Article for Medicare Coverage of HYPERBARIC Oxygen Therapy (A46289)

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Blue Cross and Blue Shield of Arkansas

Contractor Number
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Contractor Type
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Missouri - Northeastern & Southern

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Article Text

The information in this article outlines requirements for hyperbaric oxygen (HBO) therapy services (CPT Code 99183 and HCPCS Code C1300 [only in a hospital outpatient department]).

Note: In skilled nursing facilities (SNFs), HBO therapy is part of the SNF PPS payment for beneficiaries in covered Part A stays. For hospital inpatients and critical access hospitals (CAHs), not electing Method I, HBO therapy is reported under revenue code 0940 without any HCPCS code. For inpatient services, show ICD-9-CM procedure code 93.59 in FL 80 and 81. For CAHs electing Method I, HBO therapy is reported under revenue code 0940 along with HCPCS code 99183.

For complete coverage and billing instructions review CMS Pub. 100-03, Medicare National Coverage Determinations (NCDs), Chapter 1, Section 20.29.

For purposes of coverage under Medicare, hyperbaric oxygen (HBO) therapy is a modality in which the entire body is exposed to oxygen under increased atmospheric pressure.

Covered Conditions

Program reimbursement for HBO therapy will be limited to that which is administered in a chamber (including the one-man unit) and is limited to the following conditions:

- Acute carbon monoxide intoxication, (ICD-9 code 986)
- Decompression illness, (ICD-9 codes 993.2, 993.3)
- Gas embolism, (ICD-9 codes 958.0, 999.1)
- Gas gangrene, (ICD-9 code 040.0)
- Acute traumatic peripheral ischemia. HBO therapy is a valuable adjunctive treatment to be used on combination with accepted standard therapeutic measures when loss of function, limb, or life is threatened. (ICD-9 codes 902.53, 903.01, 903.1, 904.0, 904.41)
- Crush injuries and suturing of severed limbs. As in the previous conditions, HBO therapy would be an adjunctive treatment when loss of function, limb, or life is threatened. (ICD-9 codes 927.00-927.03, 927.09-927.11, 927.20-927.21, 927.8-927.9, 928.00-928.01, 928.10-928.11, 928.20-928.21, 928.3, 928.8-928.9, 929.0, 929.9, 996.90-996.99)
- Progressive necrotizing infections (necrotizing fasciitis), (ICD-9 code 728.86)
- Acute peripheral arterial insufficiency, (ICD-9 codes 444.21, 444.22, 444.81)
- Preparation and preservation of compromised skin grafts (not for primary management of wounds), (ICD-9 code 996.52; excludes artificial skin graft including bilaminate or dermal skin substitutes*)
*NOTE: The covered indication of "preparation and preservation of compromised skin grafts" requires that a compromised skin graft be present. This indication is not for primary management of wounds nor is it for the initial preparation of the body site for a graft.
- Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management, (ICD-9 codes 730.10-730.19)
- Osteoradionecrosis as an adjunct to conventional treatment, (ICD-9 code 526.89)
- Soft tissue radionecrosis as an adjunct to conventional treatment, (ICD-9 code 990)
- Cyanide poisoning, (ICD-9 codes 987.7, 989.0)
- Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment, (ICD-9 codes 039.0-039.4, 039.8, 039.9)
- Diabetic wounds of the lower extremities in patients who meet the following three criteria:
  a. Patient has type I or type II diabetes and has a lower extremity wound that is due to diabetes (ICD-9 codes 250.70 – 250.73, 250.80 – 250.83, 707.10, 707.12 – 707.19).
  b. Patient has a wound classified as Wagner grade III or higher; and
  c. Patient has failed an adequate course of standard wound therapy.

The use of HBO therapy is covered as adjunctive therapy only after there are no measurable signs of healing for at least 30 days of treatment with standard wound therapy and must be used in addition to standard wound care. Standard wound care in patients with diabetic wounds includes:
- Assessment of a patient’s vascular status and correction of any vascular problems in the affected limb if possible,
- Optimization of nutritional status,
- Optimization of glucose control,
- Debridement by any means to remove devitalized tissue,
- Maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings, appropriate offloading, and necessary treatment to resolve any infection that might be present.

Failure to respond to standard wound care occurs when there are no measurable signs of healing for at least 30 consecutive days. Wounds must be evaluated at least every 30 days during administration of HBO therapy. Continued treatment with HBO therapy is not covered if measurable signs of healing have not been demonstrated within any 30-day period of treatment.

