

Children and Adolescents - Admission to Services Designated Level 1-3 Paediatric Medicine & Surgery

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Summary This policy provides information and guidance to clinicians and hospital administrators regarding appropriate assessment and admission of presenting patients for paediatric medicine and paediatric surgery in NSW Health facilities with paediatric services designated as levels 1-3 in line within the Guide to the Role Delineation of Health Services, NSW Department of Health, third edition, 2002.

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Applies to Area Health Services/Chief Executive Governed Statutory Health Corporation, Board Governed Statutory Health Corporations, Affiliated Health Organisations - Non Declared, Affiliated Health Organisations - Declared, Public Health System Support Division, Community Health Centres, NSW Ambulance Service, Public Health Units, Public Hospitals

Audience Emergency Departments, Paediatric Units

Distributed to Public Health System, Divisions of General Practice, Government Medical Officers, NSW Ambulance Service, NSW Department of Health, Private Hospitals and Day Procedure Centres, Tertiary Education Institutes

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Director-General

This Policy Directive may be varied, withdrawn or replaced at any time. Compliance with this directive is **mandatory** for NSW Health and is a condition of subsidy for public health organisations.

MANAGEMENT OF ADMISSION OF CHILDREN AND ADOLESCENTS TO SERVICES DESIGNATED LEVEL 1-3 PAEDIATRIC MEDICINE & PAEDIATRIC SURGERY

PURPOSE

This policy provides information and guidance to clinicians and hospital administrators regarding appropriate assessment and admission of presenting patients for paediatric medicine and paediatric surgery in NSW Health facilities with paediatric services designated as levels 1-3 in line within the *Guide to the Role Delineation of Health Services, NSW Department of Health, third edition, 2002*.

The purpose of the policy is to:

Provide paediatric role delineated medical/surgical services 1-3 with a framework within which to provide paediatric patients appropriate and safe care at all times.

Encourage appropriate treatment for children and adolescents as close as possible to their home.

Ensure timely escalation of care for children and adolescents requiring higher levels of care due to deteriorating and/or complex health conditions.

Facilitate the development and implementation of appropriate local AHS policy and procedure for levels 1-3 paediatric medical and surgical services.

MANDATORY REQUIREMENTS

This policy applies to all facilities where paediatric patients are managed. It requires all Health Services to have local guidelines/protocols based on the attached clinical practice guideline in place in all hospitals and facilities likely to be required to assess or admit children.

IMPLEMENTATION

Area Health Service Chief Executives or delegated officers are required to communicate the information contained within this Policy to relevant facilities and staff. Area Health Services are required to engage relevant clinicians and ensure that consistent local protocols or operating procedures are developed and distributed to relevant clinical areas. Facilities that regularly provide paediatric care would benefit from the development of local protocols to encourage appropriate paediatric involvement for *all* children, including those under the care of an adult clinician.

REVISION HISTORY

Version	Approved by	Amendment notes
June 2010 (PD2010_032)	Director-General	New Policy

ATTACHMENTS

1. Management of Admission of Children and Adolescents to Services Designated Level 1-3 Paediatric Medicine & Paediatric Surgery - Clinical Practice Guideline.

**Management of Admission of Children and
Adolescents to Services Designated Level 1-3
Paediatric Medicine & Paediatric Surgery**

NSWHEALTH
Clinical Practice
Guideline

Issue date: June 2010

PD2010_032

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Note: this policy has been informed by relevant documents developed by AHSs and the NSW Child Health Networks.

1 BACKGROUND

Level 1-3 paediatric services play an important role in local communities in the provision of healthcare to children and adolescents, particularly in rural and remote areas. Whilst aiming to provide the best possible care as close as possible to where children live, it is not feasible to provide all services at all facilities. The *NSW Health Guide to Role Delineation of Health Services* (2002) outlines six possible levels of paediatric medical and surgical service delivery, and broadly describes the paediatric care that can be delivered at a facility.

Given variations in the configuration of level 1-3 services in terms of staffing, resources and available clinical expertise, it is important that Area Health Services [AHSs] recognise these differences and tailor local paediatric service provision accordingly. Support for local clinicians to maintain and further develop their paediatric clinical skills is also important through:

- Providing a safe and appropriate range of local paediatric medical and surgical services.
- Ensuring effective paediatric networking arrangements are in place across the AHS.
- Ensuring effective mechanisms for monitoring clinical safety and quality.
- Ensuring staff have access to ongoing professional and clinical education opportunities to ensure their skills are maintained and appropriately updated.

The definition of a child in this policy document is any person under the age of 16 years, neonates excluded. It is acknowledged that adolescents are defined as those of an age 12-18 years. Discretion should be applied in relation to adolescents older than 16 years. Clinical judgement/previous paediatric admissions should be considered when deciding if the older adolescent is suitable for accommodation in a paediatric unit.

For a list of definitions for specific terms used in this document, refer to Appendix 1.

2 PURPOSE

This policy provides information and guidance to clinicians and hospital administrators regarding appropriate assessment and admission of presenting patients for paediatric medicine and paediatric surgery in NSW Health facilities with paediatric services designated as levels 1-3 in line within the *Guide to the Role Delineation of Health Services, NSW Department of Health, third edition, 2002* (see Appendix 2 & 3).

The purpose of the policy is to:

- Provide paediatric role delineated medical/surgical services 1-3 with a framework within which to provide paediatric patients appropriate and safe care at all times.
- Encourage appropriate treatment for children and adolescents as close as possible to their home.

- Ensure timely escalation of care for children and adolescents requiring higher levels of care due to deteriorating and/or complex health conditions.
- Facilitate the development and implementation of appropriate local AHS policy and procedure for levels 1-3 paediatric medical and surgical services.

