

B02/S/a

**2013/14 NHS STANDARD CONTRACT
FOR POSITRON EMISSION TOMOGRAPHY - COMPUTED TOMOGRAPHY (PET-CT) SCANNING (ALL AGES)**

SECTION B PART 1 - SERVICE SPECIFICATIONS

Service Specification No.	B02/S/a
Service	Positron Emission Tomography - Computed Tomography (PET CT) Scanning (All Ages)
Commissioner Lead	
Provider Lead	
Period	12 months
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

Introduction

Positron Emission Tomography - Computed Tomography (PET CT) acquires Positron Emission Tomography (PET) data and X ray Computed Tomography (CT) data in one scan and combines the data into superimposed (co-registered) images. The technique allows for precise and accurate anatomical localisation of biochemical activity in the body.

PET CT scanning is a non direct access, key clinical imaging tool. Patients are referred from secondary care. The investigation contributes directly to the management of cancer patients; it also aids the management of patients who suffer from other diseases including those with cardiac and neurological disease and clinical suspicion of inflammation of the arteries (vasculitis).

Current Profile/National Context

The most recent guidance from the National Cancer Action Team¹ provides recommendations regarding the number of PET CT scans to be carried out per million population in England for cancer conditions.

The clinical indications prepared by The Royal College of Physicians and The Royal College of Radiologists 2012, provide further indications for the use of PET

CT in non-cancer conditions.

The Royal College of Radiologists 2012, provide further indications for the use of PET CT in non-cancer conditions

In addition to this current evidence and practice:

- Oncology: PET CT may be helpful on an individual basis for the diagnosis, staging and management of individual patients with rare malignancies in discussion with the specialist multidisciplinary team
- Non Oncology: PET CT may be helpful on an individual case by case basis in the diagnosis and management of individual patients in discussion with the specialist centre.

The evidence to support the benefits of PET CT scanning is established by original research, expert opinion and professional and governmental bodies including National Institute of Clinical Excellence (NICE) as noted above.

Formally PET CT was commissioned on a local Specialist Commissioning Group or Cancer Network policy basis meaning that provision and access policies were variable across England. From 1st April 2013 PET CT will be commissioned by the NHS England to one standard policy.

PET CT is provided in England by a variety of fixed and mobile facilities through a number of providers. These include Third Sector, NHS Trusts, Research Institutes and the National Independent Treatment Sector Contract, as listed in appendix 1.

Population Covered

The service outlined in this specification is for patients resident in England; or otherwise the commissioning responsibility of the NHS in England² (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).

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 patients resident in Wales who are registered with a GP in England.

See also **Current Profile/National Context** above and **Aims and objectives of service** below.

2. Scope

2.1 Aims and objectives of service

Objective:

Specifically this service is for adults and children with a variety of cancer and non

cancer conditions requiring the specialised diagnostic intervention of PET CT scanning as outlined within this specification and with reference to the clinical indications prepared by The Royal College of Physicians and The Royal College of Radiologists, 2012.

From 1st April 2013 all oncological indications noted in The Royal College of Physicians and The Royal College of Radiologists, 2012.

Will be supported and funded by NHS England alongside a 10% tolerance at the Administration of Radioactive Substances Advisory Committee (ARSAC) certificate holder's discretion.

Aims:

- The service will deliver accurate, reliable, high technology imaging
- The service will provide equitable access for adults and children
- The service will improve early diagnoses of cancer, staging and treatment monitoring and other conditions to better inform treatment decision making
- The service will contribute to the positive achievement of cancer waiting times in support of the patient's diagnostic pathway

2.2 Service description/care pathway

- Referral from secondary care organisation in line with local practice
- Authorisation of referral by Administration of Radioactive Substances Advisory Committee (ARSAC) certificate holder
- Appointment for outpatient scan made
- Outpatient scan performed
- Patient discharged from outpatient diagnostic facility
- Reporting of images
- Transfer of images and report to referrer
- Support to Multi-Disciplinary Team (MDT) discussions where required

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

As stated in **Aims and objectives of service**

2.4 Any acceptance and exclusion criteria

None

2.5 Interdependencies with other services

NHS Trusts, Referring Clinicians, Reporting Clinicians, Multidisciplinary Teams, Royal Colleges, Cancer Registries, Cancer Networks, Cardiac Networks, Old Age Psychiatry Networks, Commissioning Organisations, Radiotherapy Services, Clinical Networks, Research Institutions, (this is not an exhaustive list).

3. Applicable Service Standards

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

The Provider will deliver PET CT scans to the adult and paediatric population of England in accordance with the requirements as set out in this Specification and current industry guidelines and legislation.

