

E02/S/a

**NHS STANDARD CONTRACT
FOR PAEDIATRIC SURGERY: SURGERY (AND SURGICAL PATHOLOGY,
ANAESTHESIA & PAIN)**

**PARTICULARS, SCHEDULE 2 – THE SERVICES, A - SERVICE
SPECIFICATIONS**

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| Service Specification No. | E02/S/a |
| Service | Paediatric Surgery: Surgery (and Surgical Pathology, Anaesthesia & Pain) |
| Commissioner Lead | |
| Provider Lead | |
| Period | 12 months |
| Date of Review | |

1. Population Needs

1.1 National/local context and evidence base

This specification covers specialised children's surgical/anaesthetic and acute pain management/pathology services (including specialised surgery in the following specialties: paediatric surgery, dentistry, ENT, gynaecology, oral/maxillofacial, orthopaedic, plastic and urology). It applies to all children over 44 weeks conceptual age, (or over 60 weeks conceptual age, if born prematurely) up to the age of 18 years. It is recognised that patients in the age range 16-18 years will require flexibility to exercise choice to be treated in paediatric or adult services, subject to appropriate quality standards being in place.

A neonate is normally defined as being 44 weeks post-conception age. For the purpose of surgery in babies the period is extended to 60 weeks post conception age when they have been born prematurely, because of the particular anaesthetic risks in this population and the requirement for specialist paediatric anaesthetists." The specification does not include the following paediatric surgical specialties: Cardiac, Neurosurgery, Neonatal, or Ophthalmic surgery. These specialties are covered by separate service specifications.

The children's surgery covered by this specification is considered specialised on the

basis that the number of patients accessing services is small and therefore a critical mass of activity is needed in each treatment centre in order to maintain the skills and competency of the clinical staff and to ensure that patients are treated in the appropriate physical environment. In addition, children's surgery which is not normally considered specialised will become specialised when a child has a complex co-morbidity, which increases the anaesthetic and surgical risk significantly. In these circumstances, children should only be treated in specialised centres with the appropriate surgical and anaesthetic competency.

Specialised children's surgery will be provided by surgeons who have the appropriate accredited training accredited by the Joint Committee on Surgical Training (appropriate to the specialty). The Certificate of Completion of Training (CCT) holder on the specialist register as a surgeon, in common with all practising surgeons, will be expected to maintain his/her professional development in line with Good Surgical Practice and Good Medical Practice for the purpose of revalidation. Specialised paediatric anaesthesia will be provided by anaesthetists who have undergone training accredited/approved by the Royal College of Anaesthetists (RCoA) or equivalent and have on-going experience which is sufficient to maintain competencies and satisfy revalidation.

At all times there must be adequate, skilled assistance by staff with appropriate paediatric training and facilities will be compliant with national standards for paediatric anaesthetic services.

Specialist children's surgery, anaesthetic and acute pain services are provided in the context of a local network of care for children including critical care facilities for babies and children.

In summary children's surgery and anaesthesia comprises the following categories:

- **The surgical and radiological management of infants and children who are very seriously ill and/or have rare conditions that require specialist expertise (including children already receiving care in a paediatric intensive care unit).**

This encompasses a large number of diagnoses which have been defined in the information algorithm. These are often congenital with a genetic or developmental cause and may require treatment by more than one surgical specialty.

Appendix 1 provides a list (not exhaustive) of the conditions for which the surgical intervention will be regarded as specialised and will be commissioned by NHS England.

- **Management of children who have complex co-morbidities or significant risk of peri-operative complications.**

Some children have other medical problems/co-morbidities that might complicate surgery or anaesthesia and make it more hazardous, such as complex airway abnormalities or severe uncorrected heart problems. These patients are regarded as specialised and will require referral to a specialist

centre, even for minor surgery, such as surgery to remove a soft tissue lump, if their co-morbidity is serious. (Appendix 2 provides list which is not exhaustive of the recognised co-morbidities).

- **Anaesthesia for non-surgical procedures in seriously ill children or those with complex co-morbidity.**

Anaesthesia is required in a number of children undergoing diagnostic or interventional radiological procedures for example brain Magnetic Resonance Imaging (MRI) in neonates, small infants or those with significant co-morbidity (e.g. patients with cystic fibrosis and reduced respiratory function) percutaneous computed tomography (CT) or ultrasound guided drainage of obstructed kidneys or difficult Central venous cannulation, Angiography, Angioplasty, Embolisation and Thrombolysis, Percutaneous cholangiography, Nephrostomy. Due to the specialised anaesthetic skills required this activity will only be undertaken in specialist centres. Interventional radiological services for children are also specialised because of complexity, high cost and small numbers.

Incidence and Prevalence

Surgical congenital abnormalities are uncommon. Around 3% of newborns have a major physical anomaly. Around 60% of these affect the brain or heart and around 1% have multiple anomalies. Many of these will not require surgical intervention. Individual congenital conditions requiring intervention in the neonatal period are rare, e.g. Gastroschisis, one of the commonest abnormalities, has an incidence of around 1 in 2,500. Less severe abnormalities are more common (e.g. inguinal hernias about 1%) but do not always require specialist care.

