

Table of Contents

1.0	Description of the Procedure	1
2.0	Eligible Recipients	1
2.1	General Provisions	1
2.2	EPSDT Special Provision: Exception to Policy Limitations for Recipients under 21 Years of Age	1
3.0	When the Procedure Is Covered	2
4.0	When the Procedure Is Not Covered	3
4.1	General Restrictions	3
4.2	Non-covered Conditions	3
4.3	Topical Application	4
4.4	Replacement Therapy	4
5.0	Requirements for and Limitations on Coverage	4
5.1	Requirements	4
5.2	Prior Approval	5
5.3	Service Limitation.....	5
6.0	Providers Eligible to Bill for the Procedure.....	5
7.0	Additional Requirements	5
8.0	Billing Guidelines	5
8.1	Claim Type	5
8.2	Diagnosis Codes that Support Medical Necessity	5
8.3	Procedure Codes	6
	8.3.1 Physician.....	6
	8.3.2 Facility	6
8.4	Reimbursement Rate.....	6
9.0	Policy Implementation/Revision Information.....	7

1.0 Description of the Procedure

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.

2.0 Eligible Recipients

2.1 General Provisions

Medicaid recipients may have service restrictions due to their eligibility category that would make them ineligible for this service.

2.2 EPSDT Special Provision: Exception to Policy Limitations for Recipients under 21 Years of Age

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 recipients 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 clinician). This means EPSDT covers most of the medical or remedial care a child needs to improve or maintain his/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 recipient'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 recipient's right to a free choice of providers.

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

- a. that is unsafe, ineffective, or experimental/investigational.
- b. 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/or 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 will correct or improve or maintain the recipient'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**

- a. If the service, product, or procedure requires prior approval, the fact that the recipient is under 21 years of age does **NOT** eliminate the requirement for prior approval.
- b. **IMPORTANT ADDITIONAL INFORMATION** about EPSDT and prior approval is found in the Basic Medicaid Billing Guide, sections 2 and 6, and on the EPSDT provider page. The Web addresses are specified below.

Basic Medicaid Billing Guide: <http://www.ncdhhs.gov/dma/medbillcaguide.htm>

EPSDT provider page: <http://www.ncdhhs.gov/dma/EPSDTprovider.htm>

3.0 When the Procedure Is Covered

IMPORTANT NOTE: EPSDT allows a recipient less than 21 years of age to receive services in excess of the limitations or restrictions below and without meeting the specific criteria in this section when such services are **medically necessary health care services** to correct or ameliorate a defect, physical or mental illness, or a condition [health problem]; that is, documentation shows how the service, product, or procedure will correct or improve or maintain the recipient'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 DOES NOT ELIMINATE THE REQUIREMENT FOR PRIOR APPROVAL IF PRIOR APPROVAL IS REQUIRED. For additional information about EPSDT and prior approval requirements, see **Section 2.0** of this policy.

HBO therapy is covered for the following conditions:

- 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
- d. Acute traumatic peripheral ischemia. HBO is an adjunctive treatment to be used in combination with accepted standard therapeutic measures, when loss of function, limb or life is threatened.
- e. Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management
- f. Crush injuries and suturing of severed limbs. HBO as an adjunctive treatment when loss of function, limb, or life is threatened.
- g. Cyanide poisoning
- h. Decompression illness
- i. Gas embolism
- j. Gas gangrene
- k. Meleney ulcers. The use of hyperbaric oxygen in any other type of cutaneous ulcer is not covered.
- l. 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.

- m. Osteoradionecrosis as an adjunct to conventional treatment
- n. Preparation and preservation of compromised skin grafts
- o. Soft tissue radionecrosis as an adjunct to conventional treatment
- p. Lower extremity wound due to diabetes. The wound is classified as a Wagner Grade III or higher and has failed an adequate course of 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 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.