Good Clinical Industry Practice

The Provider will comply with:

Good clinical industry practice which will include but is not limited to: standards for better health, relevant NICE guidance, Imaging Services Accreditation Scheme (ISAS), latest Medicines and Healthcare products Regulatory Agency (MHRA) guidance/technical notices.

Law and Consents

The Consents and Law required are as follows:

- Environmental Permitting Regulations (EPR) 2010
- Medicines (Administration of Radioactive Substances) Regulations 1978 (as amended)
- Medicines Act 1968 (as amended)
- Ionising Radiations Regulations 2000
- Ionizing Radiation (Medical Exposure) Regulations 2000 and as amended.
- Medicines (Radioactive Substances) Order 1978
- The Carriage of Dangerous Goods & Use of Transportable Pressure
- Equipment Regulations 2009

The following consents under the EPR 2010 are:

- Registration for the use of radioactive materials and any mobile radioactive apparatus; and/or
- Authorisations for the disposal and accumulation of radioactive waste and the following Consents under the Medicines (Administration of Radioactive Substances) Regulations 1978 (as amended)
- Certificate in respect of administration of radioactive medicinal products

(ARSAC Certificate); and/or written direction of an ARSAC Certificate holder in respect of the administration of radioactive medicinal products

- Health and Social Care Act 2008
- Arrangements for the production and transport of radioactive medicinal products

The Provider shall ensure that:

- A reliable and adequate supply of Tracer is available for the performance of Scans
- The quality of Tracer is:
 - Appropriate for the Scans
 - Demonstrable by audit
- Any supplier of the Tracer has in place a quality control programme sufficient to provide assurance of the integrity of the product, and methods for validation
- The Tracer is transported to the Facilities within such timescales as will facilitate the safe and efficient administration of the Tracer
- That all Tracers are prepared under Good Manufacturing Practice as defined by the MHRA that all transport of radioactive material is compliant with the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) regulations.

Time Standards

The Provider will:

Following receipt of a referral containing the clinically appropriate information including authorisation by an ARSAC certificate holder; appoint an examination date, perform the examination, complete the diagnostic report and return the diagnostic report and images to the referring clinician within seven business days or as specified by the contract and in accordance with this Specification.

Information Management & Technology (IM&T) Requirements

The Provider will enable referral information, images and reports to be received and delivered in electronic format, compatible with patient information systems.

Comply with the Information Governance requirements of the referring organisation for personal identifiable data.

Patient Referral Information

Referrals shall include the information set out in appendix 3.

Diagnostic Reports

The provider will ensure that all staff producing diagnostic reports are adequately trained and are able to demonstrate continued competency in line with the appropriate bodies' guidelines.

Prior Imaging

The provider shall be responsible for obtaining the relevant prior imaging i.e. MRI, CT and provide to the reporting clinician. The referring organisation as noted in Appendix 3 will provide access to or copies of relevant prior imaging.

Clinical Safety and Medical Emergency Measures

The Provider will ensure that they operate within a clinically safe environment ensuring safe practice and adequate levels of equipment to deal effectively with medical emergencies.

The Provider will ensure that all staff are appropriately trained and accredited including having a Life Support certificate which meets the standards set out by the Resuscitation Council (www.resus.org.uk) and at least one member of staff being qualified to Intermediate Life Support (ILS) level.

The Provider will ensure all medicines and tracers are managed safely and securely, in accordance with local radiological rules, the NHS Litigation Authority (NHSLA) and relevant consents and law.

Provision of Pre and Post Scan Information

The Provider will before the scan, provide appropriate verbal and written information about the time, place and location and any other relevant information or guidance on the scanning pathway to the patient and the referring clinician.

Pre Scan Assessment

The Provider will ensure that the medical exposure to any Patient to ionising radiation is justified and authorised in accordance with Regulation 6 of the IR(ME)R and also assess the patient to identify contra-indications to the administration of the relevant Tracer and/or the Scan.

Anaesthetic and/or Sedation

The Provider will ensure when a PET CT patient requires local anaesthetics and/or sedation it will be given in accordance with the National Minimum Standards, which includes statutory requirements.

Quality Requirements of the Diagnostic Report

The Provider will provide an accurate, relevant, concise and succinct Diagnostic Report to the referring clinician, in accordance with professional guidelines under the Society of Nuclear Medicine and European Association of Nuclear Medicine guidance (www.snm.org and www.eanm.org) and "Reporting and Interpretation of

Imaging Investigations" as published by the Royal College of Radiologists (www.rcr.ac.uk) or recommended by a specialty based peer group (relevant to the services).

