

UNIVERSITY OF MINNESOTA CHILDREN'S HOSPITAL - FAIRVIEW PEDIATRIC SEDATION CURRICULUM

DESCRIPTION OF ROTATION OR EDUCATIONAL EXPERIENCE

The sedation rotation at Fairview-University hospital is provided under the direction of the staff physicians credentialed to perform sedations. Specific goals of this rotation include gaining concentrated experience in a variety of procedures (non-intubated airway management, urgent airway stabilization, etc.), the use of many sedative/analgesic/anesthetic agents, including the reversal of such agents, and perioperative patient management.

ROTATION GOALS

The overall goal of this rotation is to provide educational and clinical opportunities to acquire the knowledge, clinical skills and professional attitudes required to recognize and manage patients requiring varying degrees of sedation and analgesia, including necessary technical procedures to support and monitor them.

PATIENT CARE

Goals

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Objectives

Residents will arrive at an appropriate hour, perform pre-sedation assessments and provide appropriate sedation with direct faculty supervision. Consultations may be requested from any inpatient hospital service and the emergency department. During the Sedation Rotation, the resident will:

1. Develop practical skills pertaining to patient care including:
 - Performing appropriately focused history and physical exam.
 - Synthesis of differential diagnoses and plans for patient management.
 - Ability to coordinate diagnoses and plans for patient management.
 - Application of the components of "Medical Knowledge" to Patient Care.
2. Foster the involvement of sound clinical judgment and efficient clinical practical skills throughout the sedated procedure, including:
 - Assessment of airway/breathing/circulation.
 - Cardiorespiratory monitoring techniques.
3. Select and administer appropriate pharmacologic or non-pharmacologic interventions to provide appropriate levels and duration of sedation safely.

Competencies

1. Faculty Rotation Evaluation
2. Patient log
3. Procedure log
4. Staff 360 evaluation
5. Patient 360 Evaluation

MEDICAL KNOWLEDGE

Goals

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

Objectives

Residents will demonstrate an investigatory and analytical thinking approach to clinical situations, know and apply the basic and clinically supportive sciences which are appropriate to providing sedation to the pediatric patient. Exposure to and discussions pertaining to individual patients should subsequently enable to fellows to:

1. Recognize the potentially difficult pediatric airway.
2. Develop strategies for managing the potentially difficult airway, to include:
 - Medication options.
 - Alternatives to pharmacologic sedation, such as distraction or relaxation techniques.
3. Recognize patients more appropriately managed in the Operating Room or by Anesthesia.
4. Recognize and manage hypoxia, hypopnea, airway obstruction, respiratory distress and respiratory failure.
5. Recognize hemodynamic effects of medications to be use for sedations.
6. Manage hypotension and bradycardia.

Competencies

1. Faculty Rotation Evaluation.
2. Society of Critical Care Medicine's Multidisciplinary Critical Care Knowledge Assessment Program (MCKKAP) in-service examination.
3. Patient log.
4. Procedure log.

PRACTICE-BASED LEARNING AND IMPROVEMENT

Goals

Residents must 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 life long learning.

Objectives

1. Attend the complications conferences/M & M and analyze their sedation experience and the experiences of others in such a way as to foster improvement in patient care.
2. Maintain procedure log.

Competencies

1. Maintain procedure log, including annotations regarding technical insights, level of comfort performing procedure, complications.
2. Faculty Rotation Review.

SYSTEMS BASED PRACTICE

Goals

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Objectives

1. Practice cost-effective health care and resource allocation while maintaining an uncompromised quality of care, including appreciation of medication pricing, sedation costs and charges.
2. Advocate for quality patient care and assist patients in dealing with system complexities, including admission and discharge for the sedation suite.
3. Partner with health care managers and health care providers to assess, coordinate, and improve health care and system performance, especially on admission and discharge from the sedation suite.
4. Acknowledge medical errors and assist in developing or improving systems for their prevention.

Competencies

1. Staff 360 evaluation.
2. Parent 360 evaluation.
3. Participate in relevant M & M.

PROFESSIONALISM

Goals

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles and sensitivity to diverse populations.

Objectives

1. Demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities.
2. Demonstrate respect, compassion and integrity for the skills and efforts of the procedure teams.

Competencies

1. Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds as evidenced by satisfactory family 360 evaluation.
2. Communicate effectively with physicians and other health professionals as evidenced by a satisfactory staff 360 evaluation.

INTERPERSONAL AND COMMUNICATION SKILLS

Goals

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.

Objectives

1. Develop and maintain a therapeutic and ethically appropriate relationship with patients and their families.
2. Listen effectively.
3. Elicit and provide information using effective nonverbal, informative, interrogative, and writing skills.
4. Communicate and work effectively with other fellows, residents, attendings, consultants, nurses and ancillary health care providers as a member of the critical care medicine team.
5. Communicate relevant information to patient and families.
6. Communicate all significant intra- and peri-sedation issues personally to a member of the referring clinical team.
7. Document complete procedure note for all procedures.
8. Consistently maintain accurate, timely, and legally appropriate medical records.

Competencies

1. Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds as evidenced by satisfactory 360 evaluation.
2. Communicate effectively with physicians and other health professionals as evidenced by a satisfactory staff 360 evaluation.
3. Maintain comprehensive, timely, and legible medical records for all procedures.

TEACHING METHOD(S)

1. One-on-one instruction at the bedside and during procedures.
2. Faculty role model during bedside interaction, during teaching sessions, and during sedation cases.

ASSESSMENT METHOD - RESIDENT(S)

End-of-rotation evaluation by Pediatric Sedation staff and reviewed with fellow.

ASSESSMENT METHOD – ROTATION

The fellows provide an anonymous review of the rotation, including comment on patient volume, quality of supervision and overall value of rotation.

LEVEL OF SUPERVISION

The fellow is directly supervised by Pediatric Critical Care, Emergency Medicine and/or Anesthesia faculty credentialed and experienced in providing sedation.

EDUCATIONAL RESOURCES

Critical Care fellows' office library
Computer-assisted literature reviews
PALS course
Simulation center