3 IMPLEMENTATION

Area Health Service Chief Executives or delegated officers are required to communicate the information contained within this Policy to relevant facilities and staff. Area Health Services are required to engage relevant clinicians and ensure that consistent local protocols or operating procedures are developed and distributed to relevant clinical areas. Facilities that regularly provide paediatric care would benefit from the development of local protocols to encourage appropriate paediatric involvement for *all* children, including those under the care of an adult clinician.

4 NSW HEALTH PAEDIATRIC SERVICE ROLE DELINEATION LEVELS 1-3

The following definitions are taken from the *Guide to the Role Delineation of Health Services, NSW Department of Health, third edition, 2002*.

4.1 Role delineation Level 1

Role delineation Level 1 Paediatric Medicine

No planned inpatient paediatric medical service or designated beds. Provides primary and emergency care; and stabilisation for children prior to moving to appropriate higher level of service. Quality assurance activities. Interpreters as per Policy Directive PD2006_053.

Role delineation Level 1 Paediatric Surgery

No planned inpatient paediatric surgical service. Provides primary emergency care; and stabilisation for children prior to moving to appropriate higher level of service. Quality assurance activities. Interpreters as per Policy Directive PD2006_053.

4.2 Role delineation Level 2

Role delineation Level 2 Paediatric Medicine

Designated paediatric inpatient in a general hospital in an outlying and geographically isolated area. May have isolation capacity. Accredited Medical Practitioner on call. Formal consultative links with paediatrician. Would be used for only minor medical conditions or convalescence following referral from a higher level unit. RNs with skills consistent with a competent Paediatric Nurse. Continuing nursing educational programs available. Able to provide accommodation for parents or carers.

Note there is no role delineation Level 2 for Paediatric surgery

4.3 Role delineation Level 3

Role delineation Level 3 Paediatric Medicine

As Level 2, plus designated paediatric ward/area with patient amenities. Has isolation capacity in separate rooms. Provides for common medical conditions. NUM, preferably with post basic clinical qualifications or access to CNC within the area and RN's with skills consistent with a competent Paediatric Nurse. Some RNs undertaking relevant post graduate studies. Has 24 hour access to Medical Officer on site or available within 10 minutes. Access to allied health professionals. Formal link to community child and family health service. Formal quality assurance program.

Role delineation Level 3 Paediatric Surgery

Except in emergencies, children under the age of one year should not be admitted. Minor elective and selected moderate surgical procedures on ASA category 1 and 2 children over the age of 1 year performed by General Surgeons or Accredited Medical Practitioners credentialed in paediatric surgery, and Specialist Anaesthetists or Medical Practitioners with appropriate paediatric anaesthetic experience and/or qualification as determined by the credentialing process involving the relevant colleges. Appropriate surgical, anaesthetic and resuscitation equipment available. Has 24 hour access to Medical Officers on site or available within 10 minutes. RN with skills consistent with a competent Paediatric Nurse caring for the child. Continuing nursing educational programs available specific to the needs of the service. Formal consultative links with Paediatrician and Paediatric Surgeons. Amenities for parents or carers. Operating suite and recovery room provider for the special needs of children and carers. Formal quality assurance program.

5 ASSOCIATED POLICIES AND GUIDELINES

- *Guide to the Role Delineation of Health Services*, NSW Department of Health, third edition, 2002, including the Indicative List of Paediatric Surgical Procedures for General Surgery and Levels of Risk of Children.
- *The Australasian Triage Scale*, Australasian College of Emergency Medicine 2000.
- *Guidelines for the Care of Children in Acute Care Settings*, [PD2010_034](#) NSW Department of Health revised 2010.
- *NSW Clinical Practice Guidelines for Paediatric Care*, various <http://www.health.nsw.gov.au/publichealth/clinicalpolicy/paediatric.asp>
- *NSW Health Paediatric Surgery Model for Designated Area Paediatric Surgical Sites*, NSW Surgical Services Taskforce Paediatric Surgery Sub Group 2008.
- *Statement on Anaesthesia Care of Children in Healthcare Facilities without Dedicated Paediatric Facilities*, Australian and New Zealand College of Anaesthetists 2008.
- *Guidelines for Networking of Paediatric Services in NSW*, NSW Department 2002.
- *Safety and Security of children in NSW Acute Health Facilities*, [PD2010_033](#) NSW Department of Health 2010.
- *Paediatric Inter-Facility Transfer*, [PD2010_031](#) NSW Department of Health 2010.
- *Recognition of a Sick Child in Emergency Departments: Clinical Practice Guidelines*, [PD2005_382](#) NSW Department of Health 2005.

- *Standards for the Care of Children and Adolescents in Health Services*, Royal Australian College of Physicians, 2008.
- *Competencies for the Specialist Paediatric and Child Health Nurses* available at: <http://www.accypn.org.au/downloads/competencies.pdf>
- *Visiting practitioners and staff specialists delineation of clinical privileges*, PD2005_497 NSW Department of Health 2005.

6 PAEDIATRIC PRESENTATION TO HEALTH CARE FACILITIES

6.1 Triage

Children presenting to the Emergency Department will be triaged as per the Australasian Triage Scale (ATS) (2000 ACEM). This will occur as soon as possible after arrival by the Registered Nurse. The NSW Health '*Recognition of a Sick Child in Emergency Departments*' Clinical Practice Guideline should be used as an adjunct to the triage process; as well as consultation with the parent/carer.

All infants and children presenting to the emergency department must have a full set of observations taken and recorded at the point of triage based on the presenting symptoms. The minimum data recorded should include temperature, weight, heart rate (by palpation, auscultation or ECG) respiration rate and respiratory effort (any patient with a respiratory condition should also have pulse oximetry with air entry, breath sounds and respiratory effort assessed). A blood pressure must be recorded at some stage during the presentation and should be taken as soon as practicable in ATS 1 & 2 patients. The recording of some observations may be deferred if doing so may compromise the patient's airway for example in epiglottitis or life threatening croup.

