

## Clinical Policy: Hyperbaric Oxygenation Therapy

Reference Number: WNC.CP.199

Last Review Date: 11/2023

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

**Note:** When state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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### Description<sup>1</sup>

Hyperbaric oxygen (HBO) therapy consists of the exposure of the entire body to 100% oxygen at pressures greater than one atmosphere absolute (ATA) in accordance with accepted clinical protocols for duration and pressure in a mono- or multi-place pressurized chamber.

### Policy/Criteria<sup>1</sup>

- I. WellCare of North Carolina® shall cover Hyperbaric Oxygenation Therapy when the beneficiary meets the following specific criteria:
  - A. Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment;
  - B. Acute carbon monoxide intoxication;
  - C. Acute peripheral arterial insufficiency, including central retinal artery occlusion;
  - D. Chronic peripheral vascular insufficiency is **only** covered when the following conditions are met:
    - 1. Investigation of arterial inflow indicates no lesions amenable to either bypass or stenting
    - 2. Transcutaneous PO<sub>2</sub> in the region of the wound less than 40 mmHG breathing air and a response to oxygen breathing (either at 1 atmosphere or during hyperbaric exposure).
  - E. Acute traumatic peripheral ischemia. HBO therapy is an adjunctive treatment to be used in combination with accepted standard therapeutic measures, when loss of function, limb or life is threatened;
  - F. Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management;
  - G. Crush injuries and suturing of severed limbs. HBO therapy as an adjunctive treatment when loss of function, limb, or life is threatened;
  - H. Cyanide poisoning;
  - I. Decompression illness;
  - J. Gas embolism;
  - K. Gas gangrene;
  - L. Meleney ulcers (the use of hyperbaric oxygen in any other type of cutaneous ulcer is **not** covered);

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- M. Necrotizing soft tissue infections of subcutaneous tissue, muscle, or fascia in conjunction with standard medical and surgical procedures when loss of function, limb, or life is threatened;
- N. Osteoradionecrosis as an adjunct to conventional treatment;
- O. Pre-treatment and post-treatment for patients undergoing dental surgery (non-implant related) of an irradiated jaw which has received a total dose threshold of radiation greater than 5000cGY;
- P. Preparation and preservation of compromised skin grafts;
- Q. Soft tissue radionecrosis as an adjunct to conventional treatment; **or**
- R. Lower extremity wound due to diabetes when the wound is classified as a Wagner Grade III or higher and has failed an adequate course of wound therapy.

**II.** WellCare of North Carolina<sup>®</sup> shall **not cover** Hyperbaric Oxygenation Therapy for the following conditions:

- A. Acute cerebral edema;
- B. Acute or chronic cerebral vascular insufficiency;
- C. Acute thermal and chemical pulmonary damage (i.e., smoke inhalation with pulmonary insufficiency);
- D. Aerobic septicemia;
- E. Anaerobic septicemia and infection other than clostridial;
- F. Arthritic diseases;
- G. Cardiogenic shock;
- H. Chronic peripheral vascular insufficiency, **except** as noted above;
- I. Congenital conditions, e.g., cerebral palsy, autism, mental retardation;
- J. Cutaneous, decubitus, and stasis ulcers;
- K. Exceptional blood loss anemia;
- L. Hepatic necrosis;
- M. Multiple sclerosis;
- N. Myocardial infarction;
- O. Nonvascular causes of chronic brain syndrome (Pick's disease, Alzheimer's disease, Korsakoff's disease);
- P. Organ storage;
- Q. Organ transplantation;
- R. Pulmonary emphysema;
- S. Senility;
- T. Sickle cell crisis;
- U. Skin burns (thermal);
- V. Systemic aerobic infection;
- W. Tetanus; **and**
- X. Traumatic brain injury
- Y. Topical Application - Topical application of oxygen does not meet the definition of HBO therapy and is not covered.
- Z. HBO therapy is not covered as a replacement for other standard successful therapeutic measures.

