

Elective Description

Campus: Southeast (Fargo)

Elective/Experience Title: Critical Care Medicine

Location of Elective: Essentia Health – Fargo, ND

Department: Internal Medicine

Course Number: IMED 9221-02

Preceptor(s): Sahand Arfaie, MD; Karol Kremens, MD, FCCP & Herman Sequeira, MD

Period(s) Offered: All

Number of students per period: 1

Course prerequisites:

Revised Curriculum Phase(s): 2 & 3

Purpose: To increase the student's clinical skills and knowledge of critical care medicine.

Objectives: Following successful completion of this elective, the student will be able to:

1. Demonstrate expertise in evaluation, treatment, and management of patients with respiratory disease of all varieties especially asthma and COPD.
2. Demonstrate expertise in the physical exam of the chest.
3. Interpret chest x-rays and pulmonary function studies.
4. Utilize the different equipment used in respiratory therapy and the pulmonary function lab as well as the sleep lab. The student will be able to state the indications for this equipment's use.
5. Demonstrate familiarity with the various respiratory ventilators.
6. State the indications for fiber-optic bronchoscopy as well as the strengths and weaknesses of this procedure.
7. State the indications for thoracentesis, pleural biopsy, chest tube insertion, Swan-Ganz catheter insertion, arterial line insertion, and percutaneous needle biopsy of the lung. Additionally, the student will be able to discuss the strengths and weaknesses of these different procedures.

Instructional Activities: During this elective, the student will be involved in/experience:

1. Daily ICU rounds in which the student is expected to be an active participant, following 2 patients per day on average including performing histories, physical exam, medical record note writing, order writing, lab and imaging interpretation, family communication, patient hand offs and subspecialist consultation requests
2. Participation in ICU procedures under the supervision of the preceptor
3. Daily critical care meetings and lectures with the attending 1:1, as time allows
4. Review of selected reading materials and topic presentations to the preceptor as assigned
5. At least once weekly formative feedback sessions

Criteria for Grading: During and following this elective, the preceptor will:

1. Evaluate the student's oral description of how to stabilize a critically ill patient
2. Evaluate by direct observation the student's knowledge of the indications and limitations of commonly used monitoring devices, pulmonary artery catheters, arterial lines, and electrocardiography.

3. Evaluate by direct observation the student's understanding of the processes of coping used by patients and families experiencing critical illness.
4. Evaluate by direct observation the student's ability to relate to and communicate with the other members of the ICU team, (pharmacist, respiratory therapist, nurses, clergy and any other individuals interacting with the critically ill patient.)
5. Evaluate the student's written documentation of ICU admissions and daily progress notes along with ICU discharge summaries.
6. Evaluate by direct observation the student's physical examination, data interpretation, and patient management as they relate to the critically ill patient.
7. Evaluate by direct observation the student's technical skills as they pertain to student performance of authorized procedures.
8. Utilize the standardized UNDSMHS senior elective evaluation form.