Medical Coverage Policy | Home Uterine Activity Monitoring (HUAM)

EFFECTIVE DATE: 10|01|2015
POLICY LAST REVIEWED: 01|08|2025

OVERVIEW
The home uterine activity monitor (HUAM) is a device intended to provide early detection of preterm labor in women at high risk of preterm labor and preterm birth. A monitoring device worn by the patient collects data on uterine activity. After using the device, the patient transmits data recordings to a provider who assesses risk of preterm labor-onset, based on frequency of uterine contractions and responses to interview questions.

MEDICAL CRITERIA
Not applicable

PRIOR AUTHORIZATION
Not applicable

POLICY STATEMENT
Medicare Advantage Plans
Home uterine activity monitoring, with or without nursing contact, is not covered, including use with tocolytic therapy (medications used to slow contractions). Despite numerous scientific studies, there is insufficient evidence to determine the effects of the technology on health outcomes.

Commercial Products
Home uterine activity monitoring, with or without nursing contact, is considered not medically necessary, including use with tocolytic therapy (medications used to slow contractions). Despite numerous scientific studies, there is insufficient evidence to determine the effects of the technology on health outcomes.

COVERAGE
Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

BACKGROUND
The home uterine activity monitor (HUAM) is a monitoring device that consists of a guard-ring tocodynamometer (worn as a belt around the abdomen), a data recorder, and a data transmitter. Typically, the patient is instructed to use the device daily for two 1-hour periods. After monitoring, the patient transmits the recordings by telephone modem link to a remote base station. Base station nurses not only facilitate transmission and analysis of the monitor tracings, they also maintain daily telephone contact with the patient to assess signs and symptoms and to provide advice and counseling.

Nurses employed in HUAM services look for evidence of the onset of preterm labor, either on the basis of uterine activity exceeding a threshold level or from the findings of a telephone interview with the patient. Signs and symptoms of preterm labor include back pain, increased vaginal discharge, menstrual-like cramps, and pelvic pressure or heaviness. The threshold number of uterine contractions signaling the possible onset of preterm labor is usually 4 to 6 per hour. If signs and symptoms are present or the uterine activity exceeds a certain threshold, patients are instructed to perform the following: empty the bladder, hydrate orally, and assume the left lateral recumbent position. The patient is also instructed to re-monitor for 1 additional hour. If uterine activity still exceeds threshold or signs and symptoms persist, the patient is instructed to see her physician immediately for a cervical examination. The cervical examination would then play a pivotal role in diagnosing whether preterm labor is occurring and whether to initiate tocolytic therapy.

In March 2001, the U.S. Food and Drug Administration (FDA) reclassified HUAMs from class III (Premarket Approval) to class II (Special Controls) devices. The HUAM is a postamendment device and thus, was automatically reclassified into class III. Devices with 510(k) marketing clearance from the FDA include the Fetal Assist (Huntleigh Diagnostics, Eatontown, NJ) and the Carefone Home Uterine Activity Monitoring System (Carelink Corp, Santa Ana, CA). The HUAM is described as an electronic system for at-home antepartum measurement of uterine contractions, data transmission by telephone to a clinical setting, and for receipt and display of the uterine contraction data at the clinic. The HUAM system comprises a tocotransducer, an at-home recorder, a modem, and a computer and monitor that receive, process and display data. The FDA indicates that the device is intended for use in women at least 24 weeks' gestation with a previous preterm delivery to aid in the detection of preterm labor.

There is a substantial evidence base on home uterine activity monitoring for reducing preterm birth in high-risk pregnant women. Numerous RCTs have been performed prior to the year 2000. The trials that were the largest in size and highest in quality have not reported a benefit for HUAM, and systematic reviews of the available trials have not concluded that health outcomes are improved. The available evidence suggests that HUAM does not improve health outcomes, and HUAM is not recommended by national organizations. Thus, home uterine activity monitoring can be considered not medically necessary.

CODING

The following codes are not covered for Medicare Advantage Plans and not medically necessary for Commercial Products:

99500 Home visit for prenatal monitoring and assessment to include fetal heart rate, non-stress test, uterine monitoring, and gestational diabetes monitoring

S9001 Home uterine monitor with or without associated nursing services

RELATED POLICIES

None

PUBLISHED

Provider Update, March 2025
Provider Update, April 2024
Provider Update, April 2023
Provider Update, June 2022
Provider Update, August 2021

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