

Elective Description

Campus: ALL (Fargo)

Elective/Experience Title: Hyperbaric Medicine

Location of Elective: Essentia Health Hospital 32nd St

Department: Family Medicine

Course Number: FMED 9510

Preceptor(s): Olayinka David Ajayi, MD, MPH

Period(s) Offered: all

Number of students per period: 1

Course Prerequisites: None

Revised Curriculum Phase(s): Phase 2 & 3

Purpose: To increase the student's knowledge and clinical skills in hyperbaric medicine and selected wound care.

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

1. List UHMS/FDA-approved indications for hyperbaric oxygen (Competency 1.10, 2.7)
2. State contraindications to receiving hyperbaric oxygen and identify side effects. (Competency 1.10, 2.7)
3. Summarize the role of hyperbaric oxygen in selected problematic wounds. (Competency 1.9, 1.10, 2.7)
4. Execute an appropriate history and physical for patients requiring hyperbaric oxygen therapy, including examination of a wound. (Competency 3.1)
5. Demonstrate the ability to identify the differences in emergent, urgent, critically ill and elective cases treated with hyperbaric oxygen. (Competency 2.7, 3.4, 3.5)
6. Execute with appropriate supervision basic procedures of hyperbaric medicine (Competency 3.6)
7. Demonstrate an understanding of the indication for and application of hyperbaric/wound care driven investigations (Competency 1.10, 2.7)

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

1. Obtaining hyperbaric and/or wound related patient histories
2. Supervised examination of hyperbaric and/or wound patients.
3. With supervision participate in special hyperbaric-related investigations such as:
 - a. Fluorescence Microangiography
 - b. Transcutaneous oximetry (TCO₂ or TCOM) evaluation
4. Basic hyperbaric/wound related procedures such as needle myringotomies with appropriate preceptor supervision.

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

1. Utilize the standardized UNDSMHS senior elective evaluation form.
2. Evaluate by direct observation the student's ability to list FDA approved-indications for hyperbaric oxygen therapy. (Objective 1)

(Continue to page 2 for remaining criteria)

3. Evaluate by direct observation the student's ability to recognize non-healing wounds that will benefit from hyperbaric oxygen therapy. (Objective 3)
4. Evaluate by direct observation the student's ability to recognize side-effect(s) and contraindications to hyperbaric oxygen therapy. (Objective 2)
5. Evaluate by direct observation the student's ability to do a hyperbaric-medicine or wound-directed history and physical examination. (Objective 4)
6. Evaluate by direct observation the student's skills in basic procedures & investigations of hyperbaric medicine. (Objective 6, 7)