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**Background<sup>1</sup>**

The use of HBO therapy is covered as adjunctive therapy only after there are no measurable signs of healing for at least 30 calendar 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.

Evidence based treatments will be permitted as noted above. The treatment of multiple sclerosis, brain injury (which includes autism, cerebral palsy, stroke) are **not approved** due to lack of evidence based medicine at this time.

**Coding Implications**

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2023, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT®* Codes	Description
99183	Physician or other qualified health care professional attendance and supervision of hyperbaric oxygen therapy, per session

**ICD-10-CM Diagnosis Codes that Support Coverage Criteria**

+ Indicates a code(s) requiring an additional character

ICD-10-CM Code	Description
For a list of applicable diagnosis codes, please visit <a href="https://medicaid.ncdhhs.gov/providers/clinical-coverage-policies/physician-clinical-coverage-policies">https://medicaid.ncdhhs.gov/providers/clinical-coverage-policies/physician-clinical-coverage-policies</a>	

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<b>Reviews, Revisions, and Approvals</b>	<b>Reviewed Date</b>	<b>Approval Date</b>
Original approval date	04/21	06/21
Reviewed CPT and HCPCS codes.	01/22	02/22
Annual Review	02/23	02/23
NCHC verbiage removed from NC Guidance Verbiage	04/23	04/23
Annual Review. HCPCS Codes A4575, E0446, G0277 removed.	11/23	11/23

**References**

1. State of North Carolina Medicaid. Medicaid and Health Choice Clinical Coverage Policy No: 1A-8 Hyperbaric Oxygenation Therapy. [Program Specific Clinical Coverage Policies | NC Medicaid \(ncdhhs.gov\)](#). Published August 15, 2023. Accessed September 7, 2023.

**North Carolina Guidance**

*Eligibility Requirements*

- a. An eligible beneficiary shall be enrolled in the NC Medicaid Program (Medicaid is NC Medicaid program, unless context clearly indicates otherwise);
- b. Provider(s) shall verify each Medicaid beneficiary’s eligibility each time a service is rendered.
- c. The Medicaid beneficiary may have service restrictions due to their eligibility category that would make them ineligible for this service.

*EPSDT Special Provision: Exception to Policy Limitations for a Medicaid Beneficiary under 21 Years of Age*

- a. 42 U.S.C. § 1396d(r) [1905(r) of the Social Security Act]  
Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) is a federal Medicaid requirement that requires the state Medicaid agency to cover services, products, or procedures for Medicaid beneficiary under 21 years of age if the service is medically necessary health care to correct or ameliorate a defect, physical or mental illness, or a condition [health problem] identified through a screening examination (includes any evaluation by a physician or other licensed practitioner).

This means EPSDT covers most of the medical or remedial care a child needs to improve or maintain his or her health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems.

Medically necessary services will be provided in the most economic mode, as long as the treatment made available is similarly efficacious to the service requested by the beneficiary’s physician, therapist, or other licensed practitioner; the determination process does not delay the delivery of the needed service; and the determination does not limit the beneficiary’s right to a free choice of providers.

EPSDT does not require the state Medicaid agency to provide any service, product or procedure:

1. that is unsafe, ineffective, or experimental or investigational.

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2. that is not medical in nature or not generally recognized as an accepted method of medical practice or treatment.

Service limitations on scope, amount, duration, frequency, location of service, and other specific criteria described in clinical coverage policies may be exceeded or may not apply as long as the provider's documentation shows that the requested service is medically necessary "to correct or ameliorate a defect, physical or mental illness, or a condition" [health problem]; that is, provider documentation shows how the service, product, or procedure meets all EPSDT criteria, including to correct or improve or maintain the beneficiary's health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems.

