

# Paediatric Specific Requirements

- Onsite
- Access
- If expertise/resource available

The following tables show the paediatric specific nursing/physician educational requirements, organizational requirements, allied health human resource requirements, diagnostic imaging/procedures/treatments/equipment needed in each of the various categories for the three levels of inpatient paediatric care.

## Educational, Organizational, and Health Human Resource Requirements

**Tables 1.1-1.3** demonstrate the paediatric specific nursing/physician educational requirements, organizational requirements, allied health human resource requirements needed for the three levels of inpatient paediatric care.

### 1.1 Educational Requirements – Nurses and Physicians

	Level I	Level II	Level III
Basic Life Support	●	●	●
Paediatric Advanced Life Support (or approved equivalent)	●	●	●
Neonatal Resuscitation Program (or approved equivalent)	●	●	●
Pediatric Emergency Assessment, Recognition and Stabilization (PEARS)	●	●	●
Paediatric Trauma Assessment (e.g. Emergency Nurse Pediatric Course (ENPC), International Trauma Life Support (ITLS) – paediatric)	Educational Opportunity	Educational Opportunity	Educational Opportunity

*At a minimum and depending on the volumes of paediatric patients seen at the hospital, these skills must be present within a majority of the physician and nursing staff involved with the care of paediatric patients (including those seen in the ED). The mechanism/protocol for disseminating paediatric best-practices will be up to each organization to determine/operationalize.*

### 1.2 Organizational/Continuous Quality Improvement Requirements

	Level I	Level II	Level III
Continuous quality improvement platform in place specific to paediatric care, for example, access to, and use of standardized paediatric:			
<ul style="list-style-type: none"> <li>● Algorithms</li> <li>● Best-practices</li> <li>● Care pathways</li> </ul>	●	●	●
Family-centred care/parental involvement	●	●	●
Awareness of developmental milestones	●	●	●
Knowledge re: normal vital signs	●	●	●
Use of paediatric – Canadian Triage & Acuity Scale in ED	●	●	●
Use of validated situational awareness tool; Policies/ procedures in place for escalation of care to a higher level of care (e.g. Early Warning System)	●	●	●
Standard medication dosing by weight	●	●	●
Standard concentrations for infusions	●	●	●
Standardized protocols in place for paediatric pain assessment/management	●	●	●
Paediatric procedural sedation program	●	●	●

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1.3 Health Human Resources for Paediatric Care: Interprofessional	Level I	Level II	Level III
Chaplain	●	● On call - if available	● On call
Child Life Specialist		●	●
Dietitian with paediatric expertise		●	●
Occupational Therapist with paediatric expertise		●	●
Pharmacist with paediatric expertise		●	●
Physiotherapist with paediatric expertise		Access to resources	●
Respiratory Therapist with paediatric expertise		●	●
Social Worker with paediatric expertise		●	●
<i>It is an expectation that interprofessional staff involved with paediatric patients and their families will have additional education/training/expertise/familiarity in working with the paediatric population.</i>			

## Diagnostic Tests and Treatment Requirements

**Tables 2.1-2.6** demonstrate diagnostic tests/treatments and indicate the **minimum standards** for hospitals in which care is provided to paediatric patients, based on their level of care. **These lists are not inclusive of all tests/procedures conducted in hospital settings.** Please note:

- Availability should be consistent with the normal model of care and work schedule of personnel i.e., 24/7/365, Monday-Friday, timely access for technologist, etc.
- “If expertise/resources available” means the procedure can be done at that site only when the appropriate expertise and/or resources are available specific to the procedure and care requirements - to be determined by hospital (in collaboration with system of care) unless agreed upon standards are already in existence
- General laboratory testing may not necessarily be done on site
- It is expected that all tests, procedures and services provided to/for paediatric patients will follow established paediatric protocols and guidelines regarding the performance and appropriateness of the test

2.1 General Laboratory	Level I	Level II	Level III
Microtechnique - for all routine blood work	●	●	●
Routine bloodwork (CBC, Blood Gas, General Chemistry)	●	●	●
Blood type	●	●	●
Crossmatch	●	●	●
Gram stain	●	●	●
Body fluid testing	●	●	●
Multiplex PCR			●
Urinalysis	●	●	●
CSF		●	●
Drug screen (collection of samples)	●	●	●

Basic ECG	●	●	●
Echocardiography		●	●
Basic EEG		●	●
Specialized EEG			●
<i>It is the expectation that hospitals have protocols in place for ensuring that paediatric-specific equipment is used when performing these studies on paediatric patients, that the person conducting the test has the requisite paediatric skills to conduct the test, and that a process is in place for determining which tests require sign-off by the appropriate specialist and which tests require interpretation by a specialist or paediatric specialist.</i>			

2.3 Other Diagnostics	Level I	Level II	Level III
Pulmonary function test		●	●
Spirometry		●	●
X-ray – basic	●	●	●
Ultrasound – basic	●	●	●
CT		●	●
MRI		●	●
MRI with sedation		●	●
Nuclear medicine		●	●
Upper GI		●	●
Small bowel follow-through		●	●
GU (VCUG)		●	●
Interventional radiology		●	●
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2.4 Specialized Equipment	Level I	Level II	Level III
Paediatric crash cart (Broselow)	●	●	●
Paediatric resuscitation equipment	●	●	●
Paediatric ventilation equipment		●	●
Safe paediatric cribs and beds	●	●	●
Age specific, age appropriate sized equipment (e.g., blood pressure cuffs, endotracheal tubes, cannulas, masks, etc.)	●	●	●
Smart pump technology	●	●	●

2.5 Isolation Capacity	Level I	Level II	Level III
Negative pressure isolation rooms		●	●

2.6 Treatment/Procedures	Level I	Level II	Level III
Monitoring (CRM, O2 sat, etc.)	●	●	●
IV access	●	●	●
IV maintenance	●	●	●
Fluid management - types of solutions, bolus, maintenance and ongoing	●	●	●
Urine catheterization		●	●
Arterial puncture		●	●
Lumbar puncture		●	●
Uncomplicated N/G tube feeding		●	●
Phototherapy	●	●	●
Short term O <sub>2</sub> stabilization (<90 minutes)	●	●	●
Ongoing O <sub>2</sub> sat monitoring/therapy		●	●
Low flow O <sub>2</sub> therapy		●	●
High flow O <sub>2</sub> therapy		●	●
Continuous positive airway pressure management (for acute respiratory distress)		●	●
Non-ventilated tracheotomy care		●*	●
Home-ventilated patients		●*	●
Chest tube initiation/maintenance		●	●
Intraosseous vascular access	●	●	●
IVIG		●	●
IV cancer chemotherapy		Per POGO standards for community-based patient treatment	●
Total parenteral nutrition		●	●
Administration of blood products/blood transfusion	●	●	●
Exchange transfusion			●
PICC – use and ongoing care		●	●
PICC – insertion		●	●
G- and G-J tube access and ongoing care		●	●
G-tube replacement – MIC-KEY		●	●
Uncomplicated G- and G-J tube insertion/replacement		●	●
Port-a-Cath – access and ongoing care		●	●
Port-a-Cath – insertion		●	●
Endoscopy		●	●
Colonoscopy		●	●
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<i>*Whenever possible, to be determined in consultation with specialized team at tertiary hospital</i>			