

Hyperbaric Oxygen Therapy (NCD 20.29)

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[↪ Terms and Conditions](#)

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Policy Summary

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Overview

Hyperbaric oxygen (HBO) therapy is a modality in which the entire body is exposed to oxygen under increased atmospheric pressure. HBO therapy is a medical treatment that involves breathing in pure oxygen while inside a sealed chamber whose air pressure is significantly higher than normal atmospheric pressure. This increased air pressure helps supply your lungs with a greater amount of oxygen and, in turn, deliver more oxygen to tissues throughout your body.

Guidelines

Hyperbaric oxygen 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,
- Osteoradionecrosis as an adjunct to conventional treatment,
- Decompression illness,
- Cyanide poisoning,
- Gas embolism,
- Preparation and preservation of compromised skin grafts (not for primary management of wounds),
- 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.
- Progressive necrotizing infections (necrotizing fasciitis),
- Acute peripheral arterial insufficiency,
- Acute traumatic peripheral ischemia. HBO therapy is a valuable adjunctive treatment to be used in combination with accepted standard therapeutic measures when loss of function, limb, or life is threatened.
- Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management,
- Soft tissue radionecrosis as an adjunct to conventional treatment,
- Gas gangrene,
- Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment,
- Diabetic wounds of the lower extremities in patients who meet the following three criteria:
 - Patient has type I or type II diabetes and has a lower extremity wound that is due to diabetes;
 - Patient has a wound classified as Wagner grade III or higher; and
 - Patient has failed an adequate course of standard wound therapy

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 off-loading, 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.

Non-Covered Conditions

No payment may be made for Hyperbaric oxygen therapy in the treatment of the following conditions:

- Acute cerebral edema
- Acute or chronic cerebral vascular insufficiency
- Acute thermal and chemical pulmonary damage, i.e., smoke inhalation with pulmonary insufficiency
- Aerobic septicemia
- Anaerobic septicemia and infection other than clostridial
- Arthritic disease
- 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 (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

Topical Application of Oxygen

Topical application of oxygen does not meet the definition of HBO therapy as stated above. Continuous Diffusion of Oxygen Therapy (CDO) also referenced as Topical Application of Oxygen and Topical Oxygen Therapy (TOT) for the treatment of wounds is not covered. Its clinical efficacy has not been established. No reimbursement may be made for the topical application of oxygen for wounds.

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply 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. Other Policies and Guidelines may apply.

CPT Code	Description
97799	Unlisted physical medicine/rehabilitation service or procedure (Topical Oxygen Therapy – Non-Covered)

CPT Code	Description
99183	Physician or other qualified health care professional attendance and supervision of hyperbaric oxygen therapy, per session (Professional Component Only)
99199	Unlisted special service, procedure or report (Topical Oxygen Therapy – Non-Covered)

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HCPCS Code	Description
A4575	Topical hyperbaric oxygen chamber, disposable (Non-Covered)
E0446	Topical oxygen delivery system, not otherwise specified, includes all supplies and accessories (Non-Covered)
G0277	Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval (Technical Component Only)

Revenue Code	Description
413	Hyperbaric oxygen
940	Other therapeutic services

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

ICD Procedure Code	Description
5A05121	Extracorporeal hyperbaric oxygenation, intermittent

References

CMS National Coverage Determinations (NCDs)

[NCD 20.29 Hyperbaric Oxygen Therapy](#)

[NCD 270.4 Treatment of Decubitus Ulcers](#)

CMS Local Coverage Determinations (LCDs) and Articles

LCD	Article	Contractor	Medicare Part A	Medicare Part B
L37873 Topical Oxygen Therapy	A56392 Response to Comments: Topical Oxygen Therapy A56431 Billing and Coding: Topical Oxygen Therapy	Palmetto	AL, GA, NC, SC, TN, VA, WV	AL, GA, NC, SC, TN, VA, WV
N/A	A56025 Billing and Coding: Topical HBO and Physician Related Service Billing and Coding Guidelines	Noridian	AS, CA, GU, HI, MP, NV	AS, CA, GU, HI, MP, NV