**EPSDT and Prior Approval Requirements**

1. If the service, product, or procedure requires prior approval, the fact that the beneficiary is under 21 years of age does NOT eliminate the requirement for prior approval.
2. **IMPORTANT ADDITIONAL INFORMATION** about EPSDT and prior approval is found in the *NCTracks Provider Claims and Billing Assistance Guide*, and on the EPSDT provider page. The Web addresses are specified below:

*NCTracks Provider Claims and Billing Assistance Guide:*

<https://www.nctracks.nc.gov/content/public/providers/provider-manuals.html>

*EPSDT provider page:* <https://medicaid.ncdhhs.gov/>

*Provider(s) Eligible to Bill for the Procedure, Product, or Service*

To be eligible to bill for the procedure, product, or service related to this policy, the provider(s) shall:

- a. meet Medicaid qualifications for participation;
- b. have a current and signed Department of Health and Human Services (DHHS) Provider Administrative Participation Agreement; and
- c. bill only for procedures, products, and services that are within the scope of their clinical practice, as defined by the appropriate licensing entity.

*Compliance*

Provider(s) shall comply with the following in effect at the time the service is rendered:

- a. All applicable agreements, federal, state and local laws and regulations including the Health Insurance Portability and Accountability Act (HIPAA) and record retention requirements; and
- b. All NC Medicaid's clinical (medical) coverage policies, guidelines, policies, provider manuals, implementation updates, and bulletins published by the Centers for Medicare and Medicaid Services (CMS), DHHS, DHHS division(s) or fiscal contractor(s).

*Claims-Related Information*

Provider(s) shall comply with the NC Tracks Provider Claims and Billing Assistance Guide, Medicaid bulletins, fee schedules, NC Medicaid's clinical coverage policies and any other relevant documents for specific coverage and reimbursement for Medicaid:

- a. Claim Type - as applicable to the service provided:

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Professional (CMS-1500/837P transaction)

Institutional (UB-04/837I transaction)

Unless directed otherwise, Institutional Claims must be billed according to the National Uniform Billing Guidelines. All claims must comply with National Coding Guidelines.

- b. International Classification of Diseases and Related Health Problems, Tenth Revisions, Clinical Modification (ICD-10-CM) and Procedural Coding System (PCS) - Provider(s) shall report the ICD-10-CM and Procedural Coding System (PCS) to the highest level of specificity that supports medical necessity. Provider(s) shall use the current ICD-10 edition and any subsequent editions in effect at the time of service. Provider(s) shall refer to the applicable edition for code description, as it is no longer documented in the policy.
- c. Code(s) - Provider(s) shall report the most specific billing code that accurately and completely describes the procedure, product or service provided. Provider(s) shall use the Current Procedural Terminology (CPT), Health Care Procedure Coding System (HCPCS), and UB-04 Data Specifications Manual (for a complete listing of valid revenue codes) and any subsequent editions in effect at the time of service. Provider(s) shall refer to the applicable edition for the code description, as it is no longer documented in the policy. If no such specific CPT or HCPCS code exists, then the provider(s) shall report the procedure, product or service using the appropriate unlisted procedure or service code.

*Unlisted Procedure or Service*

CPT: The provider(s) shall refer to and comply with the Instructions for Use of the CPT Codebook, Unlisted Procedure or Service, and Special Report as documented in the current CPT in effect at the time of service.

HCPCS: The provider(s) shall refer to and comply with the Instructions For Use of HCPCS National Level II codes, Unlisted Procedure or Service and Special Report as documented in the current HCPCS edition in effect at the time of service

- d. Modifiers - Providers shall follow applicable modifier guidelines.
- e. Billing Units - Provider(s) shall report the appropriate code(s) used which determines the billing unit(s).
- f. Co-payments -  
For Medicaid refer to Medicaid State Plan:  
<https://medicaid.ncdhhs.gov/get-involved/nc-health-choice-state-plan>
- g. Reimbursement - Provider(s) shall bill their usual and customary charges. For a schedule of rates, refer to: <https://medicaid.ncdhhs.gov/>.

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in



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developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

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