4.0 When the Procedure Is Not Covered

IMPORTANT NOTE: EPSDT allows a recipient less than 21 years of age to receive services in excess of the limitations or restrictions below and without meeting the specific criteria in this section when such services are **medically necessary health care services** to correct or ameliorate a defect, physical or mental illness, or a condition [health problem]; that is, documentation shows how the service, product, or procedure will correct or improve or maintain the recipient'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 DOES NOT ELIMINATE THE REQUIREMENT FOR PRIOR APPROVAL IF PRIOR APPROVAL IS REQUIRED. For additional information about EPSDT and prior approval requirements, see **Section 2.0** of this policy.

4.1 General Restrictions

HBO therapy is not covered when the criteria listed in **Section 3.0** are not met.

4.2 Non-covered Conditions

HBO therapy is not covered for the following conditions. This list is not all-inclusive.

- 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

- 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
- x. traumatic brain injury

4.3 Topical Application

Topical application of oxygen does not meet the definition of HBO therapy and is not covered.

4.4 Replacement Therapy

HBO therapy is not covered as a replacement for other standard successful therapeutic measures.

5.0 Requirements for and Limitations on Coverage

IMPORTANT NOTE: EPSDT allows a recipient less than 21 years of age to receive services in excess of the limitations or restrictions below and without meeting the specific criteria in this section when such services are **medically necessary health care services** to correct or ameliorate a defect, physical or mental illness, or a condition [health problem]; that is, documentation shows how the service, product, or procedure will correct or improve or maintain the recipient'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 DOES NOT ELIMINATE THE REQUIREMENT FOR PRIOR APPROVAL IF PRIOR APPROVAL IS REQUIRED. For additional information about EPSDT and prior approval requirements, see **Section 2.0** of this policy.

5.1 Requirements

The entire body must be pressurized and 100% oxygen inhaled by one of several methods: the environment (within the chamber), hood tent, face mask, or endotracheal or tracheostomy tube.

5.2 Prior Approval

Prior approval is required. The following documentation must be submitted with the prior approval request:

- a. all of the recipient's diagnoses;
- b. date of onset;
- c. conventional treatment history, including duration and outcomes of each treatment; and
- d. treatment plan, including the treatment duration.

The prior approval request must indicate the acceptance of the case by the medical director (or designee) of the HBO treatment facility.

Prior approval is given for an initial period of 30 days. Treatment beyond 30 calendar days requires a second prior approval request.

In urgent situations, providers must submit a prior approval request within five days of treatment. The first day of treatment is counted as day one. If the request is received within five days, authorization will begin on the first date of treatment if coverage criteria are met. If the request is received six or more days after the initiation of treatment, authorization will begin on the date the service is approved. Requests for urgent situations should be marked as "urgent." DMA's fiscal agent reviews the request to determine if the situation meets Medicaid coverage criteria as listed in the policy and to determine if the services were provided under urgent conditions.

5.3 Service Limitation

HBO therapy is limited to two sessions per date of service.

6.0 Providers Eligible to Bill for the Procedure

Physicians enrolled in the N.C. Medicaid program who are qualified to perform this service may bill for this service. Facilities qualified to provide this service may bill for this service.

7.0 Additional Requirements

There are no additional requirements.

8.0 Billing Guidelines

Reimbursement requires compliance with all Medicaid guidelines, including obtaining appropriate referrals for recipients enrolled in Medicaid managed care programs.

8.1 Claim Type

Physician providers bill professional services on the CMS-1500 claim form. Facilities bill on the UB-92 or UB-04.

8.2 Diagnosis Codes that Support Medical Necessity

Providers must bill the ICD-9-CM diagnoses code(s) to the highest level of specificity that supports medical necessity.