Analysis of procedure and diagnostic codes shows that there were approximately 75,000 procedures carried out defined as specialist in 2011. Of these around 10,000 were specialised due to the rarity of the condition and the procedure undertaken and around 65,000 specialised based on a combination of the procedure, age and presence of co-morbidity. (there will be more anaesthetic procedures than surgical procedures which accounts for children/babies who have radiological investigation that requires specialist anaesthesia but does not include a surgical procedure)

National Policy Initiatives

The Royal College of Surgeons in their report "Surgery for Children" (July 2007) stipulate that specialised surgery for children should be concentrated in designated units where there are the appropriate staff and facilities and a critical mass of patients sufficient to ensure an effective level of clinical experience. This is corroborated by the Royal College of Surgeons in their Working Party Report (1999) which states that surgical neonates should be concentrated within specialist paediatric surgical units with adequate numbers of appropriately trained medical and nursing staff and full facilities for the care of the infant and his/her family.

The surgical and anaesthetic care of babies and children requiring complex surgery and/or those who have significant co-morbidity require skills which are best delivered in specialist centres. This was recognised very clearly by The Bristol Royal Infirmary Inquiry. "Learning from Bristol" (the report of the public inquiry into Children's Heart surgery at the Bristol Royal infirmary – known as the 'Kennedy Report') in relation to children's cardiac surgery and applies also to other areas of specialist paediatric surgical and medical care. It is also recognised that competencies can only be retained by regular practice and on-going review of practice.

- Guidance on the Provision of Paediatric Anaesthetic Services – Royal College of Anaesthetists (April 2010)
- Children and Young People's Outcomes Strategy – Report of the Children and Young People's Outcomes Forum – July 2012
- Standards for the care of Critically ill children, 4th edition, Paediatric Intensive Care Society, June 2010 www.ukpics.org.uk
- Toolkit for High Quality Neonatal Services – Department of Health Gateway 12753 – October 2009
- Improving paediatric interventional radiology services. An Intercollegiate report. Royal College of Paediatrics and Child Health (RCPCH), Royal College Radiologists (RCR) September 2010. [www.rcr.ac.uk/docs/radiology/pdf/BFCR\(10\)12_Paediatric_IR.pdf](http://www.rcr.ac.uk/docs/radiology/pdf/BFCR(10)12_Paediatric_IR.pdf)

2. Scope

2.1 Aims and objectives of service

The aim of the service is to provide high quality, safe, specialised children's surgery and anaesthesia in line with national standards, which reduces mortality and morbidity and improves quality of life. Services will be provided in an environment which is age appropriate and child friendly.

Objectives:

- To deliver surgery, anaesthesia and pain relief services which meet agreed local network and national standards and ensures that services are regularly assessed against them
- To provide high quality surgery anaesthesia and acute pain services which achieve excellent outcomes to patients with minimal risk
- Incorporate mechanisms to avoid complications and monitor evidence of improved learning/practice as a consequence of incidents e.g. multidisciplinary team review of surgical and radiological cases at pre- and post-operative meetings, including regular morbidity and mortality meetings.
- To provide surgery and anaesthesia in an environment which is suitable for the age of the patient and which is engaging for the family/carer and minimises disruption to the family unit

- Provide holistic multi-disciplinary care which incorporates all the necessary multi disciplinary team members, for example paediatricians, social workers and play specialists, ensuring that onward referral to other paediatric specialists are made in a timely way
- To ensure communication between units and the sharing of best practice/common protocols within a Network of care are optimised in order to maximise improved patient outcomes and improvements to practice
- To provide patient friendly information on what to expect pre- and post surgery ensuring the patient is fully prepared and informed

2.2 Service description/care pathway

This services comprises of the following elements:

- Surgical/anaesthetic assessment of the referral via multidisciplinary team (MDT) or via a one-to-one consultation with the patient/family
- Surgical/anaesthetic pre-assessment (where appropriate)
- Surgical or radiological procedure/operation
- Histopathological examination of biopsies of tissues and organs removed during operation to ensure accurate diagnosis
- Post surgery/radiological in-patient care (including acute pain management)
- Out patient follow up, including acute pain (as required)
- Repeat surgery as part of staged pathway e.g. leg lengthening

Service Elements

Surgical/anaesthetic assessment – A formal referral to the surgeon will be made in writing including all investigation results, e.g. scans, bloods, pathology. Where appropriate a MDT discussion will take place as to the most appropriate management plan. Attendance from surgical pathologists and surgeons at other surgical MDTs is also recommended and this may be done virtually via video link.

The MDT: MDT working for all Paediatric specialties is very important and should be used as a standard approach for all services. The surgical episode will be supported as required by a wide range of professionals which will include: the surgeon, anaesthetist, paediatric intensivist, paediatric radiologist acute pain specialists and pathologist, paediatric trained nurses, specialist nurses, play therapists, paediatric specialist pharmacy, social workers, physiotherapists, occupational therapists, paediatric psychology and *paediatric liaison support (where indicated) and dieticians (this is not an exhaustive list)

*(to assess and address psychological and mental health needs pre and post surgery)

Specifically, providers will ensure that they have the following in place:

Appropriate paediatric radiology cover which operates on a 24/7 basis.
This may be as part of a network arrangement with other units, but where

this is the case, there must be clear processes and pathways in place. Where 24/7 cover is not in place within the Trust or as part of a network arrangement, providers will ensure that they have systems in place which mitigate the risk for patients, including robust arrangements in place for safe transfer by a neonatal or paediatric transfer service.

Access to paediatric transfer services on a 24/7 basis and that arrangements are in place for the safe transfer of infants and children when direct transfer is necessary by the provider unit.

Pain management is an integral component of children's surgery and providers will ensure that they have an appropriate acute pain service for children with a clear policy for advice about management of pain at home and the provision of take home analgesia where appropriate. All children will have an appropriate pain management assessment and multimodal analgesia management plan. This service will have the capability to safely provide epidural and opioid infusions for babies and children. All analgesia for children must be prescribed and administered by registered and appropriately trained personnel.

