

Pediatrics at the NIH Clinical Center



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Pediatric Care

- Committed to support pediatric research in a safe environment
 - Early childhood treatment can prevent some adult diseases
 - Cure of genetic diseases
 - In order to develop therapies to ensure normal development, earlier diagnosis of diseases and organ dysfunction is needed
 - Characterization of genotype/phenotype relationships
 - Identify biomarkers to serve as endpoints
- Expand scope of pediatric care safely

Monitored Bed Unit 1NW

- Add layers of safety to the care of children enrolled in clinical research at the CC
- Create an environment in which complex pediatric and rare diseases can be studied
- Enable investigators to conduct first-in-human studies in children
- Support the treatment of pediatric diseases earlier in childhood

Monitored Bed Unit 1NW

- Build on the existing infrastructure and enable treatment of younger and sicker children
- Support research protocols enrolling children who receive interventions associated with a high risk profile
- Investments
 - Physical plant
 - Five beds located in 1NW
 - Cardiovascular, pulmonary, neurologic, metabolic monitoring
 - Personnel
- Operational December 2017

Staffing

- The Pediatric Anesthesia and Critical Care (PACC) team
 - Pediatric hospitalists and anesthesiologists
 - Hospitalist coverage 24 hours a day, seven days a week
 - Coverage schedule
 - Minimize the number of hand-offs
 - Ensure continuity
 - Increase safety
- Higher pediatric nurse/patient ratio

PACC team

- Provide 24/7 coverage in-house
- Weekend and night coverage for pediatric consult team
- Pediatric emergency response
- Pediatric code calls
- Stabilize patients and oversee emergency transfer
- Simulation training for low volume high acuity pediatric scenarios
- PALS training for nurses and physicians

Patient Care Model

- Multidisciplinary
- PACC team
 - Day-to-day coordination/management, medical care and supportive care in close collaboration with the primary team
- The primary team (research)
 - Protocol/research-related care requirements/orders (investigational drug orders; research related imaging) and disease-specific care requirements (e.g., chemotherapy orders)
- Nursing
- Increased communication among primary, PACC, nursing, consultant teams

Patient Admission to the Monitor Unit

- Scheduled (via pre-admission form)
- At time of escalation of care
- Coverage 24/7 in-house
- Available for consultations

Pediatric Patients

- Frequent use of bronchodilators, oxygen supplementation, BiPAP/CPAP, tracheostomy
- Chronic and stable neurological disorders
- Need for monitoring after anesthesia
 - Continuous epidural infusions
 - Patient Controlled Analgesia (PCA)

Pediatric Patients

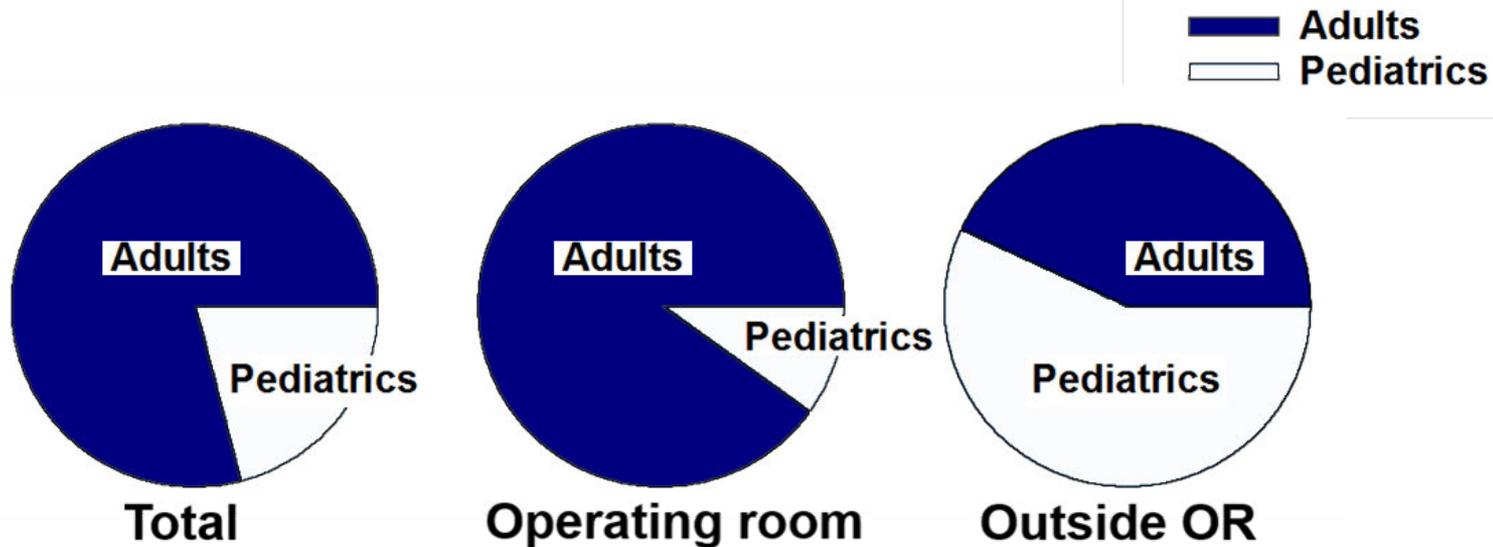
- Protocol-directed therapy that warrants cardiac and/or respiratory monitoring
- Medications that require titration until a stable administration regimen is reached
- Patients receiving IV opioids, sedatives, or electrolyte replacement
- Investigational new drugs, including cellular or immunotherapies

Escalation of Care

- Intensive care is required
 - CC- CCMD
 - CCMD
 - Pediatric Intensivists from CNHS
 - Transfer to partner institutions
 - Required care not provided here at the CC.
 - Patient who do not meet admission criteria to the CC-CCMD
 - Algorithm for patient transfer
 - Office of Patient Safety and Clinical Quality, PCC, admissions office

Pediatric Anesthesia

Unique Pediatric Anesthesia Needs



- Forty percent of our anesthesiologists have advanced training in pediatric anesthesia
- Provide anesthesia care in multiple locations
- Creation new anesthetizing location in IMC

Summary

- Institutional commitment to provide safe care for children enrolled in clinical research
 - Pediatric anesthesiologists
 - Pediatric hospitalists
 - Monitored bed unit in 1NW