LCD	Article	Contractor	Medicare Part A	Medicare Part B
N/A	A56026 Billing and Coding: Topical HBO and Physician Related Service Billing and Coding Guidelines	Noridian	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY
N/A	A57742 Billing and Coding: National Noncovered Services	First Coast	FL, PR, VI	FL, PR, VI
L35021 Hyperbaric Oxygen (HBO) Therapy Retired 08/27/2020	A56714 Billing and Coding: Hyperbaric Oxygen (HBO) Therapy Retired 08/27/2020	Novitas	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX	AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX
L36504 Hyperbaric Oxygen (HBO) Therapy Retired 08/27/2020	A57800 Billing and Coding: Hyperbaric Oxygen (HBO) Therapy Retired 08/27/2020	First Coast	FL, PR, VI	FL, PR, VI
	A55788 Response to Comments: Hyperbaric Oxygen (HBO) Therapy Retired 08/27/2020			
	A54934 Hyperbaric Oxygen HBO Therapy New Part AB LCD Retired 08/27/2020			

LCD	Article	Contractor	DME MAC
L33797 Oxygen and Oxygen Equipment	A58247 Response to Comments: Oxygen and Oxygen Equipment - DL33797	CGS	AL, AR, CO, FL, GA, IL, IN, KY, LA, MI, MN, MS, NC, NM, OH, OK, PR, SC, TN, TX, VA, VI, WI, WV
		Noridian	AK, AS, AZ, CA, CT, DC, DE, GU, HI, IA, ID, KS, MA, MD, ME, MO, MP, MT, ND, NE, NH, NJ, NV, NY, OR, PA, RI, SD, UT, VT, WA, WY
	A55426 Standard Documentation Requirements for All Claims Submitted to DME MACs	CGS	AL, AR, CO, FL, GA, IL, IN, KY, LA, MI, MN, MS, NC, NM, OH, OK, PR, SC, TN, TX, VA, VI, WI, WV
		Noridian	AK, AS, AZ, CA, CT, DC, DE, GU, HI, IA, ID, KS, MA, MD, ME, MO, MP, MT, ND, NE, NH, NJ, NV, NY, OR, PA, RI, SD, UT, VT, WA, WY

CMS Claims Processing Manual

[Chapter 32: § 30 Hyperbaric Oxygen \(HBO\) Therapy, § 30.1 Billing Requirements for HBO Therapy for the Treatment of Diabetic Wounds of the Lower Extremities](#)

[Chapter 32: § 30.2 Hyperbaric Oxygen \(HBO\) Therapy \(Section C, Topical Application of Oxygen\)](#)

CMS Transmittal(s)

[Transmittal 48, Change Request 4278, Dated 03/17/2006 \(Technical Corrections to the NCD Manual\)](#)

[Transmittal 203, Change Request 10220, Dated 11/17/2017 \(Hyperbaric Oxygen \(HBO\) Therapy \(Section C, Topical Application of Oxygen\)\)](#)

[Transmittal 1165, Change Request 8109, Dated 01/18/2013 \(International Classification of Diseases \(ICD\)-10 Conversion from ICD-9 and Related Code Infrastructure of the Medicare Shared Systems as They Relate to CMS National Coverage Determinations \(NCDs\) \(CR\)\)](#)

[Transmittal 1388, Change Request 8691, Dated 05/23/2014 \(ICD-10 Conversion/Coding Infrastructure Revisions/ICD-9 Updates to National Coverage Determinations \(NCDs\)–Maintenance CR\)](#)
[Transmittal 1537, Change Request 9252, Dated 08/21/2015 \(ICD-10 Conversion/Coding Infrastructure Revisions to National Coverage Determinations \(NCDs\)–3rd Maintenance CR\)](#)
[Transmittal 1580, Change Request 9252, Dated 12/03/2015 \(ICD-10 Conversion/Coding Infrastructure Revisions to National Coverage Determinations \(NCDs\)–3rd Maintenance CR\)](#)
[Transmittal 1658, Change Request 9540, Dated 04/29/2016 \(Coding Revisions to National Coverage Determinations\)](#)
[Transmittal 1665, Change Request 9631, Dated 05/13/2016 \(Coding Revisions to National Coverage Determinations \(NCDs\)\)](#)
[Transmittal 1672, Change Request 9631, Dated 06/03/2016 \(Coding Revisions to National Coverage Determinations \(NCDs\)\)](#)
[Transmittal 1854, Change Request 10086, Dated 05/26/2017 \(ICD-10 Coding Revisions to National Coverage Determinations \(NCDs\)\)](#)
[Transmittal 1975, Change Request 10318, Dated 11/09/2017 \(ICD-10 and Other Coding Revisions to National Coverage Determinations \(NCDs\)\)](#)
[Transmittal 2005, Change Request 10318, Dated 01/18/2018 \(ICD-10 and Other Coding Revisions to National Coverage Determinations \(NCDs\)\)](#)
[Transmittal 2243, Change Request 11134, Dated 02/01/2019 \(International Classification of Diseases, 10th Revision \(ICD-10\) and Other Coding Revisions to National Coverage Determination \(NCDs\)\)](#)
[Transmittal 3921, Change Request 10220, Dated 11/17/2017 \(Hyperbaric Oxygen \(HBO\) Therapy \(Section C, Topical Application of Oxygen\)\)](#)

