Medical Policy Reference Manual
Medical Policy

1.01.007 Home Apnea Monitoring for Infants

Original MPC Approval: 04/01/1998
Last Review: 10/01/2022
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Description

Home apnea monitors generally monitor both respiratory and heart rates. An alarm will sound if there is respiratory cessation (apnea) beyond a predetermined time limit (example: 20 seconds) or if the heart rate falls below a preset rate (bradycardia).

The American Academy of Pediatrics (AAP) have identified specific groups who may benefit from home monitoring because of other factors that increase the risk of sudden death (e.g., tracheostomies, chronic lung disease). However, the research has not proven that home cardiorespiratory monitoring prevents sudden infant death syndrome (SIDS). The AAP recommends that pediatricians promote proven practices that decrease the risk of SIDS (i.e., supine sleep position, safe sleeping environments, and elimination of prenatal and postnatal exposure to tobacco smoke).

In 2016, the AAP published a guideline which renamed and redefined ALTEs (acute life-threatening event) with the new term BRUE (brief resolved unexplained event).

The AAP defines BRUE as the observer reports a sudden, brief, and now resolved, unexplained episode of ≥1 of the following:

- cyanosis or pallor
- absent, decreased, or irregular breathing
- marked change in tone (hyper- or hypotonia)
- altered level of responsiveness

Policy

Home cardiorespiratory (apnea) monitoring may be considered **medically necessary** as indicated in the policy guidelines criteria.

Home cardiorespiratory (apnea) monitoring of siblings of infants with a history of sudden infant death syndrome (SIDS), who do not otherwise qualify through one or more of the indications provided in the policy guidelines, is considered **not medically necessary.**

Home cardiorespiratory (apnea) monitoring for all other conditions for infants is considered **not medically necessary.**

Policy Guidelines

The American Academy of Pediatrics (AAP) 2016 guidelines have identified specific groups who may benefit from home monitoring. Home cardiorespiratory (apnea) monitoring may be considered medically necessary as indicated by the following criteria:

- Those who have experienced a BRUE which was previously known as an apparent life-threatening event (ALTE); or
- Those with tracheostomies or anatomic abnormalities that make them vulnerable to airway compromise; or
- Those with neurologic or metabolic disorders affecting respiratory control; or
- Those with chronic lung disease of prematurity (bronchopulmonary dysplasia), particularly those requiring supplemental oxygen, continuous positive airway pressure, pressure support or mechanical ventilation; or

- Premature infants who are high risk of recurrent episodes of apnea, bradycardia, and hypoxemia after hospital discharge

Rationale:
Update 2022:
A search of peer-reviewed literature was performed for the period of April 2020 through July 2022. Changes to the Medically Necessary Policy statement were made per Medical Director guidance. New Policy statement amended to "Home cardiorespiratory (apnea) monitoring may be considered medically necessary in the following infants as indicated in the policy guidelines criteria." Findings in the recent literature do not change the not medically necessary conclusions on home cardiorespiratory (apnea) monitoring for siblings of infants with a history of sudden infant death syndrome (SIDS), who do not otherwise qualify through one or more of the indications provided in the policy guidelines and for all other conditions for infants.

Update 2020:
A search of peer-reviewed literature was performed for the period of April 2018 through April 2020. Findings in the recent literature do not change the conclusions regarding the use of home cardiorespiratory (apnea) monitoring. Therefore, the policy remains unchanged.

Update 2018:
A search of peer reviewed literature was performed for the period of January 2016 through March 2018. Findings in the recent literature do not change the conclusions regarding the use of home apnea monitoring. Therefore, the policy remains unchanged.

Update 2016:
A search of peer reviewed literature was performed for the period of January 2014 through December 2015. Findings in the recent literature do not change the conclusions regarding the use of home apnea monitoring. Therefore, the policy statements are unchanged.

Update 2014:
A search of peer reviewed literature was performed for the period of November 2011 through December 2013. Findings in the recent literature do not change the conclusions regarding the use of home apnea monitoring. Therefore, the policy statements are unchanged.

Update 2011:
A search of the peer reviewed literature was performed for the period of September 2009 through November 2011. Findings in the recent literature do not change the conclusions regarding the use of home apnea monitoring, therefore the policy statements are unchanged.

Update 2009:
A search of peer reviewed literature was performed through August 2009. Findings in the literature do not change the medically necessary indications for infants who could benefit from home monitoring. In 2007, the AAP reaffirmed its 2003 statement on apnea, sudden infant death syndrome and home monitoring which is consistent with the medically necessary indications in this policy. Therefore, the medically necessary indications for home apnea monitors remain unchanged.

Update 2007:
The AAP policy statement identified apnea of prematurity as those infants younger than 37 weeks gestation with sudden cessation of breathing that lasts for at least 20 seconds or is accompanied by bradycardia or oxygen desaturation (cyanosis). The AAP recommends that apnea monitoring may be warranted for premature infants at high risk for recurrent episodes of apnea, bradycardia, and hypoxemia after being discharged from the hospital.

Benefit Applications

Benefits **are provided** for home apnea monitoring for a period of three (3) months. Benefits for monitoring over three (3) months will require review by a medical director.

Benefits **are provided** for one pair of electrodes per month (A4556) and one set of lead wires per apnea monitor (A4557).

Additional benefits **are not provided** for parental training sessions and/or instructions in the use of the monitor, as these are considered *included in* the monitoring service.

Additional benefits **are not provided** to a DME provider for pediatric pneumogram equipment or for pulse oximetry when reported with an apnea monitor, as these services are considered *included* in the allowance for the apnea monitor.

Medical records may be requested from a pediatrician submitting a claim for pediatric pneumogram to verify that this is the service actually being performed, as this code is sometimes incorrectly used to report for a *patient compliance report* or *memory monitor report*. Additional benefits **are not provided** for a patient compliance report or memory monitor report as these are considered *included in* the overall care provided to the patient. When benefits are provided under the member's contract, benefits **are provided** for the professional service for the interpretation of a pediatric pneumogram.

NOTE: For FEP business, check the member's contract for benefits.

Provider Guidelines

The member's treating physician must order the home apnea monitor.

Parents and other caregivers must be trained in observation techniques, operation of the monitor, and infant cardiopulmonary resuscitation (CPR).

As suggested by a Policy Statement from the American Academy of Pediatrics (AAP) (2016), the physician should also establish a specific plan for periodic review and termination of the monitor. The use of home apnea monitoring in premature infants should be limited to approximately 43 weeks postmenstrual age *****, or after the cessation of extreme episodes, whichever comes last. Should monitoring beyond 43 weeks postmenstrual age be recommended, clear documentation of the reasons for continuing monitoring is necessary.

Home monitors should be equipped with an event recorder.

***** Postmenstrual age is the time elapsed from the first day of the last menstrual period to the birth date (otherwise known as the gestational age or time in-utero), plus the chronological age (term used after the birth of the child).

Cross References to Related Policies and Procedures

1.01.01	Durable Medical Equipment with Attached Table, Policy
1.01.010	Transcutaneous Electrical Nerve Stimulators, Policy
2.01.018	Sleep Disorders, Policy

References

The following were among the resources reviewed and considered in developing this policy. By reviewing and considering the resources, CareFirst does not in any way endorse the contents thereof nor assume any liability or responsibility in connection therewith. The opinions and conclusions of the authors of these resources are their own and may or may not be in agreement with those of CareFirst.

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