Paediatric high dependency and intensive care facilities should be available and delivered within a network of care which supports major/complex surgery and critically ill or injured babies and children.

Units will have ready access to an appropriate operating theatre for paediatric emergency surgery and be supported by paediatric radiology services.

Histopathological examination of biopsies of tissues and organs removed at operation is essential for accurate diagnosis. Selection of the best treatment for the child often depends on histological findings, for example Hirschsprung's disease, one cause of bowel obstruction. Specialist paediatric histopathologists should be involved with the pathological diagnosis of paediatric surgical specimens. All specimens on children should ideally be reported by specialist paediatric pathologists in a specialist centre. Access to expertise in specific tumour site pathology should be available for the diagnosis of tumours in young people.

Due to the specialised nature of paediatric surgical pathology, denoted by the small number of cases per annum, which are only carried out in tertiary specialised children's services, by specialist qualified pathologists with specific CCT accreditation and who participate in the paediatric pathology EQA scheme. The need for specialist paediatric pathology services is evidenced by support from numerous clinical professional groups including the Royal College of Paediatrics and Child Health, the British Association of Paediatric Surgeons, the British Society for Perinatal Medicine and the Royal College of Obstetricians and Gynaecologists.

Services will provide interpreter services as required for patients whose first language is not English.

Where a specialised surgical network exists providers will ensure appropriate attendance from identified representatives within their organisation.

Referral and Discharge

Patients will be referred from a number of different professionals including, general practitioners, paediatricians internal to the Trust or from another hospital and surgeons or radiologists external to the trust.

The patient will be treated post-operatively on an appropriate children's ward or children's day care facility, if attending for a day case procedure, until discharge.

Discharge is likely to fall into the following categories:

- **Category 1:** The patient is deemed to have received curative surgery and the patient will be discharged back to the GP – the patient will not require any further specialised follow up
- **Category 2:** The patient does not require further surgical intervention at this stage and will be discharged back to the referring specialty. However, the child may require on-going follow up locally as part of their disease management, e.g. Oncology, - at this point the care will no longer be defined as specialised
- **Category 3:** The patient may require further surgical intervention as part of a staged pathway requiring several planned surgical procedures, or requires specialist monitoring and will be followed up by the surgeon in the specialist centre (or outreach) – this activity will be deemed specialised until such time as the child no longer requires further surgery/specialist monitoring.

The provider will ensure that clear admissions policies are in place including referral criteria for all procedure types.

General Paediatric care

When treating children, the Service will additionally follow the standards and criteria outlined in the Specification for Children's Services (attached as Annex 1 to this Specification).

2.3 Population covered

The service outlined in this specification is for patients ordinarily resident in England*, or otherwise the commissioning responsibility of the NHS in England (as defined in Who Pays? Establishing the responsible commissioner and other Department of Health guidance relating to patients entitled to NHS care or exempt from charges).

Specifically, this service is for all children under the age of 18 who are having a specialised surgical procedure and/or a specialist radiological procedure under

general anaesthesia. (Providers will offer an element of choice to teenagers and young adults in relation to their location of care and facilities available and consider paediatric or adult settings, provided that all safeguarding issues have been taken into account.)

*Note: for the purposes of commissioning health services, this EXCLUDES patients who, whilst resident in England, are registered with a GP Practice in Wales, but INCLUDES patient resident in Wales who are registered with a GP practice in England.

2.4 Any acceptance and exclusion criteria

Acceptance Criteria

The service will accept inward referrals from a number of different professionals including, general practitioners, paediatricians, radiologists, and surgeons internal to the Trust or from another hospital.

Most specialist centres provide non-specialised surgery and anaesthesia for their local population but referrals will not generally be accepted where it is considered that the surgery is appropriate to be undertaken closer to home in a local centre where this is available.

Criteria for Referral

Referrals will need to ensure that all investigations are complete and results obtained.

Exclusions

Specialised children's surgery/anaesthesia does not include general paediatric surgery/(GPS), or anaesthesia except where the patient has a recognised co-morbidity or combination or co-morbidities which requires the patient to be cared for in a designated specialist centre.

2.5 Interdependencies with other services

| Service | Co-location essential | Co-location not essential |
|---------------------|-----------------------|---------------------------|
| Radiology | X | |
| Histopathology | | X |
| Laboratory Services | | X |
| Pharmacy | X | |
| Physiotherapy | X | |

| | | |
|--------------------------------------|---|---|
| Occupational therapy | X | |
| Dietetics | | X |
| Acute pain team | X | |
| PICU/HDU | X | |
| Audiology | | X |
| Education | X | |
| Orthotics | X | |
| Psychology | | X |
| CAHMS | | X |
| Safeguarding team | X | |
| Genetics | | X |
| Chronic pain | | X |
| Speech & Language Specialists (SALT) | | X |
| Anaesthesia | X | |

Patients may require rehabilitation and/or require provision of specialist equipment which should be easily accessible.

Robust arrangements will be in place with safeguarding teams, social services and education/schools to ensure that the needs and safety of the child are maintained during the admission and to ensure robust transition at discharge.

