



Harmony Behavioral Health, Inc.

Harmony Behavioral Health of Florida, Inc.

Harmony Health Plan of Illinois, Inc.

HealthEase of Florida, Inc.

*'Ohana Health Plan, a plan offered by
WellCare Health Insurance of Arizona, Inc.*

WellCare Health Insurance of Illinois, Inc.

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WellCare Prescription Insurance, Inc.

Oxygen Use

Policy Number: HS-088

Original Effective Date: 3/2/2009

Revised Date(s): 3/31/2010; 3/31/2011;
3/1/2012

DISCLAIMER

The Clinical Coverage Guideline is intended to supplement certain standard WellCare benefit plans. The terms of a member's particular Benefit Plan, Evidence of Coverage, Certificate of Coverage, etc., may differ significantly from this Coverage Position. For example, a member's benefit plan may contain specific exclusions related to the topic addressed in this Clinical Coverage Guideline. When a conflict exists between the two documents, the Member's Benefit Plan always supersedes the information contained in the Clinical Coverage Guideline. Additionally, Clinical Coverage Guidelines relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.

APPLICATION STATEMENT

The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.

BACKGROUND

Home oxygen therapy is used to treat and prevent symptoms and manifestations of hypoxemia. Home oxygen may be indicated for patients with severe lung disease such as chronic obstructive pulmonary disease (COPD), diffuse interstitial lung disease, cystic fibrosis, bronchiectasis, or widespread pulmonary neoplasm.

Oxygen Delivery Systems

Stationary oxygen systems include gaseous oxygen cylinders, liquid oxygen systems and oxygen concentrators.

- **Oxygen gas cylinders:** Oxygen gas is stored under pressure in tanks or cylinders. Large H cylinders weigh approximately 200 pounds and provide continuous oxygen at two liters per minute for 2.5 days.
- **Liquid oxygen:** Oxygen is stored in a reservoir as a very cold liquid that converts to gas when released from the tank. Liquid oxygen is more expensive than compressed gas but takes up less space and can be more easily transferred to a portable tank. A typical liquid oxygen system weighs approximately 120 pounds and provides continuous oxygen at two liters per minute for 8.9 days. Certain liquid oxygen systems can provide oxygen at the same rate for 30 days or more.
- **Oxygen concentrator:** An oxygen concentrator is an electric device that extracts oxygen from ambient air and delivers oxygen at 85% or greater at concentrations of up to four liters per minute. A back-up oxygen cylinder is used in the event of a power failure for patients on continuous oxygen using concentrators.

Long-Term Measurements

Additional measurements of arterial blood gas tensions and/or saturations by invasive or noninvasive methods may be indicated whenever there is a change in clinical status that may be cardiopulmonary related. Once the need for long-term oxygen therapy (LTOT) has been documented, repeat arterial blood gases or oxygen saturation measurements are unnecessary other than to follow the course of the disease, to assess changes in clinical status, or to facilitate changes in the oxygen prescription.

POSITION STATEMENT

Oxygen therapy **may be considered medically necessary** for members with ONE of the following conditions:

- Severe lung disease such as COPD, diffuse interstitial lung disease, cystic fibrosis bronchiectasis, or widespread pulmonary neoplasm; **OR**,
- Hypoxia-related symptoms or findings that might be expected to improve with oxygen therapy (Examples of these symptoms are pulmonary hypertension, recurring congestive heart failure due to chronic cor pulmonale, erythrocytosis, impairment of the cognitive process, nocturnal restlessness, and morning headache).

Oxygen therapy **may be considered NOT medically necessary** for members with ONE of the following conditions:

- Angina pectoris in the absence of hypoxemia; **OR**;
- Breathlessness without cor pulmonale or evidence of hypoxemia; **OR**,
- Severe peripheral vascular disease resulting in clinically evident desaturation in one or more extremities; **OR**,
- Terminal illnesses that do not affect the lungs

Oxygen Therapy **may be considered medically necessary** for members who have a covered condition noted above and fall into ONE of the following blood gas value groups:

1. **Group One:** Coverage is provided for members with significant hypoxemia evidenced by **ANY** of the following:
 - An arterial PO₂ at or below 55 mm Hg, or an arterial oxygen saturation at or below 88%, taken at rest, breathing room air; **OR,**
 - An arterial PO₂ at or below 55 mm Hg, or an arterial oxygen saturation at or below 88%, taken during sleep for a patient who demonstrates an arterial PO₂ at or above 56 mm Hg, or an arterial oxygen saturation at or above 89%, while awake; or a greater than normal fall in oxygen level during sleep (a decrease in arterial PO₂ more than 10 mmHg, or a decrease in arterial oxygen saturation more than 5%) associated with symptoms or signs reasonably attributable to hypoxemia (e.g., impairment of cognitive processes and nocturnal restlessness or insomnia). In either of these cases, coverage is provided only for use of oxygen during sleep, and then only one type of unit will be covered. Portable oxygen would **NOT** be covered in this situation; **OR,**
 - An arterial PO₂ at or below 55 mm Hg or an arterial oxygen saturation at or below 88%, taken during exercise for a member who demonstrates an arterial PO₂ at or above 56mm Hg, or an arterial oxygen saturation at or above 89%, during the day while at rest. In this case, supplemental oxygen is provided for during exercise if there is evidence the use of oxygen improves the hypoxemia that was demonstrated during exercise when a member was breathing room air.
2. **Group Two:** Except as modified in the note below, coverage is available for members whose arterial PO₂ is 56-59 mmHg or whose arterial blood oxygen saturation is 89%, if there is evidence of:
 - Dependent edema suggesting congestive heart failure; **OR,**
 - Pulmonary hypertension or cor pulmonale, determined by measurement of pulmonary artery pressure, gated blood pool scan, echocardiogram, or "P" pulmonale on EKG (P wave greater than 3 mm in standard leads II, III, or AVFL); **OR,**
 - Erythrocythemia with a hematocrit greater than 56%.
3. **Group Three:** Except as modified in the note below, claims from members with arterial PO₂ levels at or above 60 mm Hg, or arterial blood oxygen saturation at or above 90% must be submitted for medical director review of medical necessity.

NOTE: In reviewing the arterial PO₂ levels and the arterial oxygen saturation percentages specified above, reviewers must take into account variations in oxygen measurements that may result from such factors as the member's age, the altitude level, or the member's decreased oxygen carrying capacity.

CODING

CPT® Codes - No applicable codes

ICD-9-CM Procedure Codes - No applicable codes.

HCPCS Level II © Codes

- A4611** Battery, heavy duty; replacement for patient-owned ventilator
- A4612** Battery cables; replacement for patient-owned ventilator
- A4613** Battery charger; replacement for patient-owned ventilator
- A4615** Cannula, nasal
- A4616** Tubing (oxygen), per foot

- A4617** Mouthpiece
- A4618** Breathing circuits
- A4619** Face tent
- A4620** Variable concentration mask

- E0424** Stationary compressed gaseous oxygen system, rental;
includes container, contents, regulator, flow meter, humidifier, nebulizer, cannula or mask, and tubing
- E0425** Stationary compressed gas system, purchase;
includes regulator, flow meter, humidifier, nebulizer, cannula or mask, and tubing
- E0430** Portable gaseous oxygen system, purchase;
includes regulator, flow meter, humidifier, cannula or mask, and tubing
- E0431** Portable gaseous oxygen system, rental;
includes portable container, regulator, flow meter, humidifier, cannula or mask, and tubing
- E0434** Portable liquid oxygen system, rental; includes portable container, supply reservoir, humidifier, flow meter, refill adaptor, contents gauge, cannula or mask, and tubing
- E0435** Portable liquid oxygen system purchase; includes portable container, supply reservoir, flow meter, humidifier, contents gauge, cannula or mask, tubing and refill adaptor
- E0439** Stationary liquid oxygen system, rental;
includes container, contents, regulator, flow meter, humidifier, nebulizer, cannula or mask, and tubing
- E0440** Stationary liquid oxygen system, purchase; includes use of reservoir, contents indicator, regulator, flow meter, humidifier, nebulizer, cannula or mask, and tubing
- E0441** Oxygen contents, gaseous (for use with owned gaseous stationary systems or when both a stationary and portable gaseous system are owned), one month's supply = one unit
- E0442** Oxygen contents, liquid (for use with owned liquid stationary systems or when both a stationary and portable liquid system are owned), one month's supply = one unit
- E0443** Portable oxygen contents, gaseous (for use only with portable gaseous systems when no stationary gas or liquid system is used), one month's supply = one unit
- E0444** Portable oxygen contents, liquid (for use only with portable liquid systems when no stationary gas or liquid system is used), one month's supply = one unit
- E0445** Oximeter device for measuring blood oxygen levels non-invasively
- E0450** Volume control ventilator, without pressure support mode, may include pressure control mode, used with invasive interface (e.g., tracheostomy tube)
- E0455** Oxygen tent, excluding croup or pediatric tents
- E0457** Chest shell (cuirass)
- E0459** Chest wrap
- E0460** Negative pressure ventilator; portable or stationary
- E0461** Volume control ventilator, without pressure support mode, may include pressure control mode, used with non-invasive interface (e.g. mask)
- E0463** Pressure support ventilator with volume control mode, may include pressure control mode, used with invasive interface (e.g., tracheostomy tube)
- E0464** Pressure support ventilator with volume control mode, may include pressure control mode, used with noninvasive interface (e.g., mask)
- E0470** Respiratory assist device, bi-level pressure capability, without backup rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device)
- E0471** Respiratory assist device, bi-level pressure capability, with backup rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device)
- E0472** Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with invasive interface, e.g., tracheostomy tube (intermittent assist device with continuous positive airway pressure device)
- E0500** IPPB machine, all types, with built-in nebulization; manual or automatic valves; internal or external power source
- E1353** Regulator
- E1354** Oxygen accessory, wheeled cart for portable cylinder or portable concentrator, any type, replacement only, each