Quality Requirements of Diagnostic Reports – General

The Provider will produce Diagnostic Reports that are securely delivered so as to preserve confidentiality of Patient Records irrespective of the method of delivery of the diagnostic report in accordance with the relevant Connecting for Health guidance. The Provider will ensure that the Reporter (or nominated deputy) is available to discuss scans or referrals with the multi-disciplinary team meeting where required.

Quality Requirements of Activity Outputs: Communication, Distribution and Timing

The Provider will ensure the referring clinician receives the Activity Output to agreed or mandated timescales or in line with clinical appropriateness.

The provider will communicate any unusual, unexpected, urgent, or clinically significant findings that may require immediate or urgent clinical decisions in accordance with the locally agreed protocol.

Quality Assurance

The Provider shall:

- Be clinically and managerially responsible and accountable for any scan carried out on the Patient
- Operate an effective, comprehensive, clinical governance system with clear channels of accountability and supervision that reduces the risk of clinical system failure
- Continuously monitor clinical performance and evaluate unexpected clinical complications/adverse events arising from any scan. This shall also include, where relevant an evaluation of the accuracy of investigation interpretations and the contribution of the report to answering the clinical question posed, the clinical appropriateness of examinations undertaken and any further investigations suggested
- Audit clinical care against standards, and use appropriate formal methods such as root cause analysis for untoward incidents

Clinical Audit

The Provider will ensure that an appropriate method of clinical audit takes place in line with the guidance shown in appendix 1.

- For each facility, collect data on the Referral, ICD10 code and PET-CT acquisition for national surveys and in response to any reasonable requests from time to time.
- For each facility, provide clinical audit and activity data to the Regional Cancer Registry that is responsible for the region in which the relevant facility is located,

and any relevant national registries on a routine basis (at least monthly), and in response to any reasonable requests from time to time.

- For each facility provide Diagnostic Imaging Dataset data (DID) on NHS patients extracted and submitted monthly as defined by the Information Standards Board for Health and Social Care.

NHS Patient Experience and Referrer Satisfaction Survey

The Provider will ensure that an appropriate Patient Satisfaction Survey and Referrer Satisfaction Survey is undertaken, asking a minimum of ten per cent of NHS Patients and referrers selected at random from each site, for each contract quarter during which the facility is performing Scans in line with Picker Institute Healthcare Commission standardised patient experience questionnaires.

Clinical Contract Specification - Standards and Equipment

- The Provider will ensure that equipment is provided and maintained to an adequate minimum level to fulfil the standards outlined within this Specification (including the ability to perform scans using intravenous and oral contrast medium) and in line with the guidance shown in appendix 2.
- The Provider will carry out daily quality assurance and quality control checks on equipment to ensure minimum standards of operations are maintained in line with legal, professional, industry and manufacturers specifications and under the supervision of a Medical Physics Expert.

Availability of specialist expertise

The Provider will ensure the availability at all times of supervisory and specialist expertise as defined by regulatory requirements including a Radiation Protection Advisor, Transport of Dangerous Goods Advisor and Medical Physics Expert.

Training and Education

The Provider will provide education and training for all staff to attain competence and maintain those standards including the provision of professional registration requirements.

Specification Casemix

The casemix will include the indications specified by the Intercollegiate Standing Committee in Nuclear Medicine which can be accessed from:

<http://www.rcr.ac.uk/publications.aspx?PageID=310&PublicationID=363>

or those specified by the commissioning body.

Acquisition Protocol

The Provider will use evidence based acquisition protocols for PET with CT for attenuation correction and anatomical localisation.

Operating Manual

The Provider will have and adhere to an Operating Manual that contains effective policies and procedures covering service specific standards and any regulatory and legislative requirements.

4. Key Service Outcomes

As shown in **Applicable service standards**

The provider will ensure that all mandatory datasets and surveys are collected and reported in a format that is compatible with recipients systems.

Key Service Outcomes

As shown in **Applicable service standards** and the Quality Markers for PET CT.

Other Issues

Interdependencies with other services

NHS Trusts, Referring Clinicians, Reporting Clinicians, Multidisciplinary Teams, Royal Colleges, Cancer Registries, Cancer Networks, Cardiac Networks, Old Age Psychiatry Networks, Commissioning Organisations, Radiotherapy Services, Clinical Networks, Research Institutions, (this is not an exhaustive list).

Cancer waiting times

The Provider should have regard to the fact that PET CT Scanning waiting times impact on cancer pathway waiting times.