Furthermore, **Commissioning Safe and Sustainable Specialised Paediatric Services** (DH 2008) describes the required inter-dependencies between paediatric services in order to ensure safe practice. In line with the Department of Health –

“Safe & Sustainable Specialised Paediatric Service – Aug 08” framework, services will have immediate access to Paediatric Intensive Care Unit (PICU) / High Dependency Unit (HDU) / Neonatal Intensive Care Unit (NICU), paediatric nephrology and specialist paediatric anaesthetics and have robust pathway arrangements in place for the following amber interdependent specialties:

| Specialty | Timescales/Arrangements |
|---|---|
| Clinical Haematology, Respiratory Medicine, Neurosurgery, Specialised Orthopaedics and Spinal, Urology, Endocrinology, Gastroenterology, Neonatology Ophthalmic surgery | An integrated clinical service, Visit by consultant paediatric specialist, or transfer of care Time-scale: Available within four hours |
| Oncology, Cardiology, Cardiac Surgery, Major Trauma, ENT Airway, Chronic Pain, Paediatric Dermatology | Planned intervention Timescale: as required |
| Neurology | Visit by consultant specialist, or transfer of care Time-scale: next working day |

(Commissioning Safe and Sustainable Specialised Paediatric Services – Department of Health – August 08).

Amber interdependencies require a pathway to be in place, according to the timescales provided in the table below. These interdependent specialties do not necessarily have to be co-located. Providers shall demonstrate robust pathway arrangements as per the requirements stipulated below:

3. Applicable Service Standards

3.1 Applicable national standards e.g. NICE, Royal College

Relevant Standards of Care & Policy Documents are as follows:

- Royal College of Surgeons of England (2007) 'Surgery for children. Delivering a first class service' Available from the Royal College of Surgeons of England - www.rcseng.ac.uk
- Department of Health (2008) 'Commissioning safe and sustainable specialised paediatric services' Available from the Department of Health - www.dh.gov.uk
- Royal College of Paediatrics and Child Health (2004) 'Commissioning tertiary and specialised services for children and young people' Available from the Royal College of Paediatrics and Child Health - www.rcpch.ac.uk
- Association of Paediatric Anaesthetists, et al (2006) 'Joint statement on general paediatric surgery provision in district general hospitals on behalf of the Association of Paediatric Anaesthetists, the Association of Surgeons for Great Britain and Ireland, the British Association of Paediatric Surgeons, the Royal College of Paediatrics and Child Health and the Senate of Surgery for Great Britain and Ireland' Available from the Royal College of Surgeons of England - www.rcseng.ac.uk
- Tanner, S (2007) 'Trends in children's surgery in England' Arch Dis Child vol.92 pp.664-7 Available from - www.adc.bmj.com
- Royal College of Anaesthetists (2010) 'Guidelines for the provision of anaesthetic services' Available from the Royal College of Anaesthetists - www.rcoa.ac.uk
- Department of Health (2006) 'The acutely or critically sick or injured child in the district general hospital: a team in the district general hospital: a team response' Available from the Department of Health - www.dh.gov.uk
- National Confidential Enquiry into Patient Outcome and Death (NCEPOD) – Are We There Yet? – Surgery in Children – 2011
- The Future of Paediatric Pathology Services – March 2002 – Royal

- College of Paediatrics and Child Health
- Improving Outcomes in Children and Young People with Cancer – NICE 2005
- The Neonatal Toolkit (Department of Health) 2009
- The British Association of Paediatric Surgeons – Paediatric Surgery: Standards of Care – 2002
- Royal College of Anaesthetists – Raising the Standard – A Compendium of Audit Recipes – For Continuous Quality Improvement in Anaesthesia – 2012

In addition, providers will ensure adherence to the following requirements:

Infection Control

The provider will ensure that patients recover appropriately following surgery and that infection is minimised and managed according to the Trust's infection control policy. The Trust will evidence compliance against the policy, including infection control audits. (NHS Outcomes Framework – Domain 3)

The provider will report all incidents relating to patient safety incidents and where appropriate will report the incidence of:

- Hospital related venous thromboembolism (VTE)
- Incidence of healthcare associated infection (HCAI) MRSA, C Difficile
- Incidence of newly acquired category 2, 3 and 4 pressure ulcers
- Incidence of medication errors causing serious harm
- Incidence of harm to children due to failure to monitor

Safeguarding

All clinical staff involved in specialised children's surgery must have level 3 safeguarding training (as per the intercollegiate standards). Training must be updated annually.

Paediatric Life Support

Nursing staff surgeons and anaesthetists will have appropriate advanced life support training which is updated annually.

<http://www.rcoa.ac.uk/recommended-paediatric-resuscitation-training-non-training-grade-anaesthetists>

On Call

A consultant children's surgeon and anaesthetist will be on call for the service at all times.

Criminal Records Bureau (CRB) Checks

Providers will ensure that all staff involved in children's specialised surgery will have undergone an enhanced CRB check.

Environment

Dedicated children's facilities will be available at least in the following areas:

- Day case units
- Operating theatres
- Recovery areas
- Radiology departments
- Outpatient clinics

Children (0-16) will not be admitted to adult wards. It is recognised that in the upper age range, e.g. 16-18 it may be as appropriate to be admitted to an adult ward and some 16-18 year olds may choose this to be their place of care. In all cases appropriate safeguarding and facilities must be in place. Wherever possible, overnight facilities for parents/siblings/carers will be available.

Equipment

All staff using paediatric equipment must receive appropriate training. A full range of appropriately maintained paediatric equipment of the correct size and design for the child, including resuscitation equipment must be available.

Paediatric resuscitation equipment must be available wherever and whenever children are treated.

Patient/Carer Participation and Voice

In line with the NHS Outcomes Framework (2012/13 - Domain 4 – Ensuring that people have a positive experience of care) providers will undertake a Children and Parent experience survey and be able to demonstrate continuous improvement from feedback received.