In specific clinical presentations additional observations must be documented. In cases involving head injuries and altered level of consciousness, a Paediatric Glasgow Coma Score must be recorded as clinically indicated. A validated age-appropriate pain score must be documented for all paediatric patients. If a child presents with a suspected fracture then neurovascular observation must be commenced on the affected limb or digit.

6.2 Presentation for routine admission

For children being admitted for routine medical procedures [eg IV antibiotics] or elective surgery in a designated Level 3 Paediatric Surgical facility, routine paediatric admission procedures are to be undertaken.

6.3 Assessment

NSW Health has published *Clinical Practice Guidelines* for the most common paediatric presentations to the Emergency Department. Clinicians should refer to these for assessment and care of children with these specific health conditions.

6.3.1 Facilities with on-site medical cover available

All paediatric patients presenting to the health facility should be assessed by the Attending Medical Officer (AMO) or ED doctor rostered on duty.

6.3.2 Facilities without on-site medical cover available

All paediatric patients presenting to the Emergency Department should be assessed as soon as possible by a registered nurse (RN) with current First Line Emergency Care (FLEC) course or other current recognised emergency or paediatric accreditation who will:

- Make an assessment to determine the reason for presentation and the clinical condition of the patient and document findings.
- Commence nursing interventions appropriate to the competency of that RN.
- Contact the on-call AMO about **all** children less than 3 months of age and coordinate an assessment of the infant by an AMO in a time appropriate to their triage category.
- Ensure the on-call AMO is consulted or made aware of all paediatric presentations in a timely manner according to their clinical condition. This consultation process should follow a site specific protocol.
- Where the child's condition is considered to be non-urgent and it is deemed safe and appropriate by the AMO, the patient/carer may be given the choice to see the AMO at a later time as an alternative to waiting in the ED to be seen.

6.4 Consultation with the On Call Specialist Paediatrician

In accordance with the AHS established networking arrangements, consultation with an on call specialist paediatrician and/or appropriate other specialist should occur if the infant or child:

- is unstable.
- has no definitive diagnosis.
- has no clear signs of clinical improvement following initial treatment.
- is subject to any suspicion of child protection issues.
- is subject to any degree of concern for a safe patient outcome.
- has significant co-morbidity.

Clinicians should refer to any relevant local AHS protocols with regard to consultation pathways and escalation processes.

All paediatric acute mental health presentations should be discussed with appropriate paediatric mental health staff or mental health staff with paediatric experience. In addition a risk management assessment should occur in relation to the physical environment prior

to admission to a general paediatric unit for children under twelve years with behaviour and or mental health issues.

6.5 Paediatric Safe Beds/Areas

Not all facilities will have a paediatric unit, however all children must be located in *paediatric safe beds*. A *paediatric safe bed* is a bed that can be located anywhere within a facility [including ED, Imaging or a general ward] that meets the criteria for ensuring the safety of the child. A paediatric safe bed must meet minimum conditions, including ensuring that the child can be observed appropriately in line with clinical acuity, that clinical care is provided by staff who are experienced in providing paediatric care and there is attention to issues related to the physical safety of children. A list of the minimum requirements for a paediatric safe bed can be found in Appendix 1. If a paediatric safe bed is not available a child should not be cared for in the facility.

Paediatric wards in Level 3 services must also satisfy additional minimum requirements for a safe paediatric ward/unit/area, including:

- The area must be functionally separated from any adult patients preferably with a secured door that cannot be opened by young children.
- There must be a designated Paediatric NUM.
- There must be facilities available to allow age appropriate play including a designated and appropriately equipped play area.

A list of the minimum requirement for paediatric wards can be found at Appendix 1.

In addition, facilities should note the requirements for safety and security of children as specified in the *Policy: Safety and Security of Children in NSW Acute Health Facilities*, PD2010_033 NSW Department of Health 2010.

6.6 Medical Plan of Care

Any paediatric patient in a health facility must have a clearly defined and documented medical plan which specifically states:

- Medical requirements (consistent with the relevant NSW Health Acute Paediatric Clinical Practice Guideline; or according to clinical need where no Guideline exists).
- Fluid hydration and nutrition needs with paediatric fluid balance chart maintained.
- Observation type and frequency (this will be determined by patient acuity) should include, pulse, temperature, respirations, level of activity, colour and capillary refill. Frequency of observations must, at a minimum, be consistent with the expectations of the paediatric *Between the Flags* policy.
- The changes in patient condition that need to be notified to the AMO (the management plan must include the AMO's contact details for staff to use if there are concerns).

- Expected review intervals & estimated date of discharge.

A comprehensive and contemporaneous record of care must be documented in the patient's health record with changes in condition noted at the time they occurred including actions taken.

6.7 Length of Stay

6.7.1 Level 1 Facilities

Paediatric patients may be observed in the Emergency Department [or paediatric safe bed], in consultation with the Nurse Manager (or delegate) if their condition is stable and they are expected to be discharged home within 8 hours. Eight hours is the maximum observation period, however, AHSs may introduce local protocols mandating reduced observation time if required due to limitations in resources and staffing.

If it is considered at any point during the observation period that it is unlikely the child will be able to be discharged within 8 hours, consultation should occur between local medical/nursing staff and the Paediatrician on call and/or other appropriate specialist, to make a decision about transfer to a higher level paediatric unit. Consideration should be given to transferring to a facility that can provide definitive care. Where relevant, contact should be made with the AHS Patient Flow Unit to assist in communication and coordination of transfers.

