



## Medical Necessity Guideline

Medical Necessity Guideline (MNG) Title: Hyperbaric Oxygen Therapy		
MNG #: 005	<input checked="" type="checkbox"/> SCO <input checked="" type="checkbox"/> One Care <input checked="" type="checkbox"/> MAPD-MA Medicare Preferred <input checked="" type="checkbox"/> MAPD-MA Medicare Value <input checked="" type="checkbox"/> MAPD-RI Medicare Preferred <input checked="" type="checkbox"/> MAPD-RI Medicare Value <input checked="" type="checkbox"/> DSNP-RI Medicare Maximum	Prior Authorization Needed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Clinical: <input checked="" type="checkbox"/>	Operational: <input type="checkbox"/>	Informational: <input type="checkbox"/>
Medicare Benefit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Approval Date: 1/10/2019;	Effective Date: 1/10/2019;
Last Revised Date: 1/25/2019; 03/25/2020; 04/27/2021	Next Annual Review Date: 1/10/2020; 03/25/2021; 04/27/2022	Retire Date:

### OVERVIEW:

Hyperbaric oxygen (HBO) therapy is a systemic treatment in which an individual’s entire body is exposed to oxygen in an enclosed chamber (e.g., mono-place or multi-place chamber) under increased atmospheric pressure. During the therapy, the patient inhales near 100% oxygen gas via mask, head tent, or endotracheal tube at pressures two to three times greater than the atmospheric pressure.

HBO therapy causes mechanical and physiological effects through increasing the concentration of dissolved oxygen in the blood, replacing inert gas in the bloodstream with oxygen, improving neovascularization and tissue reperfusion, reducing inflammation and edema, and acting as a bactericide for certain susceptible bacteria.

Depending on the severity of the patient’s original problem and their response to treatment, HBO therapy may not be appropriate for the primary management of the condition. For example, HBO therapy should not be the primary management of wounds. Instead, HBO therapy may be used as an *adjunctive treatment*, specifically, when there is a loss of function or limb, when life is threatened, or when the disease process is refractory to medical and surgical treatment.

### DEFINITIONS:

**Adjunctive treatment:** An intervention that is used in combination with accepted standard therapeutic measures.

**Measurable signs of healing (in the context of diabetic wounds):** Evidence of healing should be or is best defined as specific, documented, clinical findings related to the wound volume and/or surface area. Physician or qualified healthcare practitioner statements should be descriptive and complete with interval measurements to substantiate wound improvement.

**Standard Therapy for 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



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- 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.

**Topical oxygen therapy:** Technique of delivering near 100% oxygen directly onto an open and moist wound at pressures greater than atmospheric pressure. It can be delivered intermittently at low pressure (of 0.049 to 1.03 atmospheres) or continuously using low-flow oxygen (at less than one liter/minute). It is hypothesized that the high concentrations of applied oxygen will increase local cellular oxygen tension and promote wound healing.

### DECISION GUIDELINES:

#### Clinical Coverage Criteria:

Commonwealth Care Alliance may cover the use of hyperbaric oxygen therapy, in a pressurized chamber, for the treatment of the following conditions:

- Acute carbon monoxide intoxication,
- Decompression illness,
- Cyanide poisoning,
- Gas embolism,
- Progressive necrotizing infections (necrotizing fasciitis),
- Acute peripheral arterial insufficiency, or
- Gas gangrene

Commonwealth Care Alliance may cover the use of hyperbaric oxygen therapy, in a pressurized chamber, for the *adjunctive treatment* of the following conditions:

- Preparation and preservation of compromised skin grafts,
- Crush injuries and suturing of severed limbs,
- Acute traumatic peripheral ischemia,
- Chronic refractory osteomyelitis,
- Soft tissue radionecrosis,
- Osteoradionecrosis,
- Actinomycosis, or
- Diabetic wounds of the lower extremities for patients that meet the criteria

HBO therapy is covered as an adjunctive therapy and may be used in addition to standard wound care for patients with diabetic wounds of the lower extremities. The patients must meet the following criteria:

- Patient has type I or type II diabetes and has a lower extremity wound that is due to the disease process;
- Patient has a wound classified as Wagner grade III or higher; and
- Patient has failed an adequate course of standard wound therapy

HBO therapy should only be used when there are no measurable signs of healing for at least 30 days of treatment with the *Standard Therapy for diabetic wounds*.

- Failure to respond to standard wound care occurs when there are no measurable signs of healing for at least 30



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consecutive days of appropriate wound care during which the patient has documented evidence of optimization for wound healing and there is no appreciable change in the wound.

