

## Medical Coverage Policy | Hyperbaric Oxygen Therapy



**EFFECTIVE DATE:** 12/1/2014

**POLICY LAST UPDATED:** 11/04/2014

### OVERVIEW

Hyperbaric oxygen therapy (HBOT) involves breathing 100% oxygen at a pressure of more than 1 atmosphere (atm). It is generally applied systemically with the patient inside a hyperbaric chamber. It can also be applied topically; that is, the body part to be treated is isolated, eg, in an inflatable bag and exposed to pure oxygen.

### PRIOR AUTHORIZATION

#### Blue CHiP for Medicare and Commercial

Prior authorization is recommended and obtained via the online tool for participating providers. See the Related Policies section.

### POLICY STATEMENT

HBOT is covered with for the following conditions when filed with the applicable diagnosis noted in the coding section.

- Actinomycosis
- Acute carbon monoxide intoxication
- Acute traumatic peripheral ischemia
- Crush injuries and suturing of severed limbs
- Decompression illness
- Cyanide poisoning
- Gas embolism
- Gas gangrene
- Osteoradionecrosis
- Progressive necrotizing infections (necrotizing fasciitis)
- Soft tissue radionecrosis
- For any condition in which the severity warrants inpatient care (e.g., profound anemia with exceptional blood loss: only when blood transfusion is impossible or must be delayed)
- Pre- and post-treatment for patients undergoing dental surgery (non-implant related) of an irradiated jaw

For wounds that fail to respond to standard wound care, HBOT is medically necessary when the medical criteria is met.

HBOT is not medically necessary for the following indications as due to limited peer reviewed studies to support its clinical efficacy have not been established.

- Treatment of autism spectrum disorders
- early treatment to reduce the side effects of soft tissue clarify radiation therapy
- Topical hyperbaric oxygen therapy

For simultaneous use of systemic HBOT and Negative Pressure wound closure, medical criteria for each device must be met using the web based authorization tool.

## MEDICAL CRITERIA

### Failure to respond to standard wound care

\*Failure to respond to standard wound care is defined as no measurable signs of healing after a minimum of 30 consecutive days of treatment. In addition, the clinical information submitted must document that all of the following have been addressed:

1. assessment of a patient's vascular status and correction of any vascular problems in the affected limb if possible,
2. nutritional status,
3. glucose control (if diabetic),
4. debridement by any means to remove devitalized tissue,
5. Maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings, appropriate off-loading, and necessary treatment to resolve any infection that might be present.

## BACKGROUND

### Hyperbaric oxygen therapy:

Hyperbaric oxygen therapy (HBO) is a treatment delivering higher pressure of oxygen to the tissues. There are two types of administration.

### Systemic hyperbaric oxygen therapy:

A patient receiving systemic hyperbaric oxygen therapy is entirely enclosed in a pressurized chamber and breathes pure oxygen at a pressure greater than one atmosphere (the pressure of oxygen at sea level). The systemic circulation delivers the highly oxygenated blood to the wound site. Treatment may be administered in a monoplace (one person) or multiplace (two or more person) chamber with the patient receiving pure oxygen by mask, head tent, or endotracheal tube.

The use of systemic HBO therapy as an adjunctive therapy is typically covered only after there are no measurable signs of healing after a minimum of 30 days of treatment with standard wound therapy. Failure to respond to standard wound care is defined as no measurable signs of healing after a minimum of 30 consecutive days. HBO is used in as an adjunct to standard wound care

### Topical hyperbaric oxygen therapy:

Topical hyperbaric oxygen therapy (THBO) is a treatment delivering oxygen directly to a moist, open wound. THBO uses appliances to enclose the wound area and a conventional oxygen tank. Treatment may be performed in the office or when properly trained, without supervision by the patient in the home. Topical hyperbaric oxygen therapy is not covered as its clinical efficacy has not been established.

### Simultaneous use of systemic hyperbaric oxygen therapy and vacuum assisted wound closure:

Wounds failing to heal due to persistent infection, inadequate perfusion, hypoxia, cellular failure, repetitive trauma, or tissue injury may benefit from the simultaneous use of HBO and VAC.

## COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, or Benefit Booklet for applicable Rehabilitative/Surgery coverage.

**Note:** Services rendered by institutional providers apply to the members Surgery benefit

Services rendered by professional providers apply to the members rehabilitative services benefit

## CODING

### BlueCHiP for Medicare and Commercial

The following code is medically necessary when filed with a covered diagnosis or medical criteria has been met:

**99183**

ICD9 Covered Diagnosis Codes



HBO ICD9 codes.pdf

ICD10 Covered Diagnosis Codes



HBO ICD10  
codes.pdf

## RELATED POLICIES

Preauthorization via Web-Based Tool for Durable Medical Equipment (DME)

Preauthorization via Web-Based Tool for Procedures

## PUBLISHED

Provider Update, January 2015

Provider Update, September 2012

Provider Update, September 2011

Provider Update, December 2010

Provider Update, January 2010

Policy Update, October 2007

Policy Update, October 2006

Policy Update, January 2006

Policy Update, May 2004

## REFERENCES

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Blue Cross Blue Shield Association Medical Policy Reference. Policy 2.01.04 - Hyperbaric Oxygen Pressurization (HBO)/. Reviewed with literature search/ February 2010.

Carson S, McDonagh M, Russman B et al. *Hyperbaric oxygen therapy for stroke: a systematic review of the evidence*. Clinical Rehab;2005;19(8):819-33.

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Raman G, Kupelnick B, Chew P, Lau J. *A horizon scan: Uses of hyperbaric oxygen therapy*. Technology Assessment Report. Prepared by the Tufts-New England Medical Center Evidence Based Practice Center for the Agency for Healthcare Research and Quality (AHRQ). Rockville, MD: AHRQ; October 5, 2006. Available at: <http://www.cms.hhs.gov/determinationprocess/downloads/id42TA.pdf>.

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