



NC Children's Hospital Children's Surgery Program

Guideline for Attending Physician Bedside Presence

The purpose of this guideline is to standardize criteria for the prompt physical presence of the attending physician thereby providing optimal quality care to our pediatric surgical patients.

Applies to:

Pediatric surgeons, pediatric anesthesiologists, pediatric radiologists, pediatric emergency medicine physicians, pediatric surgical specialists, pediatric medical specialists, and medical/surgical specialists who lack specific pediatric certification. Medical/Surgical specialists who lack specific pediatric certification will follow their departmental guidelines and clinical privileges to determine when consultation with or referral to a pediatric certified specialists is required.

Definitions:

- Prompt – within 60 minutes of notification
- Physical presence – at the patient's bedside participating in assessment and treatment

Pediatric Hospitalists and Pediatric Intensivists are available in-house 24/7 and are available for immediate bedside consultation while awaiting the subspecialist

Clinical conditions requiring the prompt physical presence of the attending physician

Each patient is individualized and a detailed clinical history and diagnostic exams must dictate the need for the attending presence at the bedside.

The following clinical conditions have been identified as requiring the attending physicians' prompt physical presence at the bedside to participate in patient assessment and treatment.

General Services

- Specific request by emergency department physician or inpatient physician services
- New onset hemodynamic instability
- New onset neurological instability

Surgery and Anesthesia

Anesthesia – available within 30 minutes of notification

- Pediatric Anesthesia (P1) will be present for all patients <5 years of age, all patients 5-18 years of age with an ASA >2, and/or any patient 0-18 years of age with a complex pediatric specific illness, any PICU patient, and at the request of the in-house on call Anesthesia Attending (ORW1/G1) and/or the Attending Surgeon.

Burn Surgery

- Postop bleeding not amenable to local pressure, hemostatic agents, or medical treatment of coagulopathy
- Compartment syndrome associated with a burn injury
- Cardiorespiratory arrest

Congenital Heart

- Post-op hemorrhage requiring mediastinal exploration
- Extracorporeal membrane oxygenation (ECMO) cannulation
- Post-op low cardiac output syndrome resulting in ongoing cardiopulmonary resuscitation requiring surgical intervention
- Severe pericardial effusion with hemodynamic instability

Neurosurgery

- Each patient is individualized, and detailed clinical history and imaging must dictate the need for neurosurgical presence at the bedside. Typical indications for bedside presence include progressive or severe neurological deficit associated with demonstrated surgically correctable lesion. Such lesions could include, but are not limited to, tumor, hemorrhage, foreign body, infection, or anatomic disruption from trauma.
- Situations and diagnosis determined to be a within-60-minute-emergency requiring the skills of a Neurosurgeon as determined by the on-call Neurosurgeon on a case-by-case basis

Ophthalmology

- Retrobulbar hemorrhage
- Situations and diagnosis determined to be a within 60-minute-emergency requiring the skills of an Ophthalmologist as determined by the on-call Ophthalmologist on a case-by-case basis

Oral & Maxillofacial Surgery

- Airway compromise due to oral/facial surgery or infection of odontogenic origin
- Post op bleeding due to oral surgery not amenable to local pressure, packing, hemostatic agents, or medical treatment of coagulopathy
- Vision loss/decreased visual acuity s/p a surgical procedure

Orthopaedics

- Ischemic extremities
- Compartment syndrome: early symptoms – 3As - increasing anxiety, agitation, and analgesic requirement and late symptoms – 5Ps - pain, paresthesia, paralysis, pallor, and pulselessness
- Necrotizing fasciitis (limb involvement) Orthopaedics will co-manage patients for limb involvement of necrotizing fasciitis with the PICU and/or Pediatric Surgery
- Acute neurological change in post-op spine patients

Otolaryngology

- Accidental decannulation of a fresh trach (prior to 1st trach change) with airway distress and inability of in-house or on call providers to establish a secure airway
- Active hemorrhage with airway compromise
- Life threatening airway compromise (e.g. foreign body, hemorrhage, inflammation, etc; initially managed by in-house pediatric emergency medicine, pediatric critical care, or neonatology physician, with secondary backup of in-house anesthesia, and tertiary backup provided by in-house trauma). Situations and diagnosis determined to be within 60-minute-emergency requiring the skills of an ENT physician as determined by the on-call ENT physician on a case-by-case basis.
- Initial diagnosis of aero-digestive button battery or magnet ingestion/aspiration requiring the skills of an ENT physician as determined by the on-call ENT physician
- Initial diagnosis of aero-digestive foreign body with possible threatening perforation requiring the skills of an ENT physician as determined by the on-call ENT physician

