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APPROVED BY: MMLT	
DEPENDENCIES: Utilization Management Policy UM.203 – Prior Authorizations	

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PURPOSE

This policy documents the objective measures and criteria used by Community Health Plan (CHP) for the indication of continuous positive airway pressure (CPAP) and bi-level positive airway pressure (BiPAP).

POLICY

Prior Authorization criteria (see policy UM.203 – *Prior Authorizations*) apply to both the rental and purchase of CPAP or BiPAP equipment. CHP requires a minimum three-month rental trial prior to considering purchase of the equipment. Requests for purchase not preceded by rental approved by CHP require documentation that would otherwise meet criteria for rental, and also must meet additional purchase criteria as specified below.

MEDICALLY NECESSARY: CRITERIA FOR ADULTS

CPAP Criteria

Continuous positive airway pressure (CPAP) is considered **medically necessary** for patients who meet either of the following criteria on polysomnography.

Obstructive sleep apnea meeting the following criteria:

- Apnea Hypopnea Index (AHI) or a Respiratory Disturbance Index (RDI) greater than or equal to 15 events per hour; OR
- AHI (or RDI) greater than or equal to 5, and less than 15 events per hour with documentation demonstrating ANY of the following symptoms:
 - Excessive daytime sleepiness, as documented by either a score of greater than 10 on the Epworth Sleepiness scale or inappropriate daytime napping, (e.g., during driving, conversation or eating) or sleepiness that interferes with daily activities; OR
 - Impaired cognition or mood disorders; OR
 - Hypertension, ischemic heart disease, history of stroke, cardiac arrhythmias, or pulmonary hypertension

Upper airway resistance syndrome (UARS) as defined by:

- AHI (or RDI) less than 5/hr but with more than 10 EEG arousals/hr associated with increased respiratory efforts (with or without concomitant observed snoring) AND
- Increased negative esophageal pressure (more negative than -10cms H₂O).

The AHI is equal to the average number of episodes of apnea and hypopnea per hour and must be based on a minimum of two hours of sleep recorded by polysomnography using actual recorded hours of sleep (i.e., the AHI may not be extrapolated or projected).

BiPAP Criteria

Bilevel Positive Airway Pressure (BiPAP®) is considered medically necessary when used by patients diagnosed with obstructive sleep apnea (OSA) or upper airway resistance syndrome (UARS) when CPAP has failed.

Failed CPAP is defined as any of the following criteria documented in the medical record:

- Claustrophobia; or
- Inability to breathe through the nose; or
- Pain or discomfort; or
- Patient intolerance; or

- Patients at high pressures of CPAP (>10 cm H₂O) complaining of pressure discomfort.

APAP Criteria

Auto-CPAP (APAP) is considered medically necessary:

- As a second or third line alternative therapy for obstructive sleep apnea when documentation of the following is available:
 - The level of fixed CPAP required is at least 10cms H₂O as evidenced by an in-laboratory, technician-attended CPAP titration during polysomnography; AND
 - The patient is intolerant of high fixed CPAP pressures (>10cms H₂O) despite appropriate patient education and interventions to improve patient comfort and compliance. These interventions should include:
 - The use of a topical nasal corticosteroid spray or anticholinergic spray if nasal complaints are significant; and
 - Changes made by a nurse or technician, in consultation with the attending physician, to the CPAP circuit or mask, using different nose masks, face masks, nasal pillows or head harnesses as appropriate to achieve maximum patient comfort.
- When used as an alternative to technician titrated CPAP to determine a fixed level of CPAP in patients with documented moderate to severe obstructive sleep apnea, (AHI greater than or equal to 15) without significant medical comorbidities (e.g., CHF, COPD, central sleep apnea, hypoventilation syndromes).

NOT MEDICALLY NECESSARY: CRITERIA FOR ADULTS

The use of CPAP is considered **not medically necessary** when the criteria listed above are not met.

The use of flexible positive airway pressure (PAP) devices, (such as C-Flex) is considered **not medically necessary**.

