Pediatric Sedation Rotation Competency-Based Goals and Objectives

Name of Rotation	**Pediatric Sedation Rotation**
Duration	2 weeks
Location	Arnold Palmer Hospital, Orlando Regional Medical Center
Where to Go on Day 1	Pediatric Critical Care Office - Special Care
Rotation Director	**Joseph Bernardo, MD**
Other Faculty	**Jonathan Alba DO, Nicole Slone MD, Jenna Wheeler MD, Laura Wright-Sexton MD, Lawrence Spack, MD, Andrew Bigham MD, Jessica Boegner DO, Ancil J Abney MD**
Other Requirements	**None**
Last Revision	**7/7/2025**

Introduction

During the Pediatric Sedation rotation, fellows should be able to ensure the safe and effective management of children undergoing diagnostic and therapeutic procedures. They should be able to demonstrate knowledge in pharmacologic agents, airway management, monitoring and post-sedation care as well as pre-sedation risk assessments for a variety patient acuity and conditions. This should include the ability to rescue patients from common complications and standard equipment sizes used in adverse effects. Establishing clear, competency-focused and evidence-based training for quality sedation practices for this rotation should lead to fellow autonomy, independence, and confidence by the end of the rotation.

Daytime Schedule and Tasks

- *Hours:* **Monday - Friday (7A - 5P)**

- *Patient Care/Follow-up*: Fellows should be able to meet with the patients prior to their sedation time, perform a risk assessment, decide on sedation medications to be used, obtain consent from the family/patient including common adverse effects and expectations, perform the sedation and monitoring throughout and after until discharge home or transfer back to their unit. This will be done in a graduated autonomy manner to ensure independence by the end of the rotation.

- *Documentation:* Sedation documentation will be performed by the fellow after observing appropriate documentation for the first 3 sedations.

- *Communication:* Communication will be decided in a matter that allows for graduated autonomy for the fellow. The attending will be present for sedations until all providers feel comfortable with allowing for more indirect supervision, but the fellow will have an attending available and on the premises for all sedation. Fellow is the direct communicator with specialists, nurses, residents, interns, other ancillary staff.

- *Patient Hand-offs:* Handoffs should occur with the proceduralist for outpatient procedures and with the primary admitting team for inpatient procedures. This should include indications for the procedure, complications, expectations and any other relevant information.

- *Conferences and Education:* Hospitalist Fellows are expected to attend Pediatric Critical Care Fellowship conferences Wednesday 2P-4P.

Team Organization

The sedation team consists of a critical care attending, a respiratory therapist, 1-2 RN with sedation credentials/experience. If later in the year may consist of a PICU fellow as well.

Competency-Based Goals and Objectives for the Pediatric Hospital Medicine Fellow

The fellow pediatric sedation experience emphasizes medical knowledge, clinical assessment skills, independent decision-making ability, supervisory skills, team management and effective and efficient management of hospitalized children. It should have a focus on independent clinical decision-making and graduated autonomy and independence.

COMPETENCY 1. Patient Care. Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. The fellow should:

- Demonstrate competence in the clinical skills needed in pediatric sedation.
- Demonstrate the ability to provide consultation, perform a pre-sedation examination, make informed diagnostic and therapeutic decisions that result in optimal clinical judgement, and develop and carry out management plans
- Demonstrate the ability to provide pre-sedation and post-sedation transitions

- Demonstrate ability to provide care that is sensitive to the developmental stage of the patient with common behavioral and mental health issues, and the cultural context of the patient and family
- Demonstrate the ability to refer and/or comanage/transfer patients with common comorbidities along with appropriate specialists when indicated.
- Demonstrate the ability to competently use and interpret laboratory tests and imaging, and other diagnostic procedures.
- Demonstrate the ability to recognize, evaluate, and manage patients with the following:
    - Children with multiple comorbidities
    - Children with special healthcare needs
    - Children with serious acute complications of common conditions
- Recognize and intervene in urgent and emergent medical situations
    - Appropriately assess changes in patient clinical status.
    - Create an independent plan for stabilization, further evaluation and/or definitive management in response to changes in clinical status.
- Effectively sedate following medications/classes and know their common adverse effects as well as benefits of their selection, as available:
    - Benzodiazepines
    - Opioids
    - Ketamine
    - Propofol
    - Alpha-2 agonists
    - Nitrous Oxide
- Provide oversight of and guidance to other residents and medical students who may be rotating on the service at the same time as them.
- Demonstrate the ability to rescue patients in emergent situations, if not demonstrated during the 2 weeks the fellow should be able to demonstrate via simulation. This should include the following situations and rescue maneuvers:
    - Hypoxemia
    - Hypercarbia
    - Hypopnea/Apnea
    - Hypotension
    - Bag Mask Ventilation
    - Intubation
    - Hypotension
    - Fluid resuscitation
    - Bradycardia

