National Coverage Determination (NCD) for HYPERBARIC Oxygen Therapy (20.29)

Description Information

Benefit Category
- Incident to a physician's professional Service
- Outpatient Hospital Services Incident to a Physician's Service
- Physicians’ Services

Please Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Item/Service Description

CIM 35-10

For purposes of coverage under Medicare, hyperbaric oxygen (HBO) therapy is a modality in which the entire body is exposed to oxygen under increased atmospheric pressure.

Indications and Limitations of Coverage

A. Covered Conditions

Program reimbursement for HBO therapy will be limited to that which is administered in a chamber (including the one man unit) and is limited to the following conditions:

1. Acute carbon monoxide intoxication,
2. Decompression illness,
3. Gas embolism,
4. Gas gangrene,
5. 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.
6. 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.
7. Progressive necrotizing infections (necrotizing fasciitis),
8. Acute peripheral arterial insufficiency,
9. Preparation and preservation of compromised skin grafts (not for primary management of wounds),
10. Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management,
11. Osteoradionecrosis as an adjunct to conventional treatment,
12. Soft tissue radionecrosis as an adjunct to conventional treatment,
13. Cyanide poisoning,
14. Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment,
15. Diabetic wounds of the lower extremities in patients who meet the following three criteria:
   a. Patient has type I or type II diabetes and has a lower extremity wound that is due to diabetes;
   b. Patient has a wound classified as Wagner grade III or higher; and
   c. Patient has failed an adequate course of standard 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.

B. Noncovered Conditions

All other indications not specified under §270.4(A) are not covered under the Medicare program. No program payment may be made for any conditions other than those listed in §270.4(A).

No program payment may be made for HBO in the treatment of the following conditions:

1. Cutaneous, decubitus, and stasis ulcers.
2. Chronic peripheral vascular insufficiency.
3. Anaerobic sepsis and infection other than clostridial.
4. Skin burns (thermal).
5. Senility.
7. Cardiogenic shock.
8. Sickle cell anemia.
9. Acute thermal and chemical pulmonary damage, i.e., smoke inhalation with pulmonary insufficiency.
10. Acute or chronic cerebral vascular insufficiency.
11. Hepatic necrosis.
12. Aerobic sepsis.
14. Tetanus.
15. Systemic aerobic infection.
16. Organ transplantation.
17. Organ storage.
18. Pulmonary emphysema.
19. Exceptional blood loss anemia.
20. Multiple Sclerosis.
22. Acute cerebral edema.

C. Topical Application of Oxygen

This method of administering oxygen does not meet the definition of HBO therapy as stated above. Also, its clinical efficacy has not been established. Therefore, no Medicare reimbursement may be made for the topical application of oxygen.

Cross Reference

§270.5 of this manual.

Claims Processing Instructions

• TN 3921 (Medicare Claims Processing)

- Transmittal Information

Transmittal Number

48

Coverage Transmittal Link


Revision History

07/01/1997 - Clarified coverage limited to conditions listed under §35-10.A. Effective date 08/11/1997. (TN 102)

04/01/1999 - Clarified covered conditions and physician supervision requirement. Effective date 05/01/1999. (TN 112)

10/19/2000 - Manualized program memorandum AB-00-15 (dated 4/1/2000) and clarified that "preparation and preservation of compromised skin graft" in section 35-10A.9 is not for primary management of wounds. Effective date NA. (TN 129 ) (CR 1138)

12/27/2002 - Expanded coverage for treatment of diabetic wounds of the lower extremities in patients that meet three criteria. Effective date 04/01/2003. (TN 164) (CR 2388)


01/2013 - CMS translated the information for this policy from ICD-9-CM/PCS to ICD-10-CM/PCS according to HIPAA standard medical data code set requirements and updated any necessary and related coding infrastructure. These updates do not expand, restrict, or alter existing coverage policy. Implementation date: 04/01/2013 Effective date: 10/1/2015. (TN 1165) (CR 8109)

05/2014 - CMS translated the information for this policy from ICD-9-CM/PCS to ICD-10-CM/PCS according to HIPAA standard medical data code set requirements and updated any necessary and related coding infrastructure. These updates do not expand, restrict, or alter existing coverage policy. Implementation date: 10/06/2014 Effective date: 10/1/2015. (TN 1388) (TN 1388) (CR 8691)