4. Key Service Outcomes

Services will be required to provide data on the following outcome indicators which will be incorporated into a quality dashboard:

- Number of cancelled operations leading to avoidable delay and negative patient experience
- 28 day re-admission rates
- Number of unplanned admissions to PICU
- Number of Serious Untoward Incidents (SUIs) reported
- Number of written complaints received
- Infection monitoring as per section 3.1
- Multidisciplinary mortality and morbidity meetings – documentation and evidence of learning
- Patient experience survey – to be assessed pre- and post surgery to measure views on whether patient expectations have been met.

Percentage of children and young people in whom pain was well managed (Report of the Children and Young People's Health Outcome Forum 2012 (CYPOF))

Appendix 1:

List (not exhaustive) of the conditions for which the surgical intervention will be regarded as specialised and will be commissioned by NHS England.

NHS Commissioning England commissions surgery within the **general paediatric surgery** specification for the following conditions including (not exhaustive).

Ongoing management of congenital conditions: Anterior abdominal wall defects (gastroschisis and exomphalos), congenital diaphragmatic hernia, oesophageal atresia and tracheo-oesophageal fistula, structural anomalies small and large bowel, Hirschprung's disease, anorectal malformations and cloacal anomalies, structural anomalies of the airway and lung, haemangiomas and vascular malformations, lymphangiomas, abnormalities of the vitello-intestinal duct:

- Gastro-oesophageal reflux Achalasia
- Acquired abnormalities of the gall bladder and pancreas Intussusception
- Inflammatory bowel disease
- Paediatric oncology (e.g. Neuroblastoma, neuroblastoma, rhabdomyosarcoma, germ cell tumours, lymphomas, hepatoblastoma) and including vascular access. Faecal incontinence (e.g. ACE (antegrade continence enema) procedure)
- Rectal prolapse and anal fissure
- Abnormalities of the neck (e.g. branchial arch remnants and thyroglossal cyst) and thyroid
- Abdominal and chest trauma
- Deformities of the chest wall (e.g. pectus excavatum and carinatum)

- Bronchogenic cyst, pulmonary sequestration, and cystic adenomatoid malformation Pneumothorax (other than simple drainage) and empyema.
- Hypersplenism and splenomegaly Intra-abdominal testes
- Ovarian cysts Bariatric surgery

NHS England commissions **urology surgery** within the paediatric surgery specification for the following conditions including (not exhaustive)

Ongoing management of urological conditions listed in the neonatal specification (e.g. posterior urethral valves, spina bifida and spinal dysraphism):

- Hypospadias
- Vesico-ureteric reflux Neurogenic bladder Ureteropelvic obstruction Vesicoureteric obstruction Urolithiasis
- Abnormalities of the urachus
- Prune belly syndrome
- Disorders of sexual differentiation
- Renal neoplasms
- Multicystic kidney
- Duplex kidneys (e.g. management of ureterocoeles, partial nephrectomy)
- Urinary incontinence
- Gonadal tumours
- Bladder exstrophy (ongoing surgery as initial management occurs in supra-regional centres)
- Trauma of the kidneys, ureters, bladder and urethra.

NHS England commissions **ENT Surgery** within the Paediatric Surgery specification for the following conditions including (not exhaustive)

Ongoing management of structural airway abnormalities (e.g. choanal atresia, subglottic stenosis, tracheomalacia, laryngeal cleft, bronchomalacia, tracheal atresia, vocal cord palsy, Pierre- Robin syndrome).

Ongoing management of extrinsic airway obstruction (e.g. hamangioma, lymphangioma):

- Branchial cleft and thyroglossal cyst
- Abnormalities of the salivary glands.
- Abnormalities of the thyroid and parathyroid glands.
- Congenital deafness

NHS England commissions **adolescent and gynaecology surgery** within the paediatric surgery specification for the following conditions including (not exhaustive)

Ongoing management of Disorders of sexual differentiation (DSD):

- Hydrometrocolpos (other than simple hymenal membrane)
- Vaginal atresia

- Ovarian cysts

NHS England commissions **orthopaedic surgery** within the **paediatric surgery** specification for the following conditions including (not exhaustive).

Ongoing management of congenital abnormalities:

- Slipped Upper Femoral Epiphysis
- Perthes' disease
- Developmental dysplasia of hip Osteogenesis imperfecta
- Spina bifida and spinal dysraphism Cerebral palsy
- Muscular dystrophy/myotonias Arthrogyrosis
- Kyphoscoliosis
- Congenital Talipes Equino Varus (CTEV) Polydactyly or syndactyly
- Epiphyseal dysplasia Achondroplasia Bone tumours
- Limb inequality Adolescent hip dysplasia Paediatric sports injuries
- Late effects bone and joint sepsis The neuromuscular foot

NHS England commissions **plastic surgery** within the paediatric surgery specification for the following conditions including (not exhaustive).

Management of complex congenital dermatological conditions e.g. epidermolysis bullosa, scalded skin syndrome

- Cleft lip and palate surgery (supra-regional service)
- Burns (debridement, dressing, grafting and burns reconstruction)
- Vascular Anomalies (includes haemangiomas and vascular malformations)
- Congenital abnormalities of the ear (e.g. anotia, microtia)
- Congenital absence of nose (arhinia)
- Congenital hand abnormalities (e.g. symbrachydactyly, cleft hand, syndactyly, thumb hypoplasia/aplasia, polydactyly, macrodactyly).
- Complex craniofacial anomalies: Craniofacial syndromes (e.g. Apert's, Crouzon, Fronto-nasal dysplasia, Acrofacial dysostosis; Hypertelorism; Cranio-facial Clefts, Cranio-facia dysplasia, Cranial dysplasias with dysostosis or stenosis); Cranio-facial distraction; Cranio-facial/hemifacial microsomia
- Congenital brachial plexus injury Volkman's ischaemic contracture
- Congenital abdominal wall conditions (e.g. Poland's syndrome, Prune belly syndrome)
- Congenital abnormalities of lower limb and feet. Hypospadias
- Congenital breast conditions amazia, tuberous breast deformity Plastic surgery management of intersex abnormalities
- Trauma plastic surgery reconstruction
- Post traumatic peripheral limb vascular insufficiency
- Giant Congenital Melanocytic Naevi (CMN)

NHS England commissions **maxillo-facial surgery** within the paediatric surgery specification for the following conditions including (not exhaustive).