Auto-CPAP (APAP) is considered **not medically necessary** for the treatment of patients with the following conditions:

- Central apnea; or
- Congestive heart failure; or
- Lung disease (e.g., chronic obstructive pulmonary disease); or
- Nocturnal O₂ desaturation due to conditions other than obstructive sleep apnea; or

- OSA in the absence of snoring (either natural or secondary to palatal surgery). [In these cases, APAP devices relying on vibration or sound in the device's algorithm should not be used.]

MEDICALLY NECESSARY: CRITERIA FOR CHILDREN

CPAP for the treatment of obstructive sleep apnea (OSA) is considered **medically necessary** for children when the following criteria are met:

- There is a documented diagnosis of obstructive sleep apnea (OSA) AND polysomnography demonstrates an apnea index (AI) or apnea-hypopnea index (AHI) equal to or greater than one (1); AND
- Adenotonsillectomy has been unsuccessful in relieving OSA; OR
- Adenotonsillar tissue is minimal; OR
- Adenotonsillectomy is inappropriate based on OSA being attributable to another underlying cause (e.g., craniofacial anomaly) or adenotonsillectomy is contraindicated.

NOT MEDICALLY NECESSARY: CRITERIA FOR CHILDREN

Pediatric uses of CPAP are considered **not medically necessary** when the criteria listed above are not met.

ADDITIONAL REQUIREMENTS FOR PURCHASE OF CPAP OR BIPAP

ALL of the following are required:

- Trial of rental equipment for a minimum of three (3) months; and
- Documentation of a face-to-face clinical re-evaluation by the treating physician with documentation that symptoms of obstructive sleep apnea are improved; and
- Objective evidence of adherence to use of the PAP device reviewed by the treating physician. Adherence to therapy is defined as use of PAP 4 hours per night on 70% (i.e., 21 nights per month) of nights during a consecutive thirty (30) day period anytime during the first three (3) months of initial usage.

CPAP or BiPAP purchase must be authorized by the Plan Medical Director or her/his designee.

LIMITATIONS/EXCLUSIONS

Healthy Options:	None
Basic Health Plan:	Not covered by BHP, under the DME benefit exclusion
GAU	Not covered by BHP, under the DME benefit exclusion
Medicare Advantage	None

BACKGROUND

Sleep disorders are some of the most common medical problems in the United States and have a significant impact on quality of life, productivity, and health. There are many different types of sleep-related disorders including sleep apnea; upper airway resistance syndrome; insomnia; narcolepsy; nocturnal movement disorders, such as Restless Leg Syndrome (RLS) and Periodic Limb Movement Disorder (PLMD); unexplained excessive daytime sleepiness; and arousal disorders (parasomnias). Most, if not all, of these sleep-related disorders are treatable if diagnosed properly. Sleep apnea is characterized by an interruption of breathing during sleep, due to extra or loose tissue in the upper airway that collapses into the air passage with the effort of inhalation. This is often linked to obesity and decreased muscle tone due to aging. When the airway becomes blocked, a drop in blood oxygen content can occur which is detected by the brain, causing the patient to wake just enough to tighten the airway muscles and allow breathing to then resume. This may occur several hundred times in one night. Obstructive sleep apnea can cause many symptoms, such as depression, irritability, sexual dysfunction, learning and memory difficulties, and falling asleep while at work or driving. Sleep apnea treatment is intended to alleviate or eliminate the occurrence of sleep apnea. This in turn should allow the patient to achieve healthy sleep patterns and mitigate or eliminate the symptoms of OSA.

Another type of sleep disturbance is simply known as "apnea" or "central apnea." This condition, caused by problems in the central nervous system, is unrelated to obstructive sleep apnea and is not addressed in this Clinical UM Guideline, except for reference to central apnea as being considered a not medically necessary indication for APAP.

