SUBJECT: Hyperbaric Oxygen (HBO) Therapy (Section C, Topical Application of Oxygen)

I. SUMMARY OF CHANGES: The purpose of this Change Request (CR) is to inform MACs that effective April 3, 2017, coverage of topical oxygen for the treatment of chronic wounds will be determined by the local contractors.

EFFECTIVE DATE: April 3, 2017
*Unless otherwise specified, the effective date is the date of service.
IMPLEMENTATION DATE: December 18, 2017

Disclaimer for manual changes only: The revision date and transmittal number apply only to red italicized material. Any other material was previously published and remains unchanged. However, if this revision contains a table of contents, you will receive the new/revised information only, and not the entire table of contents.

II. CHANGES IN MANUAL INSTRUCTIONS: (N/A if manual is not updated)
R=REVISED, N=NEW, D=DELETED-Only One Per Row.

<table>
<thead>
<tr>
<th>R/N/D</th>
<th>CHAPTER / SECTION / SUBSECTION / TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>1/20.29/Hyperbaric Oxygen Therapy</td>
</tr>
</tbody>
</table>

III. FUNDING:
For Medicare Administrative Contractors (MACs):
The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

IV. ATTACHMENTS:
Business Requirements
Manual Instruction
SUBJECT: Hyperbaric Oxygen (HBO) Therapy (Section C, Topical Application of Oxygen)

EFFECTIVE DATE: April 3, 2017
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IMPLEMENTATION DATE: December 18, 2017

I. GENERAL INFORMATION

A. Background: The Centers for Medicare & Medicaid Services (CMS) received a reconsideration request to remove the coverage exclusion of Continuous Diffusion of Oxygen Therapy (CDO) from National Coverage Determination (NCD) Manual 20.29, Hyperbaric Oxygen (HBO) Therapy, Section C. This section of the NCD (Topical Application of Oxygen) considers treatment known as CDO as the application of topical oxygen and currently nationally non-covers this treatment. CMS asserts that the topical application of oxygen does not meet the definition of HBO therapy as stated in NCD 20.29.

B. Policy: Effective April 3, 2017, CMS decided that no NCD is appropriate at this time concerning the use of topical oxygen for the treatment of chronic wounds. As a result, CMS will amend NCD 20.29 by removing Section C, Topical Application of Oxygen and Medicare coverage of topical oxygen for the treatment of chronic wounds will be determined by the local contractors.

Associated claims processing instructions can be found at chapter 32, section 30.2, of Pub. 100-04, Claims Processing Manual.

II. BUSINESS REQUIREMENTS TABLE

"Shall" denotes a mandatory requirement, and "should" denotes an optional requirement.

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>10220 - 03.1</td>
<td>Effective April 3, 2017, Medicare coverage of topical oxygen for the treatment of chronic wounds will be determined by the local contractors.</td>
<td>X X X</td>
</tr>
</tbody>
</table>
### III. PROVIDER EDUCATION TABLE

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>10220 - 03.2</td>
<td>MLN Article: A provider education article related to this instruction will be available at <a href="http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/">http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/</a> shortly after the CR is released. You will receive notification of the article release via the established &quot;MLN Matters&quot; listserv. Contractors shall post this article, or a direct link to this article, on their Web sites and include information about it in a listserv message within 5 business days after receipt of the notification from CMS announcing the availability of the article. In addition, the provider education article shall be included in the contractor's next regularly scheduled bulletin. Contractors are free to supplement MLN Matters articles with localized information that would benefit their provider community in billing and administering the Medicare program correctly.</td>
<td>X X X</td>
</tr>
</tbody>
</table>

### IV. SUPPORTING INFORMATION

**Section A: Recommendations and supporting information associated with listed requirements:** N/A

"Should" denotes a recommendation.

<table>
<thead>
<tr>
<th>X-Ref Requirement Number</th>
<th>Recommendations or other supporting information:</th>
</tr>
</thead>
</table>

**Section B: All other recommendations and supporting information:** N/A

### V. CONTACTS

**Pre-Implementation Contact(s):** Kimberly Long, 410-786-5702 or kimberly.long@cms.hhs.gov (Coverage), Wanda Belle, 410-786-7491 or wanda.belle@cms.hhs.gov (Coverage), Patricia Brocato-Simons, 410-786-0261 or patricia.brocatosimons@cms.hhs.gov (Coverage), Thomas Dorsey, 410-786-7434 or thomas.dorsey@cms.hhs.gov (Part B Claims), Valeri Ritter, 410-786-8652 or valeri.ritter@cms.hhs.gov (Part A Claims)

**Post-Implementation Contact(s):** Contact your Contracting Officer's Representative (COR).
VI. FUNDING

Section A: For Medicare Administrative Contractors (MACs):
The Medicare Administrative Contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the MAC Statement of Work. The contractor is not obligated to incur costs in excess of the amounts allotted in your contract unless and until specifically authorized by the Contracting Officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the Contracting Officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.

ATTACHMENTS: 0
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.

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. Non-covered 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).

1. Cutaneous, decubitus, and stasis ulcers.
2. Chronic peripheral vascular insufficiency.
3. Anaerobic septicemia 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.
10. Acute or chronic cerebral vascular insufficiency.
11. Hepatic necrosis.
12. Aerobic septicemia.
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

Section C-Topical Application of Oxygen has been removed from NCD 20.29. Effective for dates of service on and after (DATE), Medicare Administrative Contractors (MACs) acting within their respective jurisdictions may determine coverage of topical application of oxygen for chronic non-healing wounds. Cross reference: §270.5 of this manual.

(This NCD was last reviewed April 2017)