- Craniofacial syndromes (e.g. Apert's, Crouzon, Fronto-nasal dysplasia, Acrofacial

dysostosis)

- Craniofacial fractures Hypertelorism
- Cranio-facial Clefts (e.g. Cranio-facia dysplasia, Cranial dysplasias with dysostosis or stenosis)
- Cranio-facial distraction
- Cranio-facial/hemifacial microsomia Complex dentoalveolar surgery
- Craniofacial fractures initial management and secondary reconstruction Orthognathic surgery
- Surgical management of head and neck oncology
- Jaw (and other facial) prosthesis (e.g. in oncology patients)

NHS England commissions **dental surgery** within the paediatric surgery specification for the following conditions including (not exhaustive).

Congenital conditions associated with abnormal tooth development (e.g. Ectodermal dysplasia, Cleidocranial dysplasia, William's syndrome, Fragile X syndrome, Treacher Collins syndrome, Osteogenesis imperfecta):

- Dental conditions associated with Histiocytosis or leukaemia Congenital epulis
- Juvenile fibromatosis
- Intra-oral haemangioma/lymphangioma Neuroectodermal tumour
- Orthodontic abnormalities (e.g. maxillary protrusion/deficiency, vertical skeletal excess, alignment problems, posterior crossbite).
- Dental abnormalities secondary to trauma

Appendix 2

Infants and children with the following significant co-morbidities i.e. ASA3 or greater* :

- airway pathology (e.g. laryngo and tracheomalacia, tracheal stenosis, significant obstructive sleep apnoea)
- chronic lung disease with oxygen dependency, home ventilation or CPAP
- complex syndromes particularly those involving the airway, breathing or circulation
- major respiratory disease e.g. cystic fibrosis with major derangement of respiratory function
- metabolic and complex endocrine disease (excluding stable diabetes and hypothyroidism)
- pulmonary hypertension
- serious neuromuscular disorders e.g. duchenne muscular dystrophy
- severe cerebral palsy with complex needs
- significant congenital heart disease e.g. complex shunts/circulations
- significant haematological disorders (e.g. sickle cell disease and haemophilia)
- significant renal and/or hepatic impairment
- unstable epilepsy

**ASA 3 denotes the presence of severe systemic disease and in the case of babies and children, significant congenital abnormalities*

ANNEX 1 TO SERVICE SPECIFICATION:

PROVISION OF SERVICES TO CHILDREN

Aims and objectives of service

This specification annex applies to all children's services and outlines generic standards and outcomes that are fundamental to all services.

The generic aspects of care:

- The Care of Children in Hospital (Health Service Circular 1998/238) requires that:
- Children are admitted to hospital only if the care they require cannot be as well provided at home, in a day clinic or on a day basis in hospital.
- Children requiring admission to hospital are provided with a high standard of medical, nursing and therapeutic care to facilitate speedy recovery and minimize complications and mortality.
- Families with children have easy access to hospital facilities for children without needing to travel significantly further than to other similar amenities.
- Children are discharged from hospital as soon as socially and clinically appropriate and full support provided for subsequent home or day care.
- Good child health care is shared with parents/carers and they are closely involved in the care of their children at all times unless, exceptionally, this is not in the best interest of the child. Accommodation is provided for them to remain with their children overnight if they so wish.

Service description/care pathway

- All paediatric specialised services have a component of primary, secondary, tertiary and even quaternary elements.
- The efficient and effective delivery of services requires children to receive their care as close to home as possible dependent on the phase of their disease.
- Services should therefore be organised and delivered through "integrated pathways of care" (National Service Framework for children, young people and maternity services (Department of Health & Department for Education and Skills, London 2004)

Interdependencies with other services

All services will comply with Commissioning Safe and Sustainable Specialised Paediatric Services: A Framework of Critical Inter-Dependencies – Department of Health

Imaging

All services will be supported by a 3 tier imaging network (*'Delivering quality imaging services for children'* Department of Health 13732 March 2010). Within the network;

- It will be clearly defined which imaging test or interventional procedure can be performed and reported at each site
- Robust procedures will be in place for image transfer for review by a specialist radiologist, these will be supported by appropriate contractual and information governance arrangements
- Robust arrangements will be in place for patient transfer if more complex imaging or intervention is required
- Common standards, protocols and governance procedures will exist throughout the network.
- All radiologists, and radiographers will have appropriate training, supervision and access to continuing professional development
- All equipment will be optimised for paediatric use and use specific paediatric software

Specialist Paediatric Anaesthesia

Wherever and whenever children undergo anaesthesia and surgery, their particular needs must be recognised and they should be managed in separate facilities, and looked after by staff with appropriate experience and training.¹ All UK anaesthetists undergo training which provides them with the competencies to care for older babies and children with relatively straightforward surgical conditions and without major co-morbidity. However those working in specialist centres must have undergone additional (specialist) training² and should maintain the competencies so acquired³ *. These competencies include the care of very young/premature babies, the care of babies and children undergoing complex surgery and/or those with major/complex co-morbidity (including those already requiring intensive care support).