The only exception to the above is in circumstances where the child is deemed to be clinically fit for discharge, but there are extenuating social circumstances that warrant an extension of the time the child remains in hospital. This refers to logistical rather than clinical factors such as availability of the AMO, time of day/night, availability of transport etc, which may dictate a slightly longer stay in the otherwise well patient who is clinically ready for discharge.

Paediatric patients will only be observed as described above in the Emergency Department [or paediatric safe bed] if there are appropriate staffing levels and skill mix to meet care and observation requirements. Consideration should be given to:

- The number & acuity of patients in the ED and facility.
- The experience and expertise of rostered medical and nursing staff in managing and caring for paediatric patients (including the oncoming shift if relevant).
- The type of equipment and level of care required for safe clinical practice.
- The level of medical support available.
- The presence of an appropriate plan of care documented in the medical record.

During the observation period consultation with the on call paediatrician, emergency physician or appropriate other specialist should occur if:

- The infant or child's condition becomes unstable.
- There are no expected signs of clinical improvement during treatment.

- There are any concerns/uncertainty regarding the patient's condition.
- The clinical symptoms no longer support the presumptive diagnosis.

No paediatric patient will be discharged unless they have been medically reviewed and the AMO has specified the discharge requirements in writing. Parents should be given relevant discharge information.

6.7.2 Level 2 Facilities

Paediatric patients may be observed in the Emergency Department [or paediatric safe bed], in consultation with the Nurse Manager (or delegate) if their condition is stable and they are expected to be discharged home within 12 - 24 hours. This is the maximum observation period, however, AHSs may introduce local protocols mandating reduced observation time if required due to limitations in resources and staffing. The considerations outlined above for level 1 facilities related to decisions to keep a child for observation also apply to level 2 facilities.

If it is considered at any point during the observation period that it is unlikely the child will be able to be discharged within 12-24 hours, consultation should occur between local medical/nursing staff and the Paediatrician on call and/or other appropriate specialist, to make a decision about transfer to a higher level paediatric unit. Consideration should be given to transferring to a facility that can provide definitive care. Where relevant, contact should be made with the AHS Patient Flow Unit to assist in communication and coordination of transfers.

The only exception to the above is in circumstances where the child is deemed to be clinically fit for discharge, but there are extenuating social circumstances that warrant an extension of the time the child remains in hospital. This refers to logistical rather than clinical factors such as availability of the AMO, time of day/night, availability of transport etc, which may dictate a slightly longer stay in the otherwise well patient who is clinically ready for discharge.

During the observation period consultation with the on call paediatrician, emergency physician, or appropriate other specialist should occur if:

- The infant or child's condition becomes unstable.
- No expected signs of clinical improvement during treatment.
- There are any concerns/uncertainty regarding the patient's condition.
- Clinical symptoms no longer support the presumptive diagnosis.

Decisions to keep a child for observation should take into consideration the current resources such as nursing skills as well as the projected skills and experience available in the following shift/s.

No paediatric patient will be discharged unless they have been medically reviewed and the AMO has specified the discharge requirements in writing.

6.7.3 Level 3 Facilities

The maximum length of stay for paediatric patients in a level 3 paediatric medical facility is generally not expected to exceed 3 days. Children with a longer expected length of stay should be discussed between the local medical/nursing staff and a paediatrician or appropriate other specialist as there may be circumstances under which it is deemed appropriate for a child to stay longer than three days, for example a child who requires long term antibiotics in the absence of significant acute illness and who may be appropriately managed with paediatric support. AHSs may also introduce local protocols mandating reduced LOS if required due to limitations in resources and staffing.

Consultation with the on call specialist paediatrician or appropriate other specialist should reoccur to establish the need for transfer to higher care if:

- The infant or child's condition becomes unstable;
- The child has no clear signs of clinical improvement during ongoing treatment;
- There is any degree of concern for a safe patient outcome; or
- Discharge is not immediately imminent at 72 hours.

Consideration should be given to transferring to a facility that can provide definitive care. Where relevant, contact should be made with the AHS Patient Flow Unit to assist in communication and coordination of transfers.

No paediatric patient will be discharged unless they have been medically reviewed and the AMO has specified the discharge requirements in writing.

6.8 Surgical Admissions

Access to non-tertiary paediatric surgical services at Level 3 facilities is an important component in the timely treatment of paediatric patients as close as possible to home. Children over the age of 12 months may be admitted for surgery to a designated level 3 paediatric surgical service provided that:

- The scope of surgery is minor elective and/or selected moderate surgical procedures. An indicative list of paediatric surgical procedures is at Appendix 6.
- Children fall into ASA (American Society of Anesthesiologists) pre-operative evaluation of physical status category 1 or 2. The ASA Level of Risk classification is at Appendix 7.
- Paediatric surgery is provided by surgeon(s) with experience and/or qualifications in the relevant fields of paediatric surgery as determined by the facility's credentialing process.
- Anaesthesia and related post-operative treatment including pain management is provided by an anaesthetist with appropriate experience and/or qualifications in paediatric anaesthesia, as determined by the facility's credentialing process; unless a life threatening emergency makes this impossible.
- There is appropriate paediatric medical and surgical equipment in the operating room. A list of requirements is outlined in Appendix 4.

- There are arrangements for separation of adult and child patients both in operating theatres and recovery wards (eg. through use of screens, or scheduling of cases).
- The facility has 24 hour access to Medical Officers on site or available within 10 minutes.
- A Registered Nurse with skills consistent with a competent Paediatric Nurse cares for the child.