COMPETENCY 2. Medical Knowledge. Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. Apply an open-minded, analytical approach to acquiring new knowledge, access and critically evaluate current medical information and

scientific evidence, and apply this knowledge to clinical problem-solving, clinical decision-making and critical thinking. The Fellow should:

- Demonstrate knowledge of biostatistics, clinical and laboratory research methodology, study design, preparation of applications for funding and/or approval of clinical research protocols, critical literature review, principles of evidence-based medicine, ethical principles involving clinical research, and teaching methods
- Demonstrate understanding of indications for hospital admission, criteria for discharge and indications for transfer to higher levels of care.
- Demonstrate appropriate use of physical exam maneuvers to investigate patient complaints and demonstrate appropriate interpretation of exam findings.
- Demonstrate in-depth knowledge of medical conditions seen commonly in outpatient and hospitalized children, including epidemiology, pathophysiology, signs/symptoms, diagnostics, therapeutics, complications and outcome/prognosis.
- Demonstrate consistent ability to apply medical knowledge to discrete patient care interactions to provide appropriate care.
- Demonstrate understanding of indications, basic pharmacokinetics, expected response, and side effect profile for commonly used pharmacologic agents.
- Consistently provide accurate information to patients, families, staff and learners in terms tailored appropriately to each audience.

COMPETENCY 3. Interpersonal Skills and Communication Skills. Demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Fellows should:

- Communicate well and work effectively with residents, attendings, nurses, ancillary staff and referring physicians.
- Provide timely communication with patients and families that is free of medical jargon.
- Demonstrate appropriate bedside manner, listening skills and use of nonverbal communication.
- Demonstrate effective teamwork.
- Effectively communicate information via dictations, written medical records, patient presentations and handoffs.
- Demonstrate guidance of other learners in developing appropriate communication skills.
- Coordinate orderly transfer of care to other services or to a higher level of care if required.
- Appropriately use interpreters for patient/family communication.
- Practice effective conflict resolution when appropriate.
- Demonstrate ability to effectively counsel and educate patients and families.

COMPETENCY 4. Practice-based Learning and Improvement. Demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence,

and to continuously improve patient care based on constant self-evaluation and lifelong learning. Fellows should:

- Take responsibility for independently investigating patient problems/diagnoses through literature searches, critically reviewing relevant literature, and assimilating information to individual patient care.
- Take responsibility for their own education.
- Demonstrate initiative to seek own answers to data interpretation and patient management questions.
- Teach and work well with interns/residents/students who are under their supervision.
- Performance self-evaluation, identify gaps in knowledge and skills, and take initiative to fill those gaps.
- Seek and accept feedback from multiple sources and demonstrate effort to improve performance based on feedback.

COMPETENCY 5. Professionalism. Demonstrate a commitment to professionalism and an adherence to ethical principles. Have a responsible attitude toward their patients, their profession and society. Fellows should:

- Consistently demonstrate caring, respectful and empathic behavior toward patients and their families.
- Demonstrate effort to form therapeutic and ethically sound relationships with patients and families.
- Maintain patient confidentiality.
- Consistently demonstrate respectfulness and integrity toward colleagues and staff.
- Demonstrate sensitivity to bioethical principles, culture, age, gender, religious beliefs, sexual orientation, and disability to patients, families and staff.
- Acknowledge and discuss medical errors honestly with families and conscientiously follow hospital policies for reporting and correcting errors.
- Adhere to professional standards for ethical and legal behavior.
- Recognize the limits of one's knowledge, skills, and tolerance for stress, and know when to ask for help.
- Be punctual, reliable and accountable.
- Consistently complete medical records in a timely manner.
- Demonstrate professional dress, demeanor and hygiene per hospital policies.

COMPETENCY 6. Systems-Based Practice. Demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care. Fellows should:

- Demonstrate effective participation in a multidisciplinary team approach to patient care.
- Demonstrate judicious use of medical testing, imaging and procedures to achieve appropriate and timely diagnosis and treatment while avoiding overuse of resources.

- Help patients and families navigate system complexities
- Demonstrate understanding of billing requirements and document appropriately.

Content topics for study

- Pulmonary
  - Respiratory Failure
    - Choice of rescue methods
      - Nasal cannula
      - Non-rebreather
      - Bag Mask Ventilation
      - Intubation
  - Intubation Procedure
    - Equipment Selection/Sizing
    - Common Indications
    - Adverse Effects of intubation
- Cardiac
  - Identification of patients that require specialized cardiac considerations
  - Using cardiac monitoring and identification of common arrhythmias
  - Identification and management of hypotension during or after sedation
- Gastrointestinal/Electrolytes
  - Fasting Guidelines
  - Electrolyte derangements and their impact on sedations
  - Management of aspiration/emesis in a sedated patient
- Neurologic
  - Impact on sedation medication on neurologic function
    - Painful vs non-painful procedures
  - Expectations for post-sedation care with families