Reimbursement Fast Facts: RADs

This tool will assist you in understanding Medicare coding and coverage for respiratory assist devices.

Respiratory assist devices (RADs) are used to administer non-invasive positive pressure therapy. ResMed’s bilevel devices combine increased comfort with a high level of clinical control to help meet the unique needs of every patient. Bilevel to treat obstructive sleep apnea (OSA) and noncompliant CPAP is addressed in a separate Medicare coverage policy and summarized in ResMed’s PAP for OSA Reimbursement Fast Facts: PN 1013493. For Life Support Ventilator, see Ventilator Reimbursement Fast Facts: PN 1017230.

### Billing criteria for RADs

Medicare has specified coverage criteria for patients with the following groups of clinical conditions. Please refer to the local coverage policy for additional details.3

#### Restrictive thoracic disorders

A. Documentation in a patient’s medical record of a neuromuscular disease (e.g., amyotrophic lateral sclerosis) or a severe thoracic cage abnormality (e.g., post-thoracoplasty for TB); and

B. An arterial blood gas PaCO2, done while awake and breathing the patient’s prescribed FiO2, is ≥ 45 mm Hg; or sleep oximetry demonstrates oxygen saturation ≤ 88% for ≥ 5 minutes (minimum 2-hour nocturnal recording time), done while breathing the patient’s prescribed FiO2; or for a neuromuscular disease (only), maximal inspiratory pressure is < 60 cm H2O or forced vital capacity is < 50% predicted; and

C. COPD does not contribute significantly to the patient’s pulmonary limitation.

If all of the above criteria are met, either an E0470 or E0471 (based upon the judgment of the treating physician) will be covered for patients within this group of conditions for the first three months of therapy.

#### Severe COPD

A. An arterial blood gas PaCO2, done while awake and breathing the patient’s prescribed FiO2, is ≥ 52 mm Hg; and

B. Sleep oximetry demonstrates oxygen saturation ≤ 88% for ≥ a cumulative 5 minutes (minimum 2-hour nocturnal recording time), done while breathing oxygen at 2 LPM or the patient’s prescribed FiO2 (whichever is higher); and

C. Prior to initiating therapy, sleep apnea and treatment with continuous positive airway pressure (CPAP) has been considered and ruled out.

**Note:** Formal sleep testing is not required if there is sufficient information in the medical record to demonstrate that the beneficiary does not suffer from some form of sleep apnea (OSA, central sleep apnea (CSA) or complex sleep apnea (CompSA)) as the predominant cause of awake hypercapnia or nocturnal arterial oxygen desaturation.

If all above criteria are met, an E0470 device will be covered for the first three months of therapy.

An E0471 device will be covered for a patient with COPD if additional criteria are met. Please see coverage information in the extended policy for qualification criteria.

#### Central sleep apnea or complex sleep apnea

Prior to initiating therapy, a complete facility-based, attended PSG must be performed documenting the following:

A. The diagnosis of CSA4 or CompSA;4 and

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<table>
<thead>
<tr>
<th>Device</th>
<th>Description</th>
<th>HCPCS</th>
<th>2015 Medicare Reimbursement1 (Competitive bid rates will vary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilevel</td>
<td>Bilevel devices without a backup rate</td>
<td>E0470</td>
<td>$245.48 – 208.662 (monthly rate)</td>
</tr>
<tr>
<td></td>
<td>(e.g., AirCurve™ 10 VAuto, AirCurve 10 S, VPAP™ COPD)</td>
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<tr>
<td>Bilevel with backup rate</td>
<td>Bilevel devices with a backup rate</td>
<td>E0471</td>
<td>$614.34 – 522.19 (monthly rate)</td>
</tr>
<tr>
<td></td>
<td>(e.g., AirCurve 10 ST, AirCurve 10 ASV)</td>
<td></td>
<td>$614.34 – 522.19 (monthly rate)</td>
</tr>
</tbody>
</table>
B. Significant improvement of sleep-associated hypoventilation with the use of an E0470 or E0471 device on the settings that will be prescribed for initial use at home, while breathing the patient’s prescribed FiO₂.

If all above criteria are met, either an E0470 or E0471 device (based upon the judgment of the treating physician) will be covered for patients with documented CSA or CompSA for the first three months.

Hypoventilation syndrome

An E0470 device is covered if the following criteria are met:

A. An initial arterial blood gas PaCO₂, done while awake and breathing the patient’s prescribed FiO₂, is ≥ 45 mm Hg; and

B. Spirometry shows FEV₁/FVC ≥ 70%; and

C. An arterial blood gas PaCO₂, done during sleep or immediately upon awakening, and breathing the patient’s prescribed FiO₂, shows the beneficiary’s PaCO₂ worsened ≥ 7 mm Hg compared to the original result in criterion A; or

D. A facility-based PSG or HST demonstrates oxygen saturation ≤ 88% for ≥ 5 minutes (minimum 2 hours of nocturnal recording time) not caused by obstructive upper airway events (i.e., AHI < 5).