As well as providing an essential co-dependent service for surgery, specialist anaesthesia and sedation services may be required to facilitate radiological procedures and interventions (for example MRI scans and percutaneous nephrostomy) and medical interventions (for example joint injection and intrathecal chemotherapy), and for assistance with vascular access in babies and children with complex needs such as intravenous feeding.

Specialist acute pain services for babies and children are organised within existing departments of paediatric anaesthesia and include the provision of agreed (hospital wide) guidance for acute pain, the safe administration of complex analgesia regimes including epidural analgesia, and the daily input of specialist anaesthetists and acute pain nurses with expertise in paediatrics.

*The Safe and Sustainable reviews of paediatric cardiac and neuro- sciences in England have noted the need for additional training and maintenance of competencies by specialist anaesthetists in both fields of practice.

References

- GPAS Paediatric anaesthetic services. RCoA 2010 www.rcoa.ac.uk
- CCT in Anaesthesia 2010
- CPD matrix level 3

Specialised Child and Adolescent Mental Health Services (CAMHS)

The age profile of children and young people admitted to specialised CAMHS day/in-patient settings is different to the age profile for paediatric units in that it is predominantly adolescents who are admitted to specialised CAMHS in-patient settings, including over-16s. The average length of stay is longer for admissions to mental health units. Children and young people in specialised CAMHS day/in-patient settings generally participate in a structured programme of education and therapeutic activities during their admission.

Taking account of the differences in patient profiles the principles and standards set out in this specification apply with modifications to the recommendations regarding the following:

- Facilities and environment – essential Quality Network for In-patient CAMHS (QNIC) standards should apply (http://www.rcpsych.ac.uk/quality/quality_accreditationaudit/qnic1.aspx)
- Staffing profiles and training - essential QNIC standards should apply.
- The child/ young person's family are allowed to visit at any time of day taking account of the child / young persons need to participate in therapeutic activities and education as well as any safeguarding concerns.
- Children and young people are offered appropriate education from the point of admission.
- Parents/carers are involved in the child/young persons care except where this is not in the best interests of the child / young person and in the case of young people who have the capacity to make their own decisions is subject to their consent.
- Parents/carers who wish to stay overnight are provided with accessible accommodation unless there are safeguarding concerns or this is not in the best interests of the child/ young person.

Applicable national standards e.g. NICE, Royal College

Children and young people must receive care, treatment and support by staff registered by the Nursing and Midwifery Council on the parts of their register that permit a nurse to work with children (Outcome 14h Essential Standards of Quality and Safety, Care Quality Commission, London 2010)

- There must be at least two Registered Children's Nurses (RCNs) on duty 24 hours a day in all hospital children's departments and wards.
- There must be an Registered Children's Nurse available 24 hours a day to advise on the nursing of children in other departments (this post is included in the staff

establishment of 2RCNs in total).

Accommodation, facilities and staffing must be appropriate to the needs of children and separate from those provided for adults. All facilities for children and young people must comply with the Hospital Build Notes HBN 23 Hospital Accommodation for Children and Young People NHS Estates, The Stationary Office 2004.

All staff who work with children and young people must be appropriately trained to provide care, treatment and support for children, including Children's Workforce Development Council Induction standards (Outcome 14b Essential Standards of Quality and Safety, Care Quality Commission, London 2010).

Each hospital who admits inpatients must have appropriate medical cover at all times taking account of guidance from relevant expert or professional bodies (National Minimum Standards for Providers of Independent Healthcare, Department of Health, London 2002). "Facing the Future" Standards, Royal College of Paediatrics and Child Health.

Staff must carry out sufficient levels of activity to maintain their competence in caring for children and young people, including in relation to specific anaesthetic and surgical procedures for children, taking account of guidance from relevant expert or professional bodies (Outcome 14g Essential Standards of Quality and Safety, Care Quality Commission, London 2010).

Providers must have systems in place to gain and review consent from people who use services, and act on them (Outcome 2a Essential Standards of Quality and Safety, Care Quality Commission, London 2010). These must include specific arrangements for seeking valid consent from children while respecting their human rights and confidentiality and ensure that where the person using the service lacks capacity, best interest meetings are held with people who know and understand the person using the service. Staff should be able to show that they know how to take appropriate consent from children, young people and those with learning disabilities (Outcome 2b) (Seeking Consent: working with children Department of Health, London 2001).

Children and young people must only receive a service from a provider who takes steps to prevent abuse and does not tolerate any abusive practice should it occur (Outcome 7 Essential Standards of Quality and Safety, Care Quality Commission, London 2010 defines the standards and evidence required from providers in this regard). Providers minimise the risk and likelihood of abuse occurring by:

- Ensuring that staff and people who use services understand the aspects of the safeguarding processes that are relevant to them.
- Ensuring that staff understand the signs of abuse and raise this with the right person when those signs are noticed.
- Ensuring that people who use services are aware of how to raise concerns of

abuse.