- E1355** Stand/rack
- E1356** Oxygen accessory, battery pack / cartridge for portable concentrator, any type, replacement only, each
- E1357** Oxygen accessory, battery charger for portable concentrator, any type, replacement only, each
- E1358** Oxygen accessory, DC power adapter for portable concentrator, any type, replacement only, each
- E1390** Oxygen concentrator, single delivery port, capable of delivering 85 percent or greater oxygen concentration at the prescribed flow rate
- E1391** Oxygen concentrator, dual delivery port, capable of delivering 85 percent or greater oxygen concentration at the prescribed flow rate, each
- E1392** Portable oxygen concentrator, rental
- E1405** Oxygen and water vapor enriching system with heated delivery
- E1406** Oxygen and water vapor enriching system without heated delivery
- K0738** Portable gaseous oxygen system, rental; home compressor used to fill portable oxygen cylinders; includes portable containers, regulator, flow meter, humidifier, cannula or mask, and tubing
- S8120*** Oxygen contents, gaseous, 1 unit equals 1 cubic foot
- S8121*** Oxygen contents, liquid, 1 unit equals 1 pound

*S- Codes are **NON COVERED FOR MEDICARE – Refer to HCPCS Level II Temporary National Codes**

ICD-9-CM Diagnosis Codes - This list is not all inclusive.

Oxygen therapy **may be considered medically necessary and a covered benefit** for members with one of the conditions noted above and also falls into ONE of the blood gas value groups noted above.

- 162.2 - 162.9** Malignant neoplasm of bronchus and lung
- 165.0 - 165.9** Malignant neoplasm of other and ill-defined sites within the respiratory system & intrathoracic organs
- 197.0** Secondary malignant neoplasm of lung
- 207.00 - 207.12** Acute or chronic erythremia
- 231.2** Carcinoma in situ of bronchus and lung
- 277.00 - 277.09** Cystic fibrosis
- 282.1** Elliptocytosis; congenital, hereditary
- 282.42** Sickle-cell thalassemia with crisis of 517.3 Acute Chest Syndrome
- 282.62** Sickle-cell (Hb-SS) disease with crisis of 517.3 Acute Chest Syndrome
- 282.64** Sickle-cell (Hb-S/Hb-C) disease with crisis of 517.3 Acute Chest Syndrome
- 282.69** Sickle-cell (Hb-S/Hb-D)(Hb-S/Hb-E)disease with crisis of 517.3 Acute Chest Syndrome
- 289.0** Polycythemia; secondary, acquired, hypoxemic
- 289.6** Polycythemia; familial, benign, erythrocytosis
- 289.7** Methemoglobinemia; Hemoglobin M disease (Hb-M disease)
- 346.20 - 346.21** Variants of migraine; cluster headache
- 416.0** Pulmonary Hypertension; Primary; Essential, Idiopathic
- 416.1** Kyphoscoliotic heart disease
- 416.8** Chronic Pulmonary Hypertension; Secondary
- 416.9** Chronic Pulmonary Heart disease; Chronic Cor Pulmonale
- 428.0 – 428.43** Congestive heart failure due to 416.9 Chronic Cor Pulmonale
- 491.20** COPD – Chronic Obstructive Bronchitis without exacerbation; Emphysema with chronic bronchitis
- 491.21** COPD – Chronic Obstructive Bronchitis with acute exacerbation; decompensated
- 493.01 - 493.02** Extrinsic Asthma; with status asthmaticus; or with acute exacerbation
- 493.11 - 493.12** Intrinsic Asthma; with status asthmaticus; or with acute exacerbation
- 493.21 - 493.22** Chronic Obstructive Asthma with COPD; with status asthmaticus; or with acute exacerbation
- 494.0** Bronchiectasis without acute exacerbation
- 494.1** Bronchiectasis with acute exacerbation
- 496** Chronic airway / lung obstruction; COPD not elsewhere classified
- 515** Postinflammatory pulmonary fibrosis;

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|---------------|-----------------------------------------------------------------------------------------------|
| 516.3 | Interstitial Pulmonary Fibrosis; diffuse, idiopathic |
| 747.83 | Primary Pulmonary Hypertension of Newborn; Persistent fetal circulation |
| 748.61 | Congenital bronchiectasis |
| 770.7 | Chronic Respiratory Disease arising in the perinatal period; BPD - Bronchopulmonary Dysplasia |

*Current Procedural Terminology (CPT®) ©2010 American Medical Association: Chicago, IL

REFERENCES

Peer Reviewed - N/A

Government Agencies, Professional and Medical Organizations

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HISTORY AND REVISIONS

| Date | Action |
|-----------|----------------------------------------------------------------------------------------|
| 3/1/2012 | <ul style="list-style-type: none">• Approved by MPC. No changes. |
| 12/1/2011 | <ul style="list-style-type: none">• New template design approved by MPC. |
| 3/31/2011 | <ul style="list-style-type: none">• Approved by MPC. |