An initial assessment including a history and physical that clearly substantiates the condition for which HBO is recommended.

- Documentation of standard wound care
- Prior medical, surgical procedures and/or HBO treatments
- Failure to respond to standard wound care occurs when there is no documentation of measurable signs of healing for at least 30 consecutive days

**Physical Exam**

- The DFU duration is > 1 month
- Documentation must demonstrate an ulcer with bone involvement (osteomyelitis), localized gangrene or gangrene of the foot. Wagner Grade 3 ulcer or greater.
- Documented evidence of lower extremity wound(s) healing failure despite at least 30 days of standard wound care.
  - Decrease in margin size or depth of the wound
  - Formation of healthy granulation tissue (NOT reactive mounds or polyps of granulation tissue)
  - Epithelial growth or advancing margins of epithelium
- Documentation of vascular status, assessment and correction of any vascular problems in the affected limb
  - Transcutaneous oximetry evidence of reversible local tissue hypoxia.
  - Include foot pulses and ABI
  - Arteriogram and documented physician interpretation
  - Documentation of procedures performed to maximize patient’s vascular status or that no additional revascularization or other flow augmentation procedures are available.
- Documentation of optimization of nutritional status
  - Albumin
  - Pre-Albumin
  - Measures to address deficiencies are taken and documented
- Documentation of optimization of glucose control
  - HgbA1-C level; the results may be obtained from the primary care physician.
  - Documentation of measures taken to address poorly controlled blood glucose (must be more than “it is being managed by PCP”)
- Documentation of debridement by any means to remove devitalized tissue
  - There is no devitalized tissue present
  - Plan for debridement
- Documentation of maintenance of a clean, moist bed of granulation tissue with appropriate dressings
  - Initial Ulcer size - beginning of 30 days of standard wound care.
  - Ulcer size - Following 30 days of standard wound care
- Documentation of efforts for adequate off-loading (the single most important intervention for healing)
  - Adequate refers to Total Contact Casting (gold standard), CROW walker, Crutches for walking or wheelchair.
- Documentation of necessary treatment to resolve any infection that might be present
  - Ulcer is free of infection
  - Measures taken to address treating any existing infection present
- Risk benefit ratio in favor of offering hyperbaric oxygen therapy.

**Impression**

1. Diabetic Complications Code – *(E series) see ICD-10 Crosswalk*
2. Wound diagnosis code – *(L series) see ICD-10 Crosswalk*
**Plan**

1. Hyperbaric Oxygen Therapy 2.0 ATA for 90 minutes breathing 100% oxygen.
2. In-chamber TCOM assessment during the first HBO treatment if normobaric reading did not exceed 100 mmHg.
   - A minimum value of 200 mmHg is required to confirm adequate reversal of local hypoxia
   - Increase (titrate) chamber pressure to reach this minimum value every 10 minutes.
   - Repeat normobaric TCOM following TX 14 to determine if hypoxia has been reversed
3. Institute air breaks if treatment pressure exceeds 2.0 ATA.
4. Do not exceed 2.5 ATA.
5. Treatments are given on a QD basis
6. Weekly wound evaluation with measurements

**Guidelines for continuing/further HBOT**

- Decrease in wound size either in surface area or volume
- Decrease in amount of exudate(s)
- Decrease in amount of necrotic tissue
- Improvement in tissue perfusion
- New epithelial tissue growth and/or granulation

**Diabetic Wounds of the Lower Extremity**

The UHMS Guidelines Committee recommends patients with Wagner ≥3 diabetic foot ulcers that have not healed for 30 days have Hyperbaric Oxygen Therapy added to the Standard of Care to reduce the risk of major amputation and incomplete healing. Urgent HBOT should be added to the standard of care for patients with Wagner ≥3 diabetic foot ulcers who have had surgical debridement of an infected foot (e.g., partial toe or foot amputation, I&D of deep space abscess, necrotizing soft tissue infection) to reduce the risk of major amputation and incomplete healing. In patients with Wagner ≤2 diabetic foot ulcers, The UHMS Guidelines Committee recommends against using Hyperbaric Oxygen Therapy. (Fife)