7 Security of Children

The physical and emotional wellbeing of the child and adolescent is paramount at all times and staff should never feel obliged to keep patients because of pressure from carers or others when the child or adolescent's clinical needs or safe conditions as outlined in this policy cannot be met. AHSs must ensure that all medical and surgical services including levels 1-3 have in place local policies and procedures consistent with the requirements set out in the NSW Policy: *Safety and Security of Children in Acute NSW Health Facilities* PD2010_033 with respect to such issues as:

- Child protection.
- Physical environment including the use of paediatric safe beds.
- Ensuring children are not colocated with adults.
- Temporary removal and/or discharge of children.
- Care of children under orders.

8 Parents/carers

It should be possible for a parent/primary carer or designated proxy to remain with the infant or child at all times and have informed participation in all decisions involving their health care. Preferences of adolescent patients should be respected with respect to having a parent present.

Parents/primary care giver are to be notified of any pending transfer arrangements for their child.

Amenities should be provided to facilitate the comfortable stay of parents/primary carers at the child's bedside.

Parents/primary carers are to be orientated to the relevant areas within the facility and relevant practices to assist them to safely assist with the basic care needs of their child.

Parents/primary carers of children requiring surgery should be able to accompany their child to the operating theatre and have access to the recovery room. When agreed with the attending anaesthetist, parent/primary carers should be offered the choice to be present at the induction of the child's anaesthetic, unless medically not indicated.

9 Resources

9.1 Staffing

All attending medical officers providing assessment, treatment or observation of paediatric patients must have appropriate credentialling for paediatric and/or emergency patients by the Area Health Service or local network to do so. Medical Officers should refer to their local AHS credentialling protocols for more information. It is highly recommended that attending medical officers caring for paediatric patients maintain currency in an accredited paediatric advanced life support course.

Nursing staff caring for children in level 1 services without doctors on site should have completed a current First Line Emergency Care [FLEC] course or other current recognised emergency or paediatric accreditation course and undertake annual accreditation as required.

Nursing staff caring for children in services designated 2 and 3 should satisfy the criteria of a 'competent paediatric nurse' as outlined in *Competencies for the Specialist Paediatric and Child Health Nurses* [available at: <http://www.accypn.org.au/downloads/competencies.pdf>]. In addition they must be familiar with NSW Health Paediatric Clinical Practice Guidelines and local paediatric clinical pathways and protocols. They should also have experience in using clinical skills and tools to recognise a sick child. [NSW Paediatric Clinical Practice Guidelines, NSW PD2005_382: *Recognition of a Sick Child in Emergency Department.*]

All sites that regularly care for children must ensure both medical and nursing staff attend paediatric education. All staff are required to attend Basic Life Support education every 12 months and staff involved in active resuscitation are also required to attend Paediatric Advanced Life Support or Advanced Resuscitation/Skills days at least every 3 to 5 years. Staff should also comply with education requirements mandated by their AHS and the NSW Department of Health.

In level 3 services, a schedule of paediatric education provided by those with paediatric expertise within the unit and from outside sources should be occurring regularly.

9.2 Physical Resources

AHS paediatric medical and/or surgical sites must have a minimum of paediatric medical equipment required for their designated level. Requirements for levels 1-3 are set out in Appendix 5.

Localised flowcharts, paediatric forms and policies for the care of children must be in place.

Designated Level 1 and 2 services

Level 1 & 2 services must identify suitable beds in the ED that meet the criteria of a 'paediatric safe bed'.

Designated Level 3 services

Level three services must have designated areas specifically designed for the safe care of children that comply with the requirements of the NSW Health document *Guidelines for Care of Children and Adolescents in Acute Care Setting PD2010_034* revised June 2010. Play equipment, designated play areas and appropriately screened volunteer play facilitators should be available.

A treatment room should be available for all invasive and potentially painful procedures.

Paediatric linen, clothing and nappies will need to be available. Facilities for the preparation, cleaning and storage of formula and associated equipment should be available. Paediatric age appropriate meals must be available.

10 APPENDICES

10.1 Appendix 1: Definitions

Competent Paediatric Nurse

The Nurse:

- Assesses a child's normal parameters, recognises the deviations from the normal and acts appropriately on the findings.
- Demonstrates a broad knowledge of growth and development.
- Calculates and administers medications and other preparations to children safely.
- Demonstrates an understanding of the effects of hospitalisation on children and families.
- Communicates effectively and works in partnership with children and families.
- Demonstrates knowledge of conditions and their management relevant to their area of childhood clinical practice.
- Commences and maintains effective basic paediatric life support.
- Recognises and challenges management that compromises the child's safety.
- Utilises contact with the child and family to promote child health i.e. immunisation, child safety.
- Demonstrates an awareness of appropriate Federal and State legislation and policies and acts accordingly.

For a more comprehensive explanation of paediatric nursing competencies go to <http://www.accypn.org.au/downloads/competencies.pdf>

Paediatric Safe Bed

Not all facilities will have a paediatric unit, however, all children must be located in a *paediatric safe bed*. A *paediatric safe bed* is a bed that can be located anywhere within a facility [including ED, Imaging or a general ward] that meets the criteria for ensuring the safety of the child. A paediatric safe bed must meet the following minimum conditions:

- Must be able to be observed.
- The bed area must be immediately accessible to paediatric specific emergency equipment.
- Must have sufficient nurses allocated per shift to ensure adequate supervision and care relevant to admitted patient acuity.
- Nursing staff caring for the child must be familiar with local NSW Health paediatric guideline protocols and be competent in using recognition of the sick child skills and tools.
- Nurses caring for children should have skills equivalent to that of the 'competent paediatric nurse' as defined in the document *Competencies for the Specialist Paediatric and Child Health Nurses* [available at: <http://www.chnwa.org.au/docs/ACPCHN.pdf>]
- Must be physically safe for children with any potentially dangerous equipment, medications, chemicals or fluids out of reach or in locked cupboards.
- Has appropriate furniture that is child safe and meets appropriate Australian Standards for children. e.g. appropriate cots for children 2 years of age or less.
- Parents/visitors must not take hot drinks to children's bedsides.