Pediatric Surgery

- Gastroschisis with ischemic bowel
- Ruptured giant omphalocele
- Evisceration
- Initial diagnosis battery button ingestion
- Malrotation with midgut volvulus
- Incarcerated inguinal hernia
- Intussusception that cannot be reduced with air enema
- Necrotizing soft tissue infection
- Pneumoperitoneum
- Abdominal compartment syndrome
- ECMO cannulation

Plastic & Reconstructive Surgery

- Uncontrollable hemorrhage from face and/or oral cavity
- Amputated part that could be considered for replantation
- Compartment syndrome (hand/forearm)

Transplant Surgery

- Post op hemorrhage requiring abdominal exploration

Urology

- Trauma with dramatic perineal injury
- Obstructed cloacal exstrophy

Pediatrics & Radiology**Cardiology**

- Echocardiography for ECMO cannulation
- Severe cyanosis in a newborn
- Pericardial effusion causing clinical compromise
- Congenital heart disease requiring balloon atrial septostomy

Emergency Medicine

- Pediatric Emergency Medicine Attending is in-house 24/7

Gastroenterology

- Active GI bleeding requiring emergent intervention to attempt hemostasis
- Foreign body (FB) retrieval – examples include
 - Disk battery in the esophagus (below the carina projection on chest AP film)
 - FB in the esophagus or stomach with signs of GI obstruction
 - Sharp objects that in the judgement of the Pediatric GI specialist may injury the GI tract
- Magnets within reach of a standard upper endoscope

NCCC

- Abdominal compartment syndrome
- Emergency Airway

Pediatrics

- Pediatrics Attending is in-house 24/7

PICU

- Pediatric Critical Care Attending is in-house 24/7
- Cardiorespiratory arrest requiring chest compressions
- Acute respiratory failure requiring immediate intubation

- Hypotensive shock unresponsive to volume boluses requiring the initiation of Inotropes
- Sustained elevation in intracranial pressure > 30 cm H₂O or with clinical signs of herniation (bradycardia, acute hypertension, acute cranial nerve compromise)

Pulmonary

- Acute airway compromise requiring intubation via flexible bronchoscope. Situations and diagnosis determined to be within 60-minute-emergency requiring the skills of a Pediatric Pulmonary physician as determined by the on-call Pediatric attending physician on a case-by-case basis, in consultation with other airway emergency responders (Pediatric ENT, Pediatric Anesthesiology, Pediatric Critical Care, Neonatal Critical Care)

Radiology

- Upper GI fluoroscopy for malrotation with volvulus
- Intussusception reduction

Interventional Radiology

- Embolization or intervention for control of active bleeding

Compliance:

Compliance with the expectations described in this guideline will be monitored by the Children's Surgery Verification Performance Improvement & Patient Safety (CSV PIPS) Committee

Inclusion criteria: Any patient admitted to NC Children's Hospital for a surgical procedure or in the Children's Emergency Department meeting one of the clinical conditions outlined above.

Measurement: Response time will be calculated from time of attending notification (as charted in the medical record) to the physical presence of the attending. Although documentation within the medical record confirming the physical presence of the attending at the bedside is ideal, the patient's clinical condition may limit contemporaneous documentation thus proxies may be used as evidence.

Compliance Reporting:

Compliance reports will be tracked on a quarterly basis by surgical specialty expressed as:

of clinical conditions requiring prompt physical presence of attending physician with response ≤ 60 minutes

Total # of clinical conditions requiring prompt physical presence of attending physician

Delays in attending response will be reviewed by the Medical Director of Children's Surgery and addressed within the CSV PIPS committee.

If a physician is not physically present within an hour of notification for a condition listed above, please complete a SAFE Report utilizing the following event:

Event Type: Diagnosis/Treatment

Specific Event Type: Delay/lack of response to patient condition.