Continuous Positive Airway Pressure (CPAP) is the most common treatment for sleep apnea in adults. During sleep, the patient wears a mask over the nose attached to an air compressor that forces air through the nasal passages, opening the back of the throat. In OSA, tissues in the upper airway, including the tongue, soft palate and nasal passages sag and block the airway. The pressurized air in CPAP forces the tissues in the upper airway out of the way, allowing normal breathing to occur during sleep. Variations of the CPAP device, including auto-CPAP and BiPAP®, adjust the airflow to the needs of the patient. Some side effects that may occur include discomfort, nasal irritation and drying, facial skin irritation, abdominal bloating, mask leaks, sore eyes, and headaches. CPAP prevents airway closure while in use, but apneic episodes return when CPAP is stopped or if it is used improperly.

Currently, peer-reviewed medical literature supports the use of CPAP for the treatment of obstructive sleep apnea and upper airway resistance syndrome (UARS) in adults. Standard CPAP, and the variants BiPAP and Auto-CPAP, have been found in randomized controlled trials to be highly effective in decreasing, and in some cases eliminating, obstructive sleep apnea events in patients with mild to moderate sleep apnea.

In children, both the clinical presentation and criteria for the diagnosis of OSA differ from those in adults, hence adult criteria for diagnosis and treatment cannot be applied to the pediatric population. Although polysomnography is required for the diagnosis of OSA in children, it has not been well standardized in its performance or interpretation. The International Classification of Sleep Disorders, Second Edition guidelines for the diagnosis of pediatric OSA, require an AHI of at least one (1) scorable respiratory event lasting at least two (2) respiratory cycles (Hoban, 2007). However, Schechter (2002), reporting for the American Academy of Pediatrics and others, notes that, while this value of one (1) is of statistical significance based on normative data, it is unclear what level of AHI is of clinical significance or is associated with the development of adverse health outcomes.

OSA occurs most commonly in preschool aged children when the tonsils and adenoids are the largest, in relation to the airway size. For this reason, adenotonsillectomy (AT) is generally recognized as the most appropriate first-line treatment of choice for childhood OSA (Marcus, 2002; Hoban, 2007; Benninger, 2007; Darrow, 2007). Success rates for AT in relieving OSA have been reported to be in the 75%-85% range, although lower rates have been reported in other studies, and Tauman (2006) reported a reduction in AHI to one (1) or less (i.e. complete resolution of OSA) in only 25% of 110 children, with obesity being associated with the lesser rates of success. For children whose OSA has failed to resolve following AT, or who have a condition not amenable to AT (e.g., craniofacial anomaly as the primary underlying cause of OSA), or where AT is contraindicated, CPAP has been shown to be effective therapy with success rates in the 74%-97% range (Hoban, 2007). However, as reported in a small study of 29 patients (Marcus, 2006), adherence to CPAP therapy may be suboptimal in the pediatric age group.

LIST OF APPENDICES

None.

CITATIONS & REFERENCES

CFR	
WAC	
RCW	
CONTRACT CITATION	<input checked="" type="checkbox"/> HO/SCHIP (HO, SCHIP, S-MED, BH+) <input checked="" type="checkbox"/> BH (BHS, BH-SUB, BH-HCTC) <input checked="" type="checkbox"/> MA <input checked="" type="checkbox"/> GA-U
OTHER REQUIREMENTS	–
NCQA ELEMENTS	UM 2.A