References

1: Evidence based indications for the use of PET- CT in the United Kingdom 2012.
<http://www.rcr.ac.uk/publications.aspx?PageID=310&PublicationID=363>

Appendix 1 : Clinical Audit

The Provider shall:

- Ensure that an independent external clinician, at least weekly, double reports a minimum of 10% of the total number of Activity Outputs of each Reporting Clinician which, as far as the Provider is aware, were not presented at a Multidisciplinary Team Meeting at which the independent clinician was present
- Report promptly any clinically significant diagnostic reporting errors to the NHS Representative and Institute and ensure all necessary corrective plans and rectification plans are implemented immediately thereafter.
- Implement a monthly report of clinical performance including audit results by

- each clinician, showing volume of Activity Outputs undertaken in the period
- Take appropriate remedial action where audit rates of category 1 and 2 discrepancies are above 5% in any (6) month period. As defined below:

CATEGORY 5	Perfect report – complete agreement – Could not be improved upon.
CATEGORY 4	Trivial difference in opinion - report need not be amended.
CATEGORY 3	Minor disagreement - unlikely to be of any clinical significance - but report should be amended for the sake of completeness of the patient's record (eg, a lesion which one reader thinks is benign but may be malignant and the other thinks is malignant but may be benign).
CATEGORY 2	Moderate disagreement - could well be of clinical significance - report needs to be amended on an urgent basis in order to prevent inappropriate treatment.
CATEGORY 1	Major error in interpretation - likely to lead to adverse outcome - The referring clinician must be informed about the amended report.

The design and process of the audit will be defined prior to service commencement

Appendix 2

Standards and Equipment:

Specification	Minimum Requirements
Configuration of PET component	Full ring
ET detector material	BGO/GSO/SO or similar (not Na I)
CT slice options	6
PET acquisition modes	3D or 2D/3D
Maximum co-scan range (CT and PET)	greater or equal to 150cm
Maximum patient weight	greater or equal to 180kg
Patient port diameter	greater or equal to 59 cm
In-plane spatial resolution	<6.5mm
Axial resolution	<6.5mm
Sensitivity (3D)	greater or equal to 4.0 cps/ kq
Sensitivity (2D)	greater or equal to 1.0 cps/kq
Uniformity	<5%
CT field of view	50cm

- Ionization Chamber Dose Calibrator
- Resuscitation equipment
- Pulse oximeter

The Provider should follow the standards for Quality Assurance on PET-CT

equipment as shown in the Institute of Physics and Engineering in Medicine (IPEM) report "Quality Assurance of PET and PET/CT Systems".

Appendix 3

Patient Referral Information

Referrals shall include:

- Clinical data:
 - Type of Scan, anatomical area(s) to be investigated, and clinical question(s)
 - prompting the investigation
 - Focused history, ICD10 code at the time of referral, the type and site of malignancy, dates of diagnosis and treatment (biopsy results, surgery, radiation, chemotherapy and administration of bone marrow stimulants and steroids) and current medications
 - History of diabetes, fasting state, renal disease and recent infection
 - NHS Patient's ability to lie still for the duration of the image acquisition
 - History of claustrophobia
 - NHS Patient's ability to put his or her arms overhead
 - Details of all treatments or medication that could cause a Contraindication to the Tracer or CT contrast agent to be administered or the Scan (e.g. metformin)
 - details of current medications and any other known allergies (e.g. allergies to intravenous contrast agent or Tracer)
 - Last Menstrual Period or pregnancy/breast feeding status of all females of child bearing age together, if required, with a pregnancy test result to confirm negative status, in accordance with the Joint Royal College of Radiologists/College of Radiographers/National Radiological Protection Board Guidance entitled "Advice on Exposure to Ionising Radiation during Pregnancy" published in 1998
 - Relevant previous images and reports (including photocopies of results if appropriate and the dates of such investigations and reports)
 - Any special needs (e.g. interpreter required, disabilities requiring special manual handling, carer support)
 - Details of community support services in place, if appropriate (e.g. ambulance services, carer support)
 - Date and time of Referral
 - noted access to or copies of relevant prior imaging
- Administrative data to be collected:
 - Basic contact information for the Patient including: full name (and title), the name of the parent or carer (if appropriate), sex, ethnicity, NHS Number, date of birth, marital status (or civil partnership status), address and postcode, home and daytime telephone number, evening telephone number, mobile telephone number and/or e- mail contact details for the patient if available.
 - Name, address, NHS email address and telephone number of the Referring clinician and any other Healthcare Professionals who are to

receive copies of the Activity Output, the definition of which is: a Diagnostic Report and a Digital Medical Image (full CT and PET CT data set, axial, coronal and saggital datasets fused and non-fused)