HBO should not be a replacement for other standard successful therapeutic measures; however, it is the treatment of choice and standard of care for decompression sickness and arterial gas embolism. Traumatic or spontaneous pneumothorax are contraindications to adjunctive HBO therapy only if untreated. Pregnancy is considered a contraindication to HBO except in the case of carbon monoxide poisoning where it is specifically indicated. Prior to the initiation of HBO therapy, it is expected in most cases that the diagnosis will be established by the referring or treating physician.

Indications of effective treatment outcomes for HBO:
- There is improvement or healing of wounds.
- There is improvement of tissue perfusion.
- There is new epithelial tissue growth and granulation.
- Tissue PO2 of at least 35 mmHg of oxygen is necessary for oxidative function to occur.
- The mechanism reduction in the bubble size of air emboli alleviates decompression sickness and gas/air emboli.
- Tissue PO2 of 45 or greater defines resolved hypoxia. The body can now resume wound healing and antimicrobial defenses without the need of HBO.

**Non-covered Conditions**

All other indications not specified under the "Covered Conditions" section are not covered under the Medicare program. No program payment may be made for any conditions other than those listed in "Covered Conditions" section.

No program payment may be made for HBO in the treatment of the following conditions:

1. Cutaneous, decubitus, and stasis ulcers
2. Chronic peripheral vascular insufficiency
3. Anaerobic septicemia and infection other than clostridial
4. Skin burns (thermal)
5. Senility
6. Myocardial infarction
7. Cardiogenic shock
8. Sickle cell anemia
9. Acute thermal and chemical pulmonary damage, i.e., smoke inhalation with pulmonary insufficiency
10. Acute or chronic cerebral vascular insufficiency
11. Hepatic necrosis
12. Aerobic septicemia
14. Tetanus
15. Systemic aerobic infection
16. Organ transplantation
17. Organ storage
18. Pulmonary emphysema
19. Exceptional blood loss anemia
20. Multiple Sclerosis
21. Arthritic Diseases
22. Acute cerebral edema

**Documentation Requirements**

There must be medical documentation to support the condition for which HBO therapy is being given. Documentation for all services should be maintained on file, (e.g., progress notes and treatment record) to substantiate medical necessity for HBO treatment. This medical documentation must include:

- An initial assessment which will include a medical history detailing the condition requiring HBO. The medical history should list prior treatments and their results including antibiotic therapy and surgical interventions. This assessment should also contain information about adjunctive treatment currently being rendered.
- Physician progress notes.
- Any communication between physicians detailing past or future (proposed) treatments.
- Positive gram-stain smear is required to support the diagnosis of gas gangrene.
- Definitive radiographic evidence, bone culture, or exposed bone with sensitivity studies are required to confirm the diagnosis of osteomyelitis.
- HBO treatment records describing the physical findings, the treatment rendered and the effect of the treatment upon the established goals for therapy.

**Utilization Guidelines**
1. This code reflects a per session descriptor; therefore, regardless of the time HBO therapy is performed (i.e., 1 hour, 2 hours) during each session, each unit billed equals one session. This code is to be utilized per dive per patient. The physician must be physically present on the unit during the entire dive for this reimbursement. Medicare recognizes that with multi-chamber units and multi-patient chambers, physicians can monitor several HBO patients simultaneously.

2. Evaluation and management (E&M) services and/or procedures (e.g., wound debridement, transcutaneous PO2 determinations) provided in a hyperbaric oxygen treatment facility in conjunction with a hyperbaric oxygen therapy session may be reported separately if:
   · A separate, identifiable service, unrelated to the hyperbaric oxygen therapy (HBO) or the condition which necessitated the HBO is rendered; and
   · The service could not be rendered at the time of the hyperbaric therapy (i.e., dysuria with a urinalysis and office visit for cystitis).

3. E&M services and/or other procedures cannot be billed on different patients while supervising a hyperbaric oxygen therapy session on another patient unless:
   · The HBO patient is not ascending or descending;
   · The other service is interruptible and is being provided in immediately adjacent rooms; and
   · The physician is readily available to respond to an emergency if needed.

### Topical Application of Oxygen

This method of administering oxygen does not meet the definition of HBO therapy as stated above. Also, its clinical efficacy has not been established. Therefore, no Medicare reimbursement may be made for the topical application of oxygen.