- The facility should comply with the requirements of the NSW Breastfeeding Policy for the care of paediatric patients and support continued breastfeeding among infants and children by providing facilities and breastfeeding advice to mothers as well as breast milk collection and breast milk storage facilities. Provision must be made for the safe preparation of infant formula if necessary.
- It should be possible for parents or primary carers to stay with their children during admission.
- Parent's current contact details must be ascertained at presentation.
- Other patients in the hospital must not pose a significant psychological, physical or sexual risk to the child.
- Basic equipment should be present to allow age appropriate play, for example a TV and video/DVD/games console with age appropriate media, books or board games.

Paediatric safe ward/area

In addition to the criteria outlined above for paediatric safe beds, a *paediatric ward/area* must also meet the following minimum conditions:

- Must be functionally separated from any adult patients preferably with a secured door that cannot be opened by young children.
- Must be covered by a 24-hour medical roster with doctors credentialed in the care of paediatric patients.
- Must have a NUM, preferably with post basic qualifications or access to a CNC.
- Parents or primary carers should have access to bedside sleeping facilities and ideally a kitchenette with fridge and microwave to allow them to provide for their own and children's nutritional needs when appropriate.
- Physical safety requirements must include regulated hot water temperature and secure electrical outlets
- Must have facilities available to allow age appropriate play including a designated and appropriately equipped play area.

Paediatrician

- Fellow of the Royal Australian College of Physicians and/or other specialist recognition as approved in the *Staff Specialists [State] Award* and/or who is a specialist as a defined in the *Health Insurance Act 1973* [Commonwealth].

Parent/Primary carer

Parent/s or person living with the child and assuming legal responsibility for, and providing direct care. This includes birth parent, step-parent, foster parent, legal guardian, custodial parent or safe and appropriate primary care giver.

10.2 Appendix 2: Role Delineation – Paediatric Medicine

39 PAEDIATRIC MEDICINE

Level	Description	Minimum Level Of Support Services							
		Path	Phar	Imag	Diag	NMed	Anaes	ICU	CCU
1	No planned inpatient paediatric medical service or designated beds. Provides primary and emergency care; and stabilisation for children prior to moving to appropriate higher level of service. Quality assurance activities ⁽²⁾ . Interpreters as per Circular 94/10.	1	1	1	-	1	-	*	-
2	Designated paediatric inpatient in a general hospital in an outlying and geographically isolated area. May have isolation capacity. Accredited Medical Practitioner ⁽¹⁾ on call. Formal consultative links with Paediatrician. Would be used for only minor medical conditions or convalescence following referral from a higher level unit. RNs ⁽¹⁾ with skills consistent with a competent Paediatric Nurse ⁽¹⁾ . Continuing nursing educational programs available. Able to provide accommodation for parents or carers.	3	2	3	-	3	2	*	2
3	As Level 2, plus designated paediatric ward/area with patient amenities. Has isolation capacity in separate rooms. Provides care for common medical conditions. NUM ⁽¹⁾ , preferably with post basic clinical qualifications or access to CNC ⁽¹⁾ within the Area and RNs ⁽¹⁾ with skills consistent with a competent Paediatric Nurse ⁽¹⁾ . Some RNs ⁽¹⁾ undertaking relevant postgraduate studies. Has 24-hour access to Medical Officer ⁽¹⁾ on site or available within 10 minutes. Access to allied health professionals. Formal link to community child and family health service. Formal quality assurance program ⁽²⁾ .	3	3	3	-	3	2	*	2
4	As Level 3, Designated Director of Paediatric Medical Services, plus provides integrated hospital inpatient unit, non-inpatient family and child health services, and community health services for most paediatric medical conditions. Designated adolescent area. Specialist Paediatrician on call 24 hours. Paediatric support offered to other units within the Area. Designated Medical Officer ⁽¹⁾ . May have Paediatric Registrar ⁽¹⁾ , NUM ⁽¹⁾ or access to CNC within the Area. Access to Audiology services. Allied health professionals on site.	4	4	4	4	4	4	*	2
5	As Level 4, plus Specialised Paediatric Inpatient Unit. May have some paediatric subspecialty skills. Designated adolescent unit. Has Paediatric Registrar ⁽¹⁾ on site 24 hours. Active program of undergraduate and postgraduate teaching and research coordinated with a Level 6 service. Access to CNC ⁽¹⁾ is desirable. Rostered allied health professionals on staff, including recreational therapy. School teacher available.	5	5	5	5	4	5	*	2

39 PAEDIATRIC MEDICINE

Level	Description	Minimum Level Of Support Services							
		Path	Phar	Imag	Diag	NMed	Anaes	ICU	CCU
6	As Level 5, plus most paediatric medical and surgical sub-specialties available. Designated Adolescent Ward. Clinical and diagnostic services provided by appropriately trained Paediatric Specialists. Provides some statewide services. Subspecialty consultant on call 24 hours. Has designated Subspecialty Registrar. Provides 24 hour Child Protection Services with consultant Paediatrician and Social Worker. School service for inpatients provided by Department of Education. Has research and specialist paediatric teaching role.	6	6	6	6	4	5	*	2