- Having effective means to monitor and review incidents, concerns and complaints that have the potential to become an abuse or safeguarding concern.
- Having effective means of receiving and acting upon feedback from people who use services and any other person
- Taking action immediately to ensure that any abuse identified is stopped and suspected abuse is addressed by:
 - having clear procedures followed in practice, monitored and reviewed that
 - take account of relevant legislation and guidance for the management of alleged abuse
 - separating the alleged abuser from the person who uses services and others who may be at risk or managing the risk by removing the opportunity for abuse to occur, where this is within the control of the provider
 - reporting the alleged abuse to the appropriate authority
 - reviewing the person's plan of care to ensure that they are properly supported following the alleged abuse incident.
- Using information from safeguarding concerns to identify non-compliance, or any risk of non-compliance, with the regulations and to decide what will be done to return to compliance.
- Working collaboratively with other services, teams, individuals and agencies in relation to all safeguarding matters and has safeguarding policies that link with local authority policies.
- Participates in local safeguarding children boards where required and understand their responsibilities and the responsibilities of others in line with the Children Act 2004.
- Having clear procedures followed in practice, monitored and reviewed in place about the use of restraint and safeguarding.
- Taking into account relevant guidance set out in the Care Quality Commission's Schedule of Applicable Publications
- Ensuring that those working with children must wait for a full CRB disclosure before starting work.
- Training and supervising staff in safeguarding to ensure they can demonstrate the competences listed in Outcome 7E of the Essential Standards of Quality and Safety, Care Quality Commission, London 2010.

All children and young people who use services must be:

- Fully informed of their care, treatment and support.
- Able to take part in decision making to the fullest extent that is possible.
- Asked if they agree for their parents or guardians to be involved in decisions they need to make.

(Outcome 4I Essential Standards of Quality and Safety, Care Quality Commission, London 2010)

Key Service Outcomes

Evidence is increasing that implementation of the national Quality Criteria for Young People Friendly Services (Department of Health, London 2011) have the potential to greatly improve patient experience, leading to better health outcomes for young people and increasing socially responsible life-long use of the NHS. Implementation is also expected to contribute to improvements in health inequalities and public health outcomes e.g. reduced teenage pregnancy and STIs, and increased smoking cessation. All providers delivering services to young people should be implementing the good practice guidance which delivers compliance with the quality criteria.

Poorly planned transition from young people's to adult-oriented health services can be associated with increased risk of non adherence to treatment and loss to follow-up, which can have serious consequences. There are measurable adverse consequences in terms of morbidity and mortality as well as in social and educational outcomes. When children and young people who use paediatric services are moving to access adult services (for example, during transition for those with long term conditions), these should be organized so that:

- All those involved in the care, treatment and support, provide robust hand-over arrangements from one specialist to another and participate actively in the planning and provision to ensure that the services provided continue to be appropriate to the age and needs of the person who uses services.

The *National Minimum Standards for Providers of Independent Healthcare*, (Department of Health, London 2002) require the following standards:

- **A16.1** Children are seen in a separate out-patient area, or where the hospital does not have a separate outpatient area for children, they are seen promptly.
- **A16.3** Toys and/or books suitable to the child's age are provided.
- **A16.8** There are segregated areas for the reception of children and adolescents into theatre and for recovery, to screen the children and adolescents from adult Patients; the segregated areas contain all necessary equipment for the care of children.
- **A16.9** A parent is to be actively encouraged to stay at all times, with accommodation made available for the adult in the child's room or close by.
- **A16.10** The child's family is allowed to visit him/her at any time of the day, except where safeguarding procedures do not allow this
- **A16.13** When a child is in hospital for more than five days, play is managed and supervised by a qualified Hospital Play Specialist.
- **A16.14** Children are required to receive education when in hospital for more than five days; the Local Education Authority has an obligation to meet this need and are contacted if necessary.
- **A18.10** There are written procedures for the assessment of pain in children and the provision of appropriate control.

All hospital settings should meet the *Standards for the Care of Critically Ill Children* (Paediatric Intensive Care Society, London 2010).

There should be age specific arrangements for meeting Regulation 14 of the Health and Social Care Act 2008 (Regulated Activities) Regulations 2010. These require:

- A choice of suitable and nutritious food and hydration, in sufficient quantities to meet service users' needs;
- Food and hydration that meet any reasonable requirements arising from a service user's religious or cultural background
- Support, where necessary, for the purposes of enabling service users to eat and drink sufficient amounts for their needs.
- For the purposes of this regulation, "food and hydration" includes, where applicable, parenteral nutrition and the administration of dietary supplements where prescribed.
- Providers must have access to facilities for infant feeding, including facilities to support breastfeeding (Outcome 5E, of the Essential Standards of Quality and Safety, Care Quality Commission, London 2010)

All paediatric patients should have access to appropriately trained paediatric trained dieticians, physiotherapists, occupational therapists, speech and language therapy, psychology, social work, play specialists and CAMHS services within nationally defined access standards.

All children and young people should have access to a professional who can undertake an assessment using the Common Assessment Framework and access support from social care, housing, education and other agencies as appropriate

All registered providers must ensure safe use and management of medicines, by means of the making of appropriate arrangements for the obtaining, recording, handling, using, safe keeping, dispensing, safe administration and disposal of medicines (Outcome 9 Essential Standards of Quality and Safety, Care Quality Commission, London 2010). For children, these should include specific arrangements that:

- ensure the medicines given are appropriate and person-centred by taking account of their age, weight and any learning disability
- ensure that staff handling medicines have the competency and skills needed for children and young people's medicines management
- ensure that wherever possible, age specific information is available for people about the medicines they are taking, including the risks, including information about the use of unlicensed medicine in paediatrics.

Many children with long term illnesses have a learning or physical disability.

Providers should ensure that:

- They are supported to have a health action plan
- Facilities meet the appropriate requirements of the Disability Discrimination Act 1995
- They meet the standards set out in Transition: getting it right for young people. Improving the transition of young people with long-term conditions from children's to adult health services. Department of Health, 2006, London.