I. Policy: Hyperbaric Oxygen Therapy

II. Purpose/Objective:
To provide a policy of coverage regarding Hyperbaric Oxygen Therapy

III. Responsibility:
A. Medical Directors
B. Medical Management Department

IV. Required Definitions
1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions
Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
c. in accordance with current standards of good medical treatment practiced by the general medical community;
d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
   the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment
Medical Necessity shall mean a service or benefit that is compensable under the Medical Assistance Program and if it meets any one of the following standards:
(i) the service or benefit will, or is reasonably expected to, prevent the onset of an illness, condition or disability.
(ii) the service or benefit will, or is reasonably expected to, reduce or ameliorate the physical, mental or development effects of an illness, condition, injury or disability.
(iii) the service or benefit will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for members of the same age.

DESCRIPTION:
Hyperbaric Oxygen Therapy (HBO) is a systemic treatment in which the patient is placed inside a pressurized chamber and breathes 100% oxygen under increased atmospheric pressure.

INDICATIONS:
Primary Treatment
- Decompression sickness
- Carbon monoxide poisoning (acute) if any of the following are present:
  - Transient or prolonged unconsciousness
  - Abnormal neurological signs
  - Cardiovascular dysfunction
  - Severe acidosis
- Air or Gas Embolism (acute)
- Gas gangrene
- Cyanide poisoning (acute)
- Progressive necrotizing infections
- Acute peripheral artery insufficiency
- Emergency treatment of compromised skin graft/flap refractory to maximized wound care
- Chronic refractory osteomyelitis

Adjunctive Treatment (in addition to standard therapeutic measures, or when other treatments alone are not providing positive outcomes)
- Acute traumatic peripheral ischemia, crush injuries and suturing of severed limbs
- Osteoradionecrosis
- Soft tissue radionecrosis
- Chronic refractory osteomyelitis
- Actinomycosis
- Problem diabetic wound management
  - Documented evidence of type 1 or 2 diabetes with lower extremity wound, grade III or higher, when no measurable signs of healing are achieved for at least 30 consecutive days, and after an adequate course of standard wound care* has been completed.

*The components of standard wound care for diabetic wounds includes:
  - Assessment of vascular status and correction of any vascular problem in the affected limb if possible; and
  - Debridement of devitalized tissue; and
  - Maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings; and
  - Optimization of glucose control and nutritional status; and
  - Appropriate off-loading; and
  - Appropriate and necessary treatment to resolve any infection, if present.

EXCLUSIONS:
The following indications lack sufficient scientific evidence of efficacy, and therefore are considered experimental, investigational or unproven and are NOT COVERED. The list of such indications includes, but is not limited to:

- Acute traumatic brain injury
- Spinal cord injury
- Severe or refractory perineal Crohn’s disease
- Acute thermal burns
- Carbon tetrachloride poisoning
- Cerebrovascular accident (thrombotic or embolic)
- Fracture healing
- Hydrogen sulfide poisoning
- Intra-abdominal or intracranial abscess
- Pseudomembranous colitis
- Radiation myelitis
- Sickle cell crisis
Multiple sclerosis
Myofascial pain syndrome
Retinal artery insufficiency
Cerebral palsy
Necrotizing arachnidism associated with brown recluse spider bites
Autism (unless otherwise mandated by Act 62)*
Chronic non-diabetic wounds
Demyelinating disease
Migraine or cluster-type headache

*For additional information please see MP 233 - Autism Spectrum Disorder – Evaluation and Medical Management

The Plan considers the use of topical hyperbaric oxygen therapy administered to the open wound in small limb-encasing devices experimental, investigational or unproven because the current body of evidence in the peer-reviewed, published medical literature supporting the use of topical oxygenation for any indication is insufficient to allow adequate conclusions regarding efficacy.

For more information, please refer to MP 224 – Topical Oxygenation

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

CODING ASSOCIATED WITH: Hyperbaric oxygen therapy
The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services.

For more information on Medicare coverage and coding requirements.

99183 Physician attendance and supervision of hyperbaric oxygen therapy, per session
A4575: Topical Hyperbaric Oxygen Chamber, disposable
G0277 Hyperbaric oxygen under pressure, full body chamber, per 30-minute interval

ICD10 Codes
A42.0, A42.1, A42.2, A42.89, A42.9, A43.0, A43.1, A43.8, A43.9, A48.0, B47.1, B47.9, I74.2, I74.3, I74.5, L08.1, L59.8
M02.7, M02.8, M02.9, M06.311, M06.312, M06.321, M06.322, M06.331, M06.332, M06.341, M06.342, M06.351,
M06.352, M06.361, M06.362, M06.371, M06.372, M06.38, M06.39, M06.411, M06.412, M06.421, M06.422, M06.431
M06.432, M06.441, M06.442, M06.451, M06.452, M06.461, M06.462, M06.462, M06.471, M06.472, M06.48,
M06.49, M06.511
M06.512, M06.521, M06.522, M06.53, M06.532, M06.54, M06.542, M06.551, M06.552, M06.561, M06.562,
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M06.572, M06.58, M06.59, M06.611, M06.612, M06.621, M06.622, M06.631, M06.632, M06.641, M06.642, M06.651
M06.652, M06.661, M06.662, M06.671, M06.672, M06.68, M06.69, M06.80, M06.8X1, M06.8X2, M06.8X3, M06.8X4,
M06.8X5, M06.8X6, M06.8X7, M06.8X8, N03.40, N03.41, S35.511A, S35.512A, S45.011A, S45.012A, S45.091A,
S45.092A, S45.111A, S45.112A, S45.191A, S45.192A, S45.211A, S45.212A, S45.291A, S45.292A, S47.1XXA, S47.2XXA,
S67.114A, S67.115A, S67.116A, S67.118A

E13.621, E13.622, E13.628, I70.29X, I70.3XXA, I70.3XXA, I70.3XXA, I70.3XXA, I70.3XXA, I70.3XXA,
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**LINE OF BUSINESS:**
Eligibility and contract specific benefit limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supercede this policy. For Medicare, applicable LCD’s and NCD’s will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

**REFERENCES:**


Centers for Medicare & Medicaid Services, Transmittal #AB-02-183 (CR2388)


This policy will be revised as necessary and reviewed no less than annually.

Devised: 10/99

Revised: 01/02, 02/02 (remove prior auth requirement), 02/03 (add definition); 6/03 (coding, added indications), 6/04 (Coding); 7/09 (autism ref); 7/10 (exclusion); 10/11 (indications, exclusions added), 10/12 (removed limitations)

Reviewed: 6/05; 6/06; 6/07, 6/08, 8/11 10/13, 10/14, 10/15, 10/16, 9/17, 9/18, 9/19, 9/20

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.