08/2015 - This change request (CR) is the 3rd maintenance update of ICD-10 conversions/updates specific to national coverage determinations (NCDs). The majority of the NCDs included are a result of feedback received from previous ICD-10 NCD
CR7818, CR8109, CR8197, CR8691, & CR9087. Some are the result of revisions required to other NCD-related CRs released separately that included ICD-10 coding. These updates do not expand, restrict, or alter existing coverage policy. Implementation date: 01/04/2016 Effective date: 10/1/2015. (TN 1537) (CR 9252)

12/2015 - This change request (CR) is the 3rd maintenance update of ICD-10 conversions/updates specific to national coverage determinations (NCDs). The majority of the NCDs included are a result of feedback received from previous ICD-10 NCD CR7818, CR8109, CR8197, CR8691, CR9087, & CR9087. Some are the result of revisions required to other NCD-related CRs released separately that included ICD-10 coding. Implementation date: 01/04/2016 Effective date: 10/1/2015. (TN 1580 ) (CR9252)

04/2016 - Transmittal 1630, dated February 26, 2016, is being rescinded and replaced by Transmittal 1658 to (1) remove duplicate spreadsheet NCD210.3, (2) add missing spreadsheet NCD20.33, (3) add B/MAC to requirement 3 at request of WPS/B, (4) rename the spreadsheet titles, and, (5) provide a link to the attached spreadsheets for more efficient ease of reference and accessibility. All other information remains the same. (TN 1658) (CR9540)

05/2016 - This change request (CR) is the 7th maintenance update of ICD-10 conversions and other coding updates specific to national coverage determinations (NCDs). The majority of the NCDs included are a result of feedback received from previous ICD-10 NCD CR7818, CR8109, CR8197, CR8691, CR9087, CR9252, and CR9540. Some are the result of revisions required to other NCD-related CRs released separately. Edits to ICD-10 and other coding updates specific to NCDs will be included in subsequent, quarterly releases as needed. No policy-related changes are included with these updates. Any policy-related changes to NCDs continue to be implemented via the current, long-standing NCD process. (TN 1665) (CR9631)

06/2016 - Transmittal 1665, dated May 13, 2016, is being rescinded and replaced by Transmittal 1672 to: (1) 9631.1: Remove FISS responsibility and 1st sentence; (2) 9631.2: Remove additional procedure codes, including 0075T, 0076T; (3) 9631.4: Revise descriptor of dx L59.8; (4) 9631.6: Add deletion of dx C49.10, C65.9, remove deletion of dx C45.9, remove deletion of invalid dx C47.90; (5) 9631.8: Remove deletion of invalid dx C51.29, replace with deletion of dx C50.029; (6) 9631.9: Add deletion of 0V504ZZ, 0V500ZZ, override capability, and contractor discretion verbiage. All other information remains the same. (TN 1672) (CR9631)

05/2017 - This change request (CR) constitutes a maintenance update of ICD-10 conversions and other coding updates specific to national coverage determinations (NCDs). These NCD coding changes are the result of newly available codes, coding revisions to NCDs released separately, or coding feedback received. Previous NCD coding changes appear in ICD-10 quarterly updates that can be found at: https://www.cms.gov/Medicare/Coverage/CoverageGenInfo/ICD10.html, along with other CRs implementing new policy NCDs. Edits to ICD-10 and other coding updates specific to NCDs will be included in subsequent, quarterly releases and individual NCDs continue to be implemented via the current, long-standing NCD process. (TN 1854) (CR10086)

11/2017 - This Change Request (CR) constitutes a maintenance update of International Code of Diseases, Tenth Revision (ICD-10) conversions and other coding updates specific to National Coverage Determinations (NCDs). These NCD coding changes are the result of newly available codes, coding revisions to NCDs released separately, or coding feedback received. (TN 1875) (CR10318)

- National Coverage Analyses (NCAs)

National Coverage Analyses (NCAs)

This NCD has been or is currently being reviewed under the National Coverage Determination process. The following are existing associations with NCAs, from the National Coverage Analyses database.

- First reconsideration for Hyperbaric Oxygen (HBO) Therapy (Section C, Topical Oxygen) (CAG-00060R)
- Original consideration for Hyperbaric Oxygen Therapy for Hypoxic Wounds and Diabetic Wounds of the Lower Extremities (CAG-00060N)

- Additional Information

Other Versions

- Hyperbaric Oxygen Therapy - Version 4, Effective between 4/3/2017 - 1/1/0001
- Hyperbaric Oxygen Therapy - Version 1, Effective between 10/19/2000 - 4/1/2003