

## Wound Care and Hyperbaric Medicine at University Hospital

### Clinical Experiences

The resident will rotate in the Hyperbaric Medicine and Wound Care Center at SUNY Upstate University Hospital. The resident will gain basic exposure to problem wound management and hyperbaric medicine. Clinic hours will be Monday – Friday, 8am-12pm. The resident will be overseen by an attending physician in hyperbaric medicine and wound care. The resident will participate in wound care consultation and ongoing wound care follow-up Monday – Thursday and hyperbaric medicine and/or wound care consultation and follow-up on Friday. Finally, the resident will be expected to attend Wednesday morning teaching rounds and HBO fellowship lectures from 8am-10am (please check with staff on Tuesday to confirm location). The Director of Hyperbaric Medicine and Wound Care will oversee the elective. Evaluation will be sent through medhub by the IM residency coordinator to the Hyperbaric Medicine and Wound Care faculty listed below.

HBO & WC Core Faculty (as of Feb 2017):

Marvin Heyboer III, MD  
Monica Morgan, MD  
William Santiago, MD  
Shane Jennings, MD

### Clinical Expectations:

The resident will report to the Wound Care Center located on 1 West at Upstate University Hospital (next to AP-1). The resident will complete wound care consultation under the supervision of the attending WCC/HBO physician. The resident will be expected to access the Wound Care Center schedule, review the patient information, complete a wound care consultation history and physical exam, develop a treatment plan with the supervising attending physician, and perform any necessary debridement.

1. The resident will be expected to complete a faithful documentation of the discussion with the attending about management, orders, return visit, and patient education. The resident will use the Wound Care Center smart sets to complete in the following order:
  1. Wound Care Orders
  2. Lab Orders
  3. Other Orders (vascular studies, off-loading devices, antibiotics, etc) as discussed with the attending physician
  4. Discharge instructions
  5. Consultation note (using appropriate template)
2. Attendance as the designated provider in daily morning clinic sessions with responsibility for clinical assessments and documentation demonstrating understanding and proficiency in the special history and physical exam findings pertinent to wound care.
3. Completion of assigned readings including those expected before the first session.
4. Submission of your best write up of a basic wound care visit which should include patient education and prevention strategies.

5. Creation of 1 to 2 multiple choice questions reflecting the educational goals.
6. Assistance with at least 2 debridements with documentation of the procedure elements and attending supervision.

#### Didactics

1. Assigned readings on wound care management from Wound Healing Society Clinical Practice Guidelines (see below)
2. PDF on Overview – Approach to the Problem Wound.
3. Participation in weekly HBO/WC teaching rounds (Wed mornings 8am-9am).
4. Participation in weekly HBO Fellowship lecture series (Wed mornings 9am-10am).
5. Participation in monthly Journal Club if occurs while on rotation.

#### Rotation Reading Assignments

Guidelines for the best care of chronic wounds (Wound Rep Regen)  
Guidelines for the treatment of arterial insufficiency ulcers (Wound Rep Regen)  
Guidelines for the treatment of diabetic ulcers (Wound Rep Regen)  
Guidelines for the treatment of venous stasis ulcers (Wound Rep Regen)  
Guidelines for the treatment of pressure ulcers (Wound Rep Regen)  
HBOT & Enhancement of Healing in Select Problem Wounds/DFU (UHM)  
HBOT & Delayed Radiation Injury (UHM)

#### Goals and Objectives

##### Patient Care:

1. Participate in and develop a standard approach to initial evaluation of a patient with a problem wound.
  - a. Pertinent history
  - b. Pertinent physical exam
2. Understand basic treatment goals and modalities for the major diagnostic classes of wounds including debridement, topical treatment modalities, the role of culture and antibiotics, the indications for hyperbaric oxygen treatment.
3. Participate in and develop an understanding of the basic approach to a hyperbaric medicine consultation.

##### Medical Knowledge:

1. Develop an understanding of basic wound etiologies, barriers to healing, and approach to treatment.
  - a. Venous stasis ulcers
  - b. Diabetic foot ulcers
  - c. Pressure ulcers
  - d. Arterial insufficiency ulcers
  - e. Atypical ulcers
2. Develop an understanding of modern wound care management:

- a. Moist wound healing
- b. Bio-burden
- c. Off-loading techniques
- d. Nutrition
- e. Advanced modalities
  - i. NPWT
  - ii. Skin Substitutes (Human, Placental Bovine, Cadaveric)
  - iii. HBOT
  - iv. MIST Therapy
3. Identify clinical indications for hyperbaric oxygen therapy
4. Gain an understanding of the underlying mechanism of action of HBOT.

#### Practice Based Learning

1. Analyze and assess practice experience and perform practice improvement.
2. Read from provided text on active Wound Care patient conditions.

#### Interpersonal and Communication Skills

1. Develop an effective therapeutic relationship with the patients and their significant others. Demonstrate respect for diversity, cultural, ethnic, spiritual, and emotional as well as age specific differences.
2. Demonstrate an ability to clearly document and communicate on a chart in EMR. This includes history of present illness, physical exam including wound exam, and develop assessment and plan for wound care patients.

#### Professionalism

1. Treat patients, patient's family and medical personnel with respect.
2. Protect the confidentiality of the staff, patients and family.
3. Demonstrate sensitivity to the patient's level of pain, emotional state and gender/ethnicity issues.
4. Unconditional, positive regard for patient's family, staff and consultants.
5. Accept responsibility and accountability for their own actions.
6. Demonstrate the ability to constructively criticize self.
7. Arrive in a timely manner for clinic each day.
8. Attend Wednesday morning Hyperbaric Medicine patient teaching rounds and hyperbaric medicine fellowship lectures.

#### System Base Practice

1. Know when to refer to wound care and when and how to refer the patient back to the primary care provider with clear instructions regarding prevention, ongoing monitoring and features that require a return to specialty care.
2. Gain understanding wound care pathways and appropriate consultations including vascular surgery, podiatry, endocrinology, general surgery, plastic surgery.
3. Gain understanding of sub-specialist care related to hyperbaric medicine including ENT, radiation oncology, urology, and vascular surgery.