- The date of the NHS Patient's initial appointment with the Patient's Referring Clinician.
- Referral Clinical Commissioning Group (CCG) code, Referring clinician practice code, Patient's GP telephone number and email address and Patient's GP address.
- The name, address and telephone number of the Patient's choice of next of kin.
- Any relevant social or domestic history, including mobility, home environment and family circumstances; and
- Any relevant factors influencing the Patient's ability to receive and responding to communications including without limitation lack of fluency in English, visual or auditory impairments etc.
- If a Referral does not have all the Patient Referral Information required as set out in 12.1 and such information is clinically necessary to produce the Activity Output, or it is clinically unsafe to proceed the Provider shall:
 - o contact the Referring clinician for the required information within 24 hours of receipt of the Referral
 - o make enquires on the successor to the Personal Demographic Service 1; and
 - o contact the Patient to obtain the necessary information prior to conducting the Scan, if the information cannot be provided by the Referring clinician and is not of a clinical nature

Service Line	Dashboard Name	Measure	Measurement definition	Numerator	Denominator	How much data should be aggregated	Frequency	Data collection	Data presentation	Data Thresholds
Diagnos tics	PETCT	Clinician Satisfac tion	Clinician/MDT Satisfac tion survey negative response rate of 15% or below	Number below satisfactor y	Total Number of returns	Quarterly	Quarterly	Provider	Run Chart	
Diagnos tics	PETCT	Injected Tracer scan failure	Number of patients injected with Tracer that do not undergo a Scan	Num ber of Incid ents occu rred	Total number of patients	Quarterly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Availabili ty of Previous relevant imaging	When required, availabilit y of relevant previous images to Reporters at	Numb er of instan ces where unava ilable	Number of instance s when previous images required	Quarterly	Monthly	Provider	Run Chart	

Diagnos tics	PETCT	Deliver y F ail ur e	90%. The percenta ge of booked scans complet ed, unaffec ted by equipme nt failures - includin g isotope delivery	Contractu al Scanning slots lost	Total contracte d slots	Quarterly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Upheld complai nts	Number of complai nts upheld followin g the operatio n of the NHS Complai nts Procedu re	Number of cases upheld	Total number of patients referred	Quarte rly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Complain t Action Plan failure	Number of Action Plans as a result of an upheld complai nt not complete d within agreed timescal es	Num ber of Plan s brea chin g	Total number of action plans	Quarte rly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Patient satisfacti on	Patient Satisfacti on to be 96% or above	num ber of patie nts satis fied	Minimum 10% of scanned patients randomly chosen	Quarte rly	Quarterly	Provider	Run Chart	
Diagnos tics	PETCT	Incompl ete Referra ls	Number of referrals that are received which have incomple te informati on	Number of referrals with incomple te informati on	Total number of referrals	Quarte rly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Contract ual timefram es met	% of patients complete d Activities undertake n within contractu al timeframe s	% successf ul	All completed	Quarte rly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Clinical	Numbers	Number	Total	Quarte rly	Monthly	Provider	Run	

ics		Cancellations	of patients cancelled for clinical reasons	of patients clinically cancelled	number of referrals	ly			Chart	
Diagnos tics	PETCT	Non clinical Cancellat ions	Number of patients cancelled for Non Clinical Reasons	Number of patients cancelle d for non clinical reason	Total number of referrals	Quarterly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Procedur e times	Percenta ge of patients whose procedur e commen ced within 30mins of the stated appointm ent time	Number of procedur es proceedin g within 30mins of appointm ent time	Total number of procedur es	Quarterly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Patient Appoint ment	Percenta ge of patients offered at least two appointm ents on two different days and from those the % of patients who accept the first appoint ment	% of patients taking up the first appointm ent date offered	Total number offered at least two appointm ents on two different occasion s	Quarterly	Monthly	Provider	Run Chart	
Diagnos tics	PETCT	Image quality	Number of instance s where images are classified by the reporter as non diagnosti c quality	Number of instance s	Total number of scans produce d	Quarterly	Monthly	Provider	Run Chart	

ANNEX 1 TO SERVICE SPECIFICATION:

PROVISION OF SERVICES TO CHILDREN

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

The generic aspects of care:

The Care of Children in Hospital (HSC 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, 2008.

Imaging

All services will be supported by a three tier imaging network (*Delivering quality imaging services for children* Department of Health, 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 CPD
- 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

1. GPAS Paediatric anaesthetic services. RCoA 2010 www.rcoa.ac.uk
2. CCT in Anaesthesia 2010
3. 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/>)
- 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 2 RCNs 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 organised so that:

- All those involved in the care, treatment and support cooperate with 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 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.*