ESPA SELF ASSESSMENT OF PAEDIATRIC ANAESTHESIA SERVICES

a. Principles: the European Association for Children in Hospital Charter incorporating the United Nations Rights of the Child

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SOURCE DOCUMENTS

FEAPA: European Guidelines for Training in Paediatric Anaesthesia

European Association for Children in Hospital (EACH): EACH Charter www.each-for-children.org/each-charter.html

Royal College of Anaesthetists: Guidance on the Provision of Anaesthetic Services 2014

http://www.rcoa.ac.uk/document-store/guidelines-the-provision-of-anaesthetic-services-gpas-2014

Children's surgery: a national survey of consultant clinical practice

http://dx.doi.org/10.1136/bmjopen-2012-001639

Royal College of Anaesthetists: Raising the Standard: a compendium of audit recipes. 3rd Edition 2012. Section 9 : Paediatrics

http://www.rcoa.ac.uk/document-store/audit-recipe-book-section-9-paediatrics-2012

Department of Health, England: The acutely sick or injured child in the district general hospital: a team response. 2005

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_062667.pdf

APAGBI: Peer Review http://www.apagbi.org.uk/professionals/professional-standards/peer-review

APAGBI: Safeguarding http://www.apagbi.org.uk/professionals/professional-standards/safeguarding

Safe & Sustainable Reviews

http://www.specialisedservices.nhs.uk/safeandsustainable

UEMS strategy 2008 Updated 2013

http://www.uems.net/fileadmin/user_upload/uems_documents/Official_documents/UEMS_2008.05_-_UEMS_Strategy.pdf

Standards for the Care of Critically Ill Children 4th Edition 2010

http://www.ukpics.org.uk/documents/PICS_standards.pdf

RCoA Child Protection 2014

RCoA CPD 2013

Principles: the European Association for Children in Hospital Charter incorporating the United Nations Rights of the Child

The 10 articles of the EACH Charter set out the general principles upon which modern paediatric care should be based. These articles incorporate the United Nations Rights of Children. When considering paediatric anaesthesia services for children, these principles should be followed whenever possible.

Article 1 Children shall be admitted to hospital only if the care they require cannot be equally well provided at home or on a day basis.

Article 2 Children in hospital shall have the right to have their parents or parent substitute with them at all times.

Article 3 Accommodation should be offered to all parents and they should be helped and encouraged to stay. Parents should not need to incur additional costs or suffer loss of income. In order to share in the care of their child, parents should be kept informed about ward routine and their active participation encouraged.

Article 4 Children and parents shall have the right to be informed in a manner appropriate to age and understanding. Steps should be taken to mitigate physical and emotional stress.

Article 5 Children and parents have the right to informed participation in all decisions involving their health care. Every child shall be protected from unnecessary medical treatment and investigation.

Article 6 Children shall be cared for together with children who have the same developmental needs and shall not be admitted to adult wards. There should be no age restrictions for visitors to children in hospital.

Article 7 Children shall have full opportunity for play, recreation and education suited to their age and condition and shall be in an environment designed, furnished, staffed and equipped to meet their needs.

Article 8 Children shall be cared for by staff whose training and skills enable them to respond to the physical, emotional and developmental needs of children and families.

Article 9 Continuity of care should be ensured by the team caring for children.

Article 10 Children shall be treated with tact and understanding and their privacy shall be respected at all times.

1. STAFFING

GUIDANCE

- Children should be anaesthetised by qualified anaesthesiologists who maintain competencies for safe paediatric anaesthesiology practice. When trainees or nurse anaesthetists anaesthetise children, they should be supervised by a named qualified anaesthesiologist who maintains competencies for safe paediatric anaesthesiology practice and who should be identified as having overall responsibility. The level of supervision of a trainee or nurse anaesthetist will vary according to their competence, and take into account patient age, co-morbidity, and the location and complexity of the procedure or surgery. There should be a locally agreed policy to specifically advise on the circumstances when "in-the-room" supervision is required and in all cases advice should be readily available.
- The anaesthesiologist should be assisted by staff who have had paediatric training and experience and who have maintained paediatric skills, attitudes and knowledge.
- Where there are no paediatric in-patient beds, there should be access to a named paediatric doctor with acute care responsibilities at all times.
- Immediately after anaesthesia, the child should be managed in a recovery ward or post-anaesthesia care unit on a one to one basis, by designated staff with up-to-date competencies, particularly resuscitation. A registered children's nurse should be directly involved with the organisation of the service and training in this area. A member of staff with advanced training in life support for children should always be present.
- Ideally, children should be nursed on a ward where there are at least two registered children's nurses on duty for every shift. It is accepted that there will be fewer staff in remote and rural areas and that competencies are the most important factor.