An E0471 device is covered if the following criteria are met:

A. A covered E0470 is being used; and

B. Spirometry shows FEV₁/FVC ≥ 70%; and

C. An arterial blood gas PaCO₂, done while awake and breathing the patient’s prescribed FiO₂, shows the beneficiary’s PaCO₂ worsened ≥ 7 mm Hg compared to the original result in criterion A under E0470; or

D. A facility-based PSG or HST demonstrates oxygen saturation ≤ 88% for ≥ 5 minutes (minimum 2-hour nocturnal recording time) not caused by obstructive upper airway events (i.e., AHI < 5, while using an E0470).

Follow-up documentation requirements

Continued coverage for E0470 and E0471 devices beyond the first three months of therapy

The following items must be obtained no sooner than 61 days after initiating use of the device to document continued coverage beyond three months:

1. A signed and dated statement completed by the treating physician declaring that the patient is compliant, using the device an average of four hours per 24-hour period, and is benefiting from its use; and

2. Progress of relevant symptoms and compliant device usage documented in the patient’s medical record.

Q & A

Q: What does Medicare say to determine if a patient should receive a RAD or a ventilator (E0450, E0460–E0464)?

The RAD LCD states: “Choice of an appropriate device (i.e., a ventilator versus a bilevel PAP device) is made based upon the severity of the condition. CMS distinguished the use of respiratory product types in a National Coverage Analysis Decision Memo (CAG-00052N) in June 2001, saying that RAD is “distinguished from ventilation in a patient for whom interruption or failure of respiratory support leads to death.” See Ventilator Reimbursement Fast Facts for details: PN 1017230.

Q: What is the appropriate diagnosis code for complex sleep apnea?

Complex sleep apnea (CompSA) is a recently recognized form of central sleep apnea (CSA). There is no ICD code for CompSA. As CompSA is a subset of CSA, the diagnosis code of CSA should be used. Therefore, diagnoses will fall under existing diagnosis codes for Primary CSA (i.e., ICD-9 code 327.21 and ICD-10 code G47.31, effective 10/1/2015).

Q: Can an inpatient hospital-based HST be used to diagnose central sleep apnea (CSA)?

An attended, facility-based PSG is still required under the CSA qualification criteria. Not all types of HST are appropriate for the evaluation of CSA or CompSA as they do no monitor the necessary parameters.

1 The rates listed are based on the Medicare 2015 DMEPOS National Fee Schedule. Competitive bidding rates may be applicable in certain CBAs. Please reference the single payment amounts for these areas.

2 2015 Medicare ceiling and floor rates; rate reduces by 25% after the third month; payment over 13 months. Actual allowables vary by state.


4 Central sleep apnea (CSA) is defined by all of the following: (1) an apnea–hypopnea index (AHI) greater than or equal to 5; and (2) the sum total of central apneas plus central hypopneas is greater than 50% of the total apneas and hypopneas; and (3) a central apnea–central hypopnea index (CAHI) is greater than or equal to 5 per hour; and (4) the presence of at least one of the following: AHI greater than or equal to 5; difficulty initiating or maintaining sleep, frequent awakenings, or nonrestorative sleep; or (5) worsening of AHI or oxygen saturation.

5 CompSA is a form of CSA identified by all of the following: (1) with use of a PAP device without a backup rate (E0601 or E0470), the PSG shows a pattern of apneas and hypopneas that demonstrates the persistence or emergence of CSA or central hypopneas upon exposure to CPAP (E0601) or a bilevel device without backup rate (E0471) device when titrated to the point where obstructive AHI < 5 per hour; and (2) after resolution of the obstructive events, the sum total of CSA or central hypopneas > 50% of the total apneas and hypopneas; and (3) after resolution of the obstructive events, a central apnea–central hypopnea index (CAHI) ≥ 5 per hour.

For diagnosis of CSA, CAHI is defined as the average number of episodes of central apneas and central hypopneas per hour of sleep without the use of a PAP device. For CompSA, the CAHI is determined during the use of a PAP device after obstructive events have disappeared.

The information provided with this notice is general reimbursement information only as of December 1, 2014. It is not legal advice, nor is it advice about how to code, complete or submit any particular claim for payment. Although we supply this information to the best of our current knowledge, it is always the provider’s responsibility to determine and submit appropriate codes, charges, modifiers and bills for the services that were rendered. This information is provided as of the date listed above, and all coding and reimbursement information is subject to change without notice.