⁽¹⁾ See "Medical and Nursing Staff Definitions" in Appendix 1

⁽²⁾ See "Glossary" in Appendix V

* Adult CCU - not applicable

10.3 Appendix 3: Role Delineation – Paediatric Surgery

40 PAEDIATRIC SURGERY

Level	Description	Minimum Level Of Support Services							
		Path	Phar	Imag	Diag	NMed	Anaes	ICU	CCU
1	No planned inpatient paediatric surgical service. Provides primary and emergency care; and stabilisation of children prior to moving to appropriate higher level of service. Quality assurance activities ⁽⁴⁾ . Interpreters as per Circular 94/10.	1	1	1	-	1	2	*	-
3	Except in emergencies, children under the age of one year should not be admitted. Minor ⁽¹⁾ elective and selected moderate ⁽¹⁾ surgical procedures on ASA category 1 and 2 ⁽²⁾ children over the age of 1 year performed by General Surgeons or Accredited Medical Practitioners ⁽³⁾ credentialed in paediatric surgery, and Specialist Anaesthetists or Medical Practitioners ⁽³⁾ with appropriate paediatric anaesthetic experience and/or qualifications as determined by the credentialling process involving the relevant Colleges. Appropriate surgical, anaesthetic and resuscitation equipment available. Has 24 hour access to Medical Officers ⁽³⁾ on site or available within 10 minutes. RN ⁽³⁾ with skills consistent with a competent Paediatric Nurse ⁽³⁾ caring for the child. Continuing nursing educational programs ⁽³⁾ available specific to the needs of the service. Formal consultative links with Paediatrician and Paediatric Surgeons. Amenities for parents or carers. Operating suite and recovery room provide for the special needs of children and carers. Formal quality assurance program ⁽⁴⁾ .	3	3	3	-	3	3	*	3
4	Except in emergencies, children under the age of one month should not be admitted. Designated children's ward with parent amenities. Moderate ⁽¹⁾ and selected major ⁽¹⁾ surgical procedures on ASA categories 1 and 2 ⁽²⁾ children performed by Surgeons ⁽³⁾ credentialed in paediatric surgery, and Specialist Anaesthetists ⁽³⁾ with appropriate paediatric anaesthetic experience and /or qualifications as determined by the credentialling process. Medical Officer ⁽³⁾ on site 24 hours. Consultation available from specialist paediatrician. Facility to isolate in single room. Has NUM ⁽³⁾ and RNs ⁽³⁾ with skills consistent with a competent Paediatric Nurse ⁽³⁾ . Some RNs ⁽³⁾ undertaking relevant postgraduate studies. Has access to allied health professionals. May have a role in providing paediatric support to other units within the Area.	4	4	4	3	4	4	*	4

40 PAEDIATRIC SURGERY

Level	Description	Minimum Level Of Support Services							
		Path	Phar	Diag Imag	NMed	Anaes	ICU	CCU	Op/s
5	As Level 4 plus specialised paediatric inpatient unit with nominated Director of Paediatric Surgical Services. Provides most major diagnostic and treatment procedures on ASA categories 1 to 5 ⁽²⁾ children excluding complex major ⁽¹⁾ paediatric surgery on rare complex congenital malformations (frequency of less than one in 2,500 births). Specialist Surgeons (paediatric), General Surgeons ⁽³⁾ credentialed in paediatric surgery, and Specialist Anaesthetists ⁽³⁾ (paediatric) on call 24 hours. Participates in undergraduate and postgraduate teaching. Paediatric support offered to other units within the Area. Training positions for Paediatric Nurses. Paediatric Registrar ⁽³⁾ on call 24 hours. Surgical Registrar ⁽³⁾ on call 24 hours. Access to CNC ⁽³⁾ is desirable. May have teaching and research role. Rostered allied health professionals, including recreational therapy and educational services.	5	5	5	5	5	5	*	6
6	As Level 5 plus has subspecialty units in most areas of Paediatric Surgery (eg. may have paediatric neurosurgery, cardiac surgery). Provides a statewide service. Active program of undergraduate and postgraduate teaching, research and development. Paediatricians and Specialist Surgeons (paediatric) ⁽³⁾ with subspecialty interests on call 24 hours. Designated Paediatric Surgical Registrars ⁽³⁾ in subspecialty units. Has research and specialist paediatrics teaching role.	6	6	6	6	5	6	*	6

⁽¹⁾ See "Indicative List of Paediatric Surgical Procedures" in Appendix III

⁽²⁾ See "Levels of Anaesthetic Risk - Children" in Appendix II

⁽³⁾ See "Medical and Nursing Staff Definitions" in Appendix I

⁽⁴⁾ See "Glossary" in Appendix V

* Adult CCU - not applicable

10.4 Appendix 4: Equipment Requirements In Designated Level 1- 3 Paediatric Medical Facilities

General Essential Equipment

Broselow™ Tape	
Infant Scales	

Airway

Equipment	Size
Disposable Oropharyngeal Airway (Guedels)	00, 0, 1, 2
Nasopharyngeal Airway	Sizes 6,7
Introducer	Small and medium paediatric Bougie or Introducing Stylet (6FG, 10FG)
ETT	2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5 & 6.0
Laryngoscope	Small handle with batteries blade sizes 0 ,1, 2 ,3
Oropharyngeal rigid sucker	Yankeur Sucker - sizes small and large
Y Suction Catheters	Sizes FG6, FG8, FG10
Suction Tubing	
Suction Unit	
Tape	Leukoplast 'Zinc Oxide' (Brown) 1 inch roll
Magill's Forceps	Infant (18cm) and Child (20cm)
Cervical Collar	Laerdal Stifneck™ Pedi-Select Collar, Baby 'No-neck'
Nasogastric Tube	FG 8, FG 10, FG 12
pH Paper	

