends on local arrangements, for example, minutes or reports
A-799	Document Control						Compliance determined from other documentation presented
N- STANDARDS							

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
N-199	Involving Children and Families						Examples of changes made as a result of feedback
N-201	Network Lead Consultant and Lead Nurse						
N-202	Network Manager						
N-203	Educator						
N-204	Competence Framework						
N-205	Network Training Needs Analysis						Report with results of analysis
N-206	Network-wide Training and CPD Programme						Details of programme
N-299	Administrative, Clerical and Data Collection Support						
N-501	Patient Pathways						Agreed pathways
N-502	Network Capacity Plan						Agreed plan
N-503	Network Guidance						Agreed guidance
N-504	Paediatric Early Warning System						
N-601	Network Establishment and Operational Policy						Network establishment agreement or equivalent
N-602	Network Service Configuration						Agreed network configuration
N-603	Annual Service Provision						
N-701	Network Data Collection						Summary of network data collection
N-702	Network Audit						Agreed programme or plan. Examples of completed audits
N-703	Network Quality Assurance						Details of network quality assurance programme
N-704	Network Annual Meeting and Annual Report						Notes of meeting. Network Annual Report
N-705	Network Risk Register						Network Risk Register

QS Ref. No.	QS Short Title	Background report	Visit	Meeting patients & staff	Case note review or clinical observation	Documentation needed	Illustration of Documentation Required
Ref		BI	Visit	MP&S	CNR	DOC	
N-797	Network Collaboration						Results of audits and evidence of shared data
N-798	Network Multi-disciplinary Review and Learning						Documentation depends on local arrangements, for example, minutes or reports
N-799	Network Document Control						Compliance determined from other documentation presented
C- STANDARDS							
C-601	Paediatric Critical Care Needs Assessment and Strategy						Needs assessment and strategy
C-602	Commissioning: Urgent Care for Children						Description of services commissioned
C-603	Commissioning: Paediatric Critical Care						Description of services commissioned. Service specifications
C-604	Paediatric Critical Care Operational Delivery Network						Description of agreed network
C-605	Commissioning Structure for Regional PCC						
C-606	Paediatric Critical Care						
C-701	Paediatric Critical Care Quality Monitoring						Recent monitoring reports

APPENDIX 5 CROSS- REFERENCES TO CARE QUALITY COMMISSION STANDARDS

The table below shows with an 'x' where a Quality Standard addresses one of the Care Quality Commission's Fundamental Standards and Key Questions (2014).

Ref	CQC Five Key Questions
1	Are they safe?
2	Are they effective?
3	Are they responsive?
4	Are they caring?
5	Are they well-led?

Ref	CQC Fundamental Standards
9	Care and treatment must be appropriate and reflect service users' needs and preferences.
10	Service users must be treated with dignity and respect.
11	Care and treatment must only be provided with consent.
12	Care and treatment must be provided in a safe way.
13	Service users must be protected from abuse and improper treatment.
14	Service users' nutritional and hydration needs must be met.
15	All premises and equipment used must be clean, secure, suitable and used properly.
16	Complaints must be appropriately investigated and appropriate action taken in response.
17	Systems and processes must be established to ensure compliance with the fundamental standards (good governance).
18	Sufficient numbers of suitably qualified, competent, skilled and experienced staff must be deployed.
19	Persons employed must be of good character, have the necessary qualifications, skills and experience, and be able to perform the work for which they are employed (fit and proper persons requirement).
20	Registered persons must be open and transparent with service users about their care and treatment (the duty of candour).