Disease or Condition	ICD-9-CM
Actinomycosis	039.0 through 039.9
Arterial gas embolism	958.0; 999.0; 999.1
Arterial insufficiency, peripheral acute	444.21 through 444.22; 444.81; 733.40 through 733.49
Carbon monoxide poisoning, acute	986
Crush injuries and suturing of severed limbs	925 through 929.9 885.0-887.7; 895.0-897.7; 996.90-996.99
Cyanide poisoning	989.0; 987.7
Decompression illness	993.3
Diabetic, lower extremity wound	707; 707.1; 707.10; 707.12; 707.13; 707.14; 707.19 These codes must be billed with the appropriate diabetic diagnosis (250.70-250.83).
Gas gangrene	040.0
Ischemia, peripheral traumatic, acute	444.21 through 444.22; 902.53; 903.0 through 904.9
Meleny ulcers	686.01; 686.09
Necrotizing fasciitis, progressive	728.86; 686.0
Osteomyelitis, chronic refractory	730.1 through 730.19; 730.2
Preparation and preservation of compromised skin grafts	996.52; 996.59
Radionecrosis, bone Mandible	733.40 through 733.49 526.89
Soft tissue radionecrosis	909.2; 990

8.3 Procedure Codes

The following codes are covered by the N.C. Medicaid program:

8.3.1 Physician

99183—Physician attendance and supervision of hyperbaric oxygen therapy, per session

8.3.2 Facility

RC413—Respiratory Service—Hyperbaric Oxygen Therapy

93.59—Other immobilization, pressure, and attention to wound

8.4 Reimbursement Rate

Providers must bill their usual and customary charges.

9.0 Policy Implementation/Revision Information

Original Effective Date: July 1, 1988

Revision Information:

Date	Section Updated	Change
12/01/03	Section 4.0	Titles were added to the subsections.
12/01/03	Section 4.0	The sentence "HBO therapy is not covered when the medical criteria listed in Section 3.0 are not met." Was added to this section.
12/01/03	Section 5.0	The section was renamed from Policy Guidelines to Requirements for and Limitations on Coverage.
12/01/03	Section 6.0	A sentence was added to the section stating that providers must comply with Medicaid guidelines and obtain referrals where appropriate for Managed Care enrollees.
12/01/03	Section 8.0	Titles were added to the subsections.
09/01/04	Section 1.0	The word "man rated" was deleted.
09/01/04	Section 3.0	Coverage criteria was added to include lower extremity wound due to diabetes. The wound is classified as a Wagner Grade III or higher and has failed an adequate course of wound therapy.
09/01/04	Section 3.0	The word "valuable" was deleted.
09/01/04	Section 3.0	Text was added to describe wound care in the diabetic patient with a lower extremity wound.
09/01/04	Section 4.0	Noncovered conditions were expanded to include congenital conditions (e.g., cerebral palsy, autism, mental retardation and traumatic brain injury).
09/01/04	Section 4.0	A disclaimer statement was added to indicate that the list was not all inclusive.
09/01/04	Section 5.0	The word "whole" was replaced with the word "entire."
09/01/04	Section 6.0	Text was added to include facilities that provide service.
09/01/04	Section 8.0	Text was added to clarify the billing guidelines.
09/01/04	Section 8.1	Text was added to indicate that facilities bill using the UB-92 claim form.
09/01/04	Section 8.2	An ICD-9-CM diagnoses codes table was added.
09/01/04	Section 8.2	Text was added to the ICD-9-CM table for diabetic, lower extremity wound.
09/01/04	Section 8.3	The definition of CPT code 99183 was added.
09/01/04	Section 8.3	Sections 8.3.1 and 8.3.2 were added with specific codes.
9/1/05	Section 2.0	A special provision related to EPSDT was added.
9/1/05	Section 8.0	The sentence stating that providers must comply with Medicaid guidelines and obtain referral where appropriate for Managed Care enrollees was moved from Section 6.0 to Section 8.0.
12/1/05	Section 2.2	The web address for DMA's EDPST policy instructions was added to this section.

Date	Section Updated	Change
12/1/06	Sections 2 through 5	A special provision related to EPSDT was added.
12/1/06	Section 5.1	Instructions about prior approval in urgent situations were added.
5/1/07	Sections 2 through 5	EPSDT information was revised to clarify exceptions to policy limitations for recipients under 21 years of age
5/1/07	Section 8	Added UB-04 as an accepted claim form.