Breathing

Equipment	Size
Oxygen Mask (Hudson)	Paediatric Adult
Nasal Prongs	Infant Paediatric Adult
Oxygen Head Box	Non- disposable or disposable Infant Head Box
Non – Rebreather Oxygen Mask	Paediatric Adult
Self-inflating Resuscitation Bags	Preterm (240ml) Paediatric (450ml) Adult (1500ml)
Transparent Silicon Resuscitator Masks	Sizes 00, 0, 1, 2, 3, 4
Stethoscope	Paediatric
Pulse Oximeter with Pleth (waveform)	Sensors (Probes): Infant, ear, finger and or forehead sensor' Disposable infant, child sensors
Oximeter Tape [eg Coban™]	
Volume Spacer Mask	Large and small; with mouthpiece and facemask
Nebuliser Mask	Paediatric & adult
Oxygen tubing	

Circulation

Equipment	Size
Amethocaine 4% and EMLA	
Tourniquet	Paediatric friendly
Antimicrobial Swipes	
Cannula	14g, 16g, 18g, 20g, 22g & 24g
Syringes	2ml, 5ml, 10ml, 20ml
Pathology Tubes	Paediatric tubes & Blood Culture Bottles
NeedlessT Piece Extension Tubing	X 3
Indwelling Urinary Catheter	FG6, FG8, FG10, FG12
Arm Boards ('Parker Babyboards')	Paediatric
IV Giving Set	(To suit IV infusion device)
Burette	
Intravenous Solutions (500ml bags)	0.9% Saline, N/2 + 2.5% Dextrose
Intravenous infusion pump	
Intraosseous Needle	EZ-IO™ Paediatric (3-39kg)and Adult (39KG+)
Three Way Tap	X3
Extension Tubing	
Adhesive Tapes	Brown Tape ½ inch, 3" Elastoplast™, Paediatric IV site dressing
Manual Sphygmomanometer	Child & infant cuff
Oscillometric Sphygmomanometer (eg 'Dynamap')	Neonatal, Infant, Child, Small Adult, Adult Size
Cardiac monitor	Paediatric ECG electrodes & leads ECG Paper
Defibrillator	Paediatric Paddles & Pads
Glucometer	

Disability

Equipment	Size
Glasgow Coma Scale	Modified (paediatric)
Neuro Torch	

Environment, Comfort & Safety

Thermometer	Axilla Probe, Braun™ (Welch-Allen) Tympanic Thermometer Flexible Rectal Probe (optional)
Heat Source	Over Head Heater or other heat source (optional)
Distraction Activities Box (eg 'TLC')	
Oral use only Medication Syringes	1ml, 3ml, 5ml, 10ml
Cot/Bed with rails insitu	Bunny Rugs, cot sheet & blankets
Infant formula	Disposable Bottle & teat, feeding cup
Oral Rehydration Solution [Gastrolyte™, Hydrolyte™ or similar]	Ice blocks and solution
Trial of Oral Fluids Chart	
Scales (1g increments)	To weigh nappies
Disposable nappies	

10.5 Appendix 5: Anaesthetic Equipment Required By Designated Level 1-3 Paediatric Surgical Services

Anaesthesia equipment must comply with the Australian and New Zealand College of Anaesthetists Professional Document T1 *Recommendations on Minimum Facilities for Safe Anaesthesia Practice in Operating Suites and Other Anaesthetising Locations*. Specific requirements to include:

- Appropriate equipment for the needs of infants and children.
- Climate control and equipment designed to meet the special needs of small children so that body temperature is maintained throughout the perioperative period.
- Monitoring equipment which complies with College Professional Document PS18 *Monitoring during Anaesthesia* and is suitable for use with infants and children.

10.6 Appendix 6: Indicative List of Paediatric Surgical Procedures & ASA Classification

MINOR SURGICAL PROCEDURES	MAJOR SURGICAL PROCEDURES
<ul style="list-style-type: none"> • Suture of laceration • Excision of skin lesion • Drainage of abscess • Circumcision (ie any operation which in competent hands takes less than half an hour) <p>MODERATE COMPLEXITY</p> <ul style="list-style-type: none"> • Pyloromyotomy • Herniotomy after the first year of life • Orchidopexy after the first year of life • Appendicectomy 	<ul style="list-style-type: none"> • Neonatal surgery • Major reconstructive surgery (anorectorplasty, rectosigmoidectomy, etc) • Pyeloplasty • Thoracotomy • Lymphangioma • Ureteric reimplantation • Fundoplication • Splenectomy • Cleft lip/palate surgery • Herniotomy in the first year of life • Orchidopexy in the first year of life • Burns grafting • Urethroplasty • Operative reduction of intussusception • Closure of colostomy • Insertion of central line in first two years of life (ie any procedure which in the hands of competent surgeon takes more than one hour)

Note: The procedures listed are indicative of the complexity of surgical activity in each category

The actual range of procedures which may be performed by individual practitioners appointed to a general or subspecialty surgical services of a given level will be determined through the credentialing process at which clinical privileges are granted.

Acknowledgement is given to the Royal Australasian College of Surgeons (Paediatric Surgeons) for assistance with the indicative list of paediatric surgical procedures. The procedures and their ranking are based on complexity definitions of the Board of Paediatric Surgery of the PAVS

Source: NSW Health (2002) *Role delineation of Health Services 3rd Edition* p.99

10.7 Appendix 7: Level of Risk (0 – 14 yrs Inclusive)

Classification of physical status for pre-operative assessment

ASA 1	Healthy child
ASA 2	Child with mild systemic disease – no functional limitation
ASA 3	Child with severe systemic disease – definitive functional limitation
ASA 4	Child with severe systemic disease – that is a constant threat to life
ASA 5	Moribund child not expected to survive 24 hours without an operation

With acknowledgement to the American Society of Anaesthetists

Source: NSW Health (2002) *Role delineation of Health Services 3rd Edition* p.94

10.8 Appendix 8: Acknowledgements

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