### LIMITATIONS/EXCLUSIONS:

Commonwealth Care Alliance will not cover HBO therapy, in a pressurized chamber, for the treatment of the following conditions, including but not limited to:

- Acute cerebral edema
- Acute or chronic cerebral vascular insufficiency
- Acute thermal and chemical pulmonary damage
  - For example, smoke inhalation with pulmonary insufficiency
- Aerobic septicemia
- Anaerobic septicemia and infection other than clostridia
- Arthritic diseases
- Cardiogenic shock
- Chronic peripheral vascular insufficiency
- Cutaneous, decubitus, and stasis ulcers
- Exceptional blood loss anemia
- Hepatic necrosis
- Multiple sclerosis
- Myocardial infarction
- Nonvascular causes of chronic brain syndrome
  - For examples, pick's disease, Alzheimer's disease, Korsakoff's disease
- Organ storage
- Organ transplantation
- Pulmonary emphysema
- Senility
- Sickle cell anemia
- Skin burns (thermal)
- Systemic aerobic infection
- Tetanus

Continued HBO therapy for eligible patients with diabetic wounds of the lower extremities is not covered if there are no *measurable signs of healing* within the 30-day treatment period.

- Wounds must be evaluated every 30 days during the administration of HBO therapy

*Topical Oxygen Therapy (TOT)* for the treatment of wounds will not be covered. It does not meet the definition of HBO therapy as stated above, and its clinical safety and effectiveness have not been established.

Benefit coverage for health services is determined by the member specific benefit plan document\* and applicable laws (including the Plan's applicable government program contracts) that may require coverage for a specific service. The



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member specific benefit plan document identifies which services are covered, which are excluded, and which are subject to limitations.

**AUTHORIZATION:**

The following list(s) of codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not signify that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. This Medical Necessity Guideline is subject to all applicable Plan Policies and Guidelines, including requirements for prior authorization and other requirements in Provider’s agreement with the Plan (including complying with Plan’s Provider Manual specifications).

CPT Code	Description
99183	Physician or other qualified health care professional attendance and supervision of Hyperbaric oxygen therapy, per session (Professional Component Only).
HCPCS Code	Description
A4575	Topical hyperbaric oxygen chamber, disposable (Not covered)
E0446	Topical oxygen delivery system, not otherwise specified, includes all supplies and accessories (Not covered)
G0277	Hyperbaric oxygen under pressure, full body chamber, per 30-minute interval (Technical Component Only)
Bill Type	Description
85X	Critical access hospital
Place of Service Code	Description
11	Office
19	Off campus outpatient hospital
21	Inpatient hospital
22	On campus outpatient hospital
49	Independent Clinic

**Disclaimer:**

This Medical Necessity Guideline is not a rigid rule. As with all of CCA’s criteria, the fact that a member does not meet these criteria does not, in and of itself, indicate that no coverage can be issued for these services. Providers are advised, however, that if they request services for any member who they know does not meet our criteria, the request should be accompanied by clear and convincing documentation of medical necessity. The preferred type of documentation is the letter of medical necessity, indicating that a request should be covered either because there is supporting science indicating medical necessity (supporting literature (full text preferred) should be attached to the request), or describing the member’s unique clinical circumstances, and describing why this service or supply will be more effective and/or less costly than another service which would otherwise be covered. Note that both supporting scientific evidence and a description of the member’s unique clinical circumstances will generally be required.

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### RELATED REFERENCES:

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### ATTACHMENTS:

EXHIBIT A:	
EXHIBIT B	

### REVISION LOG:

REVISION DATE	DESCRIPTION
04/27/2021	Removed "Please note" from the Decision Guidelines, Clinical Coverage Criteria section.
04/25/2021	Overview: revised the definition of hyperbaric oxygen therapy, added method of administration, mechanisms of action, information about when it can be used as an adjunctive therapy. Added a Definitions section and the following definitions: adjunctive treatment, measurable signs of healing, standard therapy for diabetic wounds, and topical oxygen therapy. Decision Guidelines: revised the first sentence, covered conditions list was separated into (1) treatment, and 2) adjunctive treatment, diabetic wounds of the lower extremities bullet. Limitations/Exclusions: Added the list of non-covered conditions, diabetic wounds (when it would not be covered), and topical oxygen therapy.



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**APPROVALS:**

Stefan Topolski  
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CCA Senior Clinical Lead [Print]

*Stefan Topolski*

\_\_\_\_\_  
Signature

Doug Hsu, MD

\_\_\_\_\_  
CCA Senior Operational Lead [Print]

*Doug Hsu*

\_\_\_\_\_  
Signature

Lori Tishler, MD

\_\_\_\_\_  
CCA CMO or Designee [Print]

*Lori Tishler*

\_\_\_\_\_  
Signature

Medical Director  
\_\_\_\_\_  
Title [Print]

1/10/2019

\_\_\_\_\_  
Date

Vice President, Medical Policy & Utilization  
Review

\_\_\_\_\_  
Title [Print]

1/10/2019

\_\_\_\_\_  
Date

Senior Vice President, Medical Services

\_\_\_\_\_  
Title [Print]

1/10/2019

\_\_\_\_\_  
Date