More detail can be found at Our fundamental standards

Ref	CQC Fundamental Standards												CQC Five Key Questions				
	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5
HW- STANDARDS																	
HW-201									x	x	x	x	*	*	*	*	*
HW-202									x	x	x	x	*	*	*	*	*
HW-203									x	x	x	x	*	*	*	*	*
HW-204									x	x	x	x	*	*	*	*	*
HW-205									x	x	x	x	*	*	*	*	*
HW-206									x	x	x	x	*	*	*	*	*
HW-401							x		x				*	*	*		
HW-501				x					x				*	*	*	*	*
HW-502			x	x					x				*	*	*	*	*
HW-598			x	x					x				*	*	*	*	*
HW-602				x					x				*	*	*		*

Ref	CQC Fundamental Standards												CQC Five Key Questions				
	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5
IP-, L1-, L2- & L3- STANDARDS																	
-101				x			x		x				*	*			*
-102	x	x	x						x				*	*	*	*	
-103	x	x	x						x				*	*	*	*	
-104	x	x	x			x			x				*	*	*	*	
-105	x	x				x	x		x				*	*	*	*	
-196	x	x		x									*	*	*	*	
-197	x	x		x					x				*	*	*	*	*
-199	x	x	x					x	x				*	*	*	*	
-201									x	x	x	x	*	*	*	*	*
-202									x	x	x	x	x	*	*	*	*
-203									x	x	x	x	x	*	*	*	*
-204									x	x	x	x	*	*	*	*	*
-205									x	x	x	x	*	*	*	*	*
-206									x	x	x	x	*	*	*	*	*
-207									x	x	x	x	*	*	*	*	*
-208									x	x	x	x	*	*	*	*	*
-209									x	x	x	x	*	*	*	*	*
-220									x				*	*	*	*	*
-297									x	x	x	x	*	*	*	*	*
-298									x	x	x	x	*	*	*	*	*
-299									x	x	x	x	*	*	*		*
-301							x		x	x	x	x	*	*	*		*
-302							x		x				*	*	*		*
-401							x		x				*	*	*		*
-402							x		x				*	*	*		
-404							x		x				*	*	*	*	*
-405							x		x				*	*	*		
-406							x		x				*	*	*		
-501				x					x				*	*	*	*	*
-502				x					x				*	*	*	*	*
-503				x					x				*	*	*	*	*
-504				x					x				*	*	*	*	*
-505			x	x					x				*	*	*	*	*
-506				x					x				*	*	*	*	*
-507				x					x				*	*	*		*
-508				x					x				*	*	*		*

Ref	CQC Fundamental Standards												CQC Five Key Questions				
	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5
-509				x					x				*	*	*		*
-598									x				*	*	*	*	*
-601	x			x			x		x	x	x	x	*	*	*	*	*
-702				x					x			x	*	*	*		*
-703									x			x	*	*	*		*
-704									x			x	*	*	*		*
-705									x			x	*	*	*		*
-706									x				*	*	*		*
-798								x	x			x	*	*	*	*	*
-799				x					x				*	*	*		
-801								x	x	x	x	x		*	*		*
-901								x	x	x	x	x	*	*	*	*	*
-902									x				*	*			
-903									x				*	*			
-904									x				*	*			
-905									x				*	*			
-906									x				*	*			
-907									x				*	*			
-997									x					*			
-998									x					*			
-999									x				*	*			*
T- STANDARDS																	
T-101	x	x	x						x				*	*	*	*	
T-199	x	x	x					x	x					*	*	*	*
T-201									x	x	x	x	*	*	*	*	*
T-202									x	x	x	x	*	*	*	*	*
T-203									x	x	x	x	*	*	*	*	*
T-204									x	x	x	x	*	*	*	*	*
T-205									x				*				
T-206									x	x	x	x	*	*	*	*	*
T-220									x				*	*	*	*	*
T-299									x	x	x		*	*	*		*
T-401							x		x				*	*	*		
T-402				x			x		x				*	*	*		*
T-403							x		x				*	*	*		*
T-501				x					x				*	*	*	*	*
T-502				x			x		x				*	*	*	*	*