### References:

2. Medicare Part B Local Coverage Determination AC-01-012 and ARA-01-012 (Both LCD’s will be retired March 1, 2007).

### Coding Information

#### CPT/HCPCS Codes

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<th>Code</th>
<th>Description</th>
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<td>99183</td>
<td>PHYSICIAN ATTENDANCE AND SUPERVISION OF HYPERBARIC OXYGEN THERAPY, PER SESSION</td>
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<tr>
<td>C1300</td>
<td>HYPERBARIC OXYGEN UNDER PRESSURE, FULL BODY CHAMBER, PER 30 MINUTE INTERVAL</td>
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#### ICD-9 Codes that are Covered

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<td>039.0 - 039.4</td>
<td>CUTANEOUS ACTINOMYCOTIC INFECTION - MADURA FOOT</td>
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<td>039.8</td>
<td>ACTINOMYCOTIC INFECTION OF OTHER SPECIFIED SITES</td>
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<td>039.9</td>
<td>ACTINOMYCOTIC INFECTION OF UNSPECIFIED SITE</td>
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<td>040.0</td>
<td>GAS GANGRENE</td>
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250.70 - 250.73  DIABETES WITH PERIPHERAL CIRCULATORY DISORDERS, TYPE II OR UNSPECIFIED TYPE, NOT STATED AS UNCONTROLLED - DIABETES WITH PERIPHERAL CIRCULATORY DISORDERS, TYPE I [JUVENILE TYPE], UNCONTROLLED

250.80 - 250.83  DIABETES WITH OTHER SPECIFIED MANIFESTATIONS, TYPE II OR UNSPECIFIED TYPE, NOT STATED AS UNCONTROLLED - DIABETES WITH OTHER SPECIFIED MANIFESTATIONS, TYPE I [JUVENILE TYPE], UNCONTROLLED

444.21  ARTERIAL EMBOLISM AND THROMBOSIS OF UPPER EXTREMITY

444.22  ARTERIAL EMBOLISM AND THROMBOSIS OF LOWER EXTREMITY

444.81  EMBOLISM AND THROMBOSIS OF ILIAC ARTERY

526.89  OTHER SPECIFIED DISEASES OF THE JAWS

707.10  UNSPECIFIED ULCER OF LOWER LIMB

707.12 - 707.19  ULCER OF CALF - ULCER OF OTHER PART OF LOWER LIMB

728.86  NECROTIZING FASCIITIS

730.10 - 730.19  CHRONIC OSTEOMYELITIS SITE UNSPECIFIED - CHRONIC OSTEOMYELITIS INVOLVING MULTIPLE SITES

902.53  INJURY TO ILIAC ARTERY

903.01  INJURY TO AXILLARY ARTERY

903.1  INJURY TO BRACHIAL BLOOD VESSELS

904.0  INJURY TO COMMON FEMORAL ARTERY

904.41  INJURY TO POPLITEAL ARTERY

927.00 - 927.03  CRUSHING INJURY OF SHOULDER REGION - CRUSHING INJURY OF UPPER ARM

927.09 - 927.11  CRUSHING INJURY OF MULTIPLE SITES OF UPPER ARM - CRUSHING INJURY OF ELBOW

927.20 - 927.21  CRUSHING INJURY OF HAND(S) - CRUSHING INJURY OF WRIST

927.8 - 927.9  CRUSHING INJURY OF MULTIPLE SITES OF UPPER LIMB - CRUSHING INJURY OF UNSPECIFIED SITE OF UPPER LIMB

928.00 - 928.01  CRUSHING INJURY OF THIGH - CRUSHING INJURY OF HIP

928.10 - 928.11  CRUSHING INJURY OF LOWER LEG - CRUSHING INJURY OF KNEE
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<td>986</td>
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<td>COMPLICATIONS OF UNSPECIFIED REATTACHED EXTREMITY - COMPLICATION OF OTHER SPECIFIED REATTACHED BODY PART</td>
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<td>999.1</td>
<td>AIR EMBOLISM AS A COMPLICATION OF MEDICAL CARE NOT ELSEWHERE CLASSIFIED</td>
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**Other Information**

There is no Other Information for this article.

**All Versions**

Updated on 01/08/2008 with effective dates 01/01/2007 - N/A