ADDITIONAL REFERENCES	<ul style="list-style-type: none">- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. NATIONAL INSTITUTES OF HEALTH (NIH). NATIONAL HEART, LUNG AND BLOOD INSTITUTE (NHLBI). DISEASES AND CONDITIONS INDEX. AVAILABLE AT: HTTP://WWW.NHLBI.NIH.GOV/HEALTH/DCI/DISEASES/SLEEPAPNEA/SLEEPAPNEA_SUMMARY.HTML. ACCESSED ON APRIL 2, 2009.- OBSTRUCTIVE SLEEP APNEA IN CHILDREN: CHAN, J. M.D., EDMAN, J. MD, KOLTAL, P, MD. AM FAM PHYSICIAN 2004;69:1147-54,1159-60.- AMERICAN ACADEMY OF PEDIATRICS CLINICAL PRACTICE GUIDELINE: DIAGNOSIS AND MANAGEMENT OF CHILDHOOD OBSTRUCTIVE SLEEP APNEA SYNDROME- SECTION ON PEDIATRIC PULMONOLOGY AND SUBCOMMITTEE ON OBSTRUCTIVE SLEEP APNEA SYNDROME. PEDIATRICS VOL. 109 NO. 4 APRIL 2002, PP. 704-712- CENTERS FOR MEDICARE AND MEDICAID SERVICES. NATIONAL COVERAGE DETERMINATION FOR CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) THERAPY FOR OBSTRUCTIVE SLEEP APNEA (OSA). NCD #240.4. EFFECTIVE APRIL 4, 2005. AVAILABLE AT: HTTP://WWW.CMS.HHS.GOV/MCD/INDEX_LIST.ASP?LIST_TYPE=NCD#PP. ACCESSED ON FEBRUARY 12, 2010- GAY P, WEAVER T, LOUBE D, IBER C. AMERICAN ACADEMY OF SLEEP MEDICINE (AASM). POSITIVE AIRWAY PRESSURE TASK FORCE STANDARDS OF PRACTICE COMMITTEE. EVALUATION OF POSITIVE AIRWAY PRESSURE TREATMENT FOR SLEEP-RELATED BREATHING DISORDERS IN ADULTS. SLEEP. 2006; 29(3):381-401.- HAYES INC. HAYES MEDICAL TECHNOLOGY DIRECTORY. <i>SLEEP APNEA TREATMENT, DEVICES</i>. LANSDALE, PA: HAYES, INC; SEPTEMBER 16, 1999. SEARCH UPDATED MARCH 14, 2005. ARCHIVED 2006.- NATIONAL INSTITUTES OF HEALTH(NIH). NATIONAL HEART, LUNG, AND BLOOD INSTITUTE (NHLBI). SLEEP APNEA. AVAILABLE AT: HTTP://WWW.NHLBI.NIH.GOV. ACCESSED ON MAY 5, 2009.- ANTHEM CLINICAL UM GUIDELINE: CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) FOR THE TREATMENT OF OBSTRUCTIVE SLEEP APNEA I ADULTS AND CHILDREN, AND RELATED DEVICES FOR THE TREATMENT OF OBSTRUCTIVE SLEEP APNEA IN ADULTS. GUIDELINE # CG-DME-32. ACCESS FEBRUARY 12, 2010.- AETNA CLINICAL POLICY BULLETIN: OBSTRUCTIVE SLEEP APNEA IN ADULTS, NUMBER 0004. ACCESSED FEBRUARY 5, 2010.- AETNA CLINICAL POLICY BULLETIN: OBSTRUCTIVE SLEEP APNEA IN CHILDREN, NUMBER: 0752. ACCESSED FEBRUARY 5, 2010.- MILLIMAN CARE GUIDELINES, 13TH EDITION. ACG_A-0431 (AC) NONINVASIVE POSITIVE PRESSURE VENTILATION (CPAP, BIPAP). ACCESSED FEBRUARY 1, 2010.- MILLIMAN CARE GUIDELINES, 14TH EDITION. ACG_A-0431 (AC) NONINVASIVE POSITIVE PRESSURE VENTILATION (CPAP, BIPAP). ACCESSED JANUARY 22, 2010.- UPTODATE: ADHERENCE WITH CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP). WEAVER ET AL. TOPIC LAST UPDATED: OCTOBER 16, 2009. ACCESSED FEBRUARY 12, 2010.- UPTODATE: POSITIVE PRESSURE THERAPY OF THE OBESITY HYPOVENTILATION SYNDROME. MARTIN ET AL. TOPIC LAST UPDATED: FEBRUARY 10, 2009. ACCESSED FEBRUARY 12, 2010.- UPTODATE: INITIATION OF POSITIVE AIRWAY PRESSURE THERAPY FOR OBSTRUCTIVE SLEEP APNEA IN ADULTS. DAVE ET AL. TOPIC LAST UPDATED: OCTOBER 15, 2009. ACCESSED FEBRUARY 12, 2010.
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REVISION HISTORY

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