Ref	CQC Fundamental Standards												CQC Five Key Questions				
	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5
T-503				x					x				*	*	*	*	*
T-601	x			x			x		x	x	x	x	*	*	*	*	*
T-701				x					x			x	*	*	*		*
T-702	x			x				x	x			x	*	*	*		*
T-703									x			x	*	*	*		*
T-704									x				*	*	*		*
T-798								x	x			x	*	*	*	*	*
T-799				x					x				*	*	*		
T-801								x	x	x	x	x		*	*		*
TA-STANDARDS																	
TA-204									x	x	x	x	*	*	*	*	*
TA-451				x			x		x				*	*	*		*
TA-601	x			x			x		x	x	x	x	*	*	*	*	*
TA-706								x	x			x	*	*	*		*
TA-707									x				*	*	*	*	*
TA-708									x				*	*	*		*
TA-801									x					*	*		*
TA-802								x	x	x	x	x	*	*	*		*
TA-850									x				*	*			*
TE-STANDARDS																	
TE-102	x	x		x										*	*	*	
TE-210									x	x	x	x	*	*	*	*	*
TE-211									x	x	x	x	*	*	*	*	*
TE-212									x	x	x	x	*	*	*	*	*
TE-213									x	x	x	x	*	*	*	*	*
TE-410							x		x				*	*	*		*
TE-411				x			x		x				*	*	*		*
TE-520				x					x				*	*	*		*
TE-521				x					x				*	*	*		*
TE-522				x					x				*	*	*		*
A- STANDARDS																	
A-101	x	x	x						x				*	*	*	*	
A-199	x	x	x					x	x				*	*	*	*	
A-201									x	x	x	x	*	*	*	*	*
A-202									x	x	x	x	*	*	*	*	*
A-203									x	x	x	x	*	*	*	*	*
A-204									x	x	x	x	*	*	*	*	*

Ref	CQC Fundamental Standards												CQC Five Key Questions				
	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5
A-205									x	x	x	x	*	*	*	*	*
A-206									x	x	x	x	*	*	*	*	*
A-207									x	x	x	x	*	*	*	*	*
A-208									x	x	x	x	*	*	*	*	*
A-209									x	x	x	x	*	*	*	*	*
A-401	x			x			x		x				*	*	*	*	*
A-403							x		x				*	*	*		*
A-404	x			x			x		x				*	*	*	*	*
A-501				x					x				*	*	*		*
A-502				x					x				*	*	*		*
A-503			x	x					x				*	*	*		*
A-598			x	x					x				*	*	*		*
A-601				x					x				*	*	*		*
A-602				x					x				*	*	*		*
A-701									x			x	*	*	*		*
A-798								x	x			x	*	*	*		*
A-799				x					x				*	*	*		
N- STANDARDS																	
N-199	x	x	x				x	x	x	x	x	x	*	*	*	*	*
N-201									x	x	x	x	*	*	*	*	*
N-202									x	x	x	x	*	*	*	*	*
N-203									x	x	x	x	*	*	*	*	*
N-204									x	x	x		*	*	*	*	*
N-205									x	x	x		*	*	*	*	*
N-206									x	x	x		*	*	*	*	*
N-299									x	x	x		*	*	*	*	
N-501				x					x				*	*	*		*
N-502				x					x				*	*	*		*
N-503				x					x				*	*	*		*
N-504				x					x				*	*	*		*
N-601	x			x			x	x	x	x	x	x	*	*	*	*	*
N-602				x					x				*	*	*	*	*
N-701				x				x	x			x	*	*	*		*
N-702									x			x	*	*	*		*
N-703				x					x			x	*	*	*		*
N-704									x				*	*	*		*
N-705				x					x				*	*	*		

Ref	CQC Fundamental Standards												CQC Five Key Questions				
	9	10	11	12	13	14	15	16	17	18	19	20	1	2	3	4	5
N-797									x			x	*	*	*	*	*
N-798								x	x			x	*	*	*		*
N-799				x					x				*	*	*		
C- STANDARDS																	
C-601	x			x					x				*	*	*	*	*
C-602	x			x					x				*	*	*	*	*
C-603	x			x					x				*	*	*	*	*
C-604	x			x					x				*	*	*	*	*