MLN Matters

[Article MM10086, ICD-10 Coding Revisions to National Coverage Determinations \(NCDs\)](#)
[Article MM10220, Hyperbaric Oxygen \(HBO\) Therapy \(Section C, Topical Application of Oxygen\)](#)
[Article MM10318, Revised \(ICD-10 and Other Coding Revisions to National Coverage Determinations \(NCDs\)\)](#)
[Article MM11134, International Classification of Diseases, 10th Revision \(ICD-10\) And Other Coding Revisions to National Coverage Determinations \(NCDs\)](#)

Guideline History/Revision Information

Revisions to this summary document do not in any way modify the requirement that services be provided and documented in accordance with the Medicare guidelines in effect on the date of service in question.

Date	Summary of Changes
04/01/2021	Template Update <ul style="list-style-type: none"> Reformatted policy; transferred content to new template
11/11/2020	Applicable Codes <ul style="list-style-type: none"> Added CPT code 97799 Supporting Information <ul style="list-style-type: none"> Updated <i>References</i> section to reflect the most current information Archived previous policy version MPG148.06

Purpose

The Medicare Advantage Policy Guideline documents are generally used to support UnitedHealthcare Medicare Advantage claims processing activities and facilitate providers' submission of accurate claims for the specified services. The document can be used as a guide to help determine applicable:

- Medicare coding or billing requirements, and/or
- Medical necessity coverage guidelines; including documentation requirements.

UnitedHealthcare follows Medicare guidelines such as NCDs, LCDs, LCAs, and other Medicare manuals for the purposes of determining coverage. It is expected providers retain or have access to appropriate documentation when requested to support coverage. Please utilize the links in the [References](#) section below to view the Medicare source materials used to develop this resource document. This document is not a replacement for the Medicare source materials that outline Medicare coverage

requirements. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

Terms and Conditions

The Medicare Advantage Policy Guidelines are applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

These Policy Guidelines are provided for informational purposes, and do not constitute medical advice. Treating physicians and healthcare providers are solely responsible for determining what care to provide to their patients. Members should always consult their physician before making any decisions about medical care.

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 member specific benefit plan document identifies which services are covered, which are excluded, and which are subject to limitations. In the event of a conflict, the member specific benefit plan document supersedes the Medicare Advantage Policy Guidelines.

Medicare Advantage Policy Guidelines are developed as needed, are regularly reviewed and updated, and are subject to change. They represent a portion of the resources used to support UnitedHealthcare coverage decision making. UnitedHealthcare may modify these Policy Guidelines at any time by publishing a new version of the policy on this website. Medicare source materials used to develop these guidelines include, but are not limited to, CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Medicare Benefit Policy Manual, Medicare Claims Processing Manual, Medicare Program Integrity Manual, Medicare Managed Care Manual, etc. The information presented in the Medicare Advantage Policy Guidelines is believed to be accurate and current as of the date of publication and is provided on an "AS IS" basis. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

You are responsible for submission of accurate claims. Medicare Advantage Policy Guidelines are intended to ensure that coverage decisions are made accurately based on the code or codes that correctly describe the health care services provided. UnitedHealthcare Medicare Advantage Policy Guidelines use Current Procedural Terminology (CPT®), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT® or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee claims payment.

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*For more information on a specific member's benefit coverage, please call the customer service number on the back of the member ID card or refer to the [Administrative Guide](#).