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Resource implications

Implementation plan with dates

2. TRAINING & EDUCATION

GUIDANCE

UEMS Domain 2.5:Paediatric Anaesthesiology

During the course of their training, anaesthesia residents must acquire clinical abilities and skills in the anaesthetic and perioperative care of paediatric patients as well as resuscitation of the critical ill paediatric patient. These include the following competences:

- Recognizes and understands the implication of differences between child and adult including airway management, anatomy, physiology, and pharmacology: **D**
- Masters paediatric aspects of monitoring, equipment, and vascular access, as well as anaesthesia including induction, maintenance and emergence of general anaesthesia in children, as well as clinical aspects of fluid management: **C**
- Masters postoperative care, pain management and critical care for the paediatric patient: **C**
- Initiates and participates in resuscitation of the infants and children in every emergency setting: **D**
- Knows the local and national guidelines in paediatric anaesthesia care and is able to take responsibility for transport of all children and neonates to a higher competence facility (including child protection issues): **C**
- Is able to communicate effectively and with empathy with the children and their parents, and obtain appropriate informed consent: **D**

GPAS 10.4.1-10.4.10

RCoA Competencies

RCoA CPD Matrix

ESPA Fellowship

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Resource implications

Implementation plan with dates
3. EQUIPMENT

GUIDANCE

A full range of monitoring devices and paediatric anaesthetic equipment should be readily available in theatres, and all other areas where children are anaesthetised and recovered. Equipment must be appropriate for use in babies and children of all sizes and ages and include:

- airway management and monitoring equipment including capnography
- paediatric pulse oximetry sensors and blood pressure cuffs
- vascular access equipment, including intraosseous needles
- burettes and syringe pumps to allow rapid and accurate fluid and drug delivery
- fluid and external warming devices
- temperature probes
- ultrasound devices (for central venous and nerve identification).

Resuscitation drugs and equipment, including an appropriate defibrillator, should be readily available wherever children are anaesthetised.

Anaesthetic machines should incorporate ventilators which have the flexibility to be used over the entire size and age range, provide accurate pressure control and PEEP.

There should be accurate thermostatic control of the operating theatre to permit rapid change of temperature to at least 23OC. Whilst this temperature is recommended within NICE guidance for adults,28 in practice the theatre temperature should be capable of regulation up to 26–28OC if necessary when neonatal surgery is performed. Patient temperature should be routinely measured when external means of warming are employed, except when surgery is very short.

If intravenous fluids are required in babies (after the neonatal period) and children in the peri- operative period, they should generally be isotonic29 and administered in a way that allows rapid and accurate delivery. Baseline plasma sodium/potassium should be measured at the outset and at least every 24 hours thereafter whilst an IVI is still in place. When babies and children undergo prolonged surgery, when they require an extended period of fasting, or have a low weight/body mass, blood glucose should also be estimated in the peri-operative period and intravenous dextrose supplementation considered.

Fluid warming should always be available and used when volumes administered are large relative to patient size and/or when fluid administration could result in an unwanted reduction in patient temperature.

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

4. FACILITIES

GUIDANCE

Children should be separated from, and not managed directly alongside adults, whether in the operating department (including reception and recovery areas), in-patient wards, day ward or critical care unit.

Theatre design, the appearance of the anaesthetic and recovery areas and working practices should reflect the emotional and physical needs of children. If there are genuine problems, such as the need to use older buildings or the need for children to be cared for within a facility that is essential to any aspects of their care, efforts should be made to comply with the overall requirement for separation from adult patients. The features of the environment should also be safe for children.

Recovery areas for children should be separate or screened from those used by adults and provided with paediatric airway and recovery equipment. Parents and carers should be allowed ready access to the recovery area, and easy communication with recovery staff facilitated (for example through a paging device).

In the general intensive care unit and emergency department there should be a separate area for children together with the necessary resuscitation equipment, and guidelines for care of the sick child.

Services and facilities should take account of the specific needs of adolescents, where these are different from those of children and adults.

Resident accommodation should be available for parents of children who require overnight admission to hospital.

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

5. SUPPORT SERVICES

GUIDANCE

PICU, HDU, play specialists, pre-assessment, laboratory and diagnostic imaging, pharmacy, acute pain service, pain management at home, sedation

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

6. CARE OF THE CRITICALLY SICK & INJURED CHILD

GUIDANCE

GPAS 10.3.1-10.3.7
PICS Standards 2010
Tanner report 2005

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

7. DAY CARE SURGERY & ANAESTHESIA

GUIDANCE

GPAS 10.3.8-10.3.12

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

8. ACUTE PAIN MANAGEMENT

GUIDANCE

GPAS 10.2.13-10.2.16
APA 2012
SPANZA

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

9. SAFETY, AUDIT, QUALITY IMPROVEMENT & RESEARCH

GUIDANCE

GPAS 10.5.1-10.5.7
RCoA Raising the Standard

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

10. ORGANISATION & ADMINISTRATION

GUIDANCE

GPA 10.6.1-10.6.8

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

11. PATIENT INFORMATION & CONSENT

GUIDANCE

GPAS 10.7.1-10.7.6

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

12. SAFEGUARDING AND CHILD PROTECTION

GUIDANCE

GPAS 10
RCoA 2014

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

13. SAFE SEDATION FOR DIAGNOSTIC & THERAPEUTIC PROCEDURES

GUIDANCE

NICE 2012
AOMRC 2013

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications

14. CHRONIC PAIN MANAGEMENT & PALLIATIVE CARE

GUIDANCE

FPM 2014

Areas of good practice

Areas requiring improvement or change

Improvements or changes required

Implementation plan with dates

Resource implications