Monitored Anesthesia Care (MAC)

Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.

Prospective review is not required.

Description

The intent of this policy is to address anesthesia services for diagnostic or therapeutic procedures performed in the outpatient setting that are listed in Appendix G of Current Procedural Terminology (CPT).

Adequate sedation and analgesia are important parts of many diagnostic and therapeutic procedures. Various levels of sedation and analgesia (anesthesia) may be used, depending on the patient’s condition and the procedure being performed. This policy addresses the Monitored anesthesia care (MAC) and refers to the anesthesia personnel present during a procedure and does not implicitly indicate the level of anesthesia needed. The American Society of Anesthesiologists (ASA) has defined MAC as:

Monitored anesthesia care is a specific anesthesia service for a diagnostic or therapeutic procedure. Indications for monitored anesthesia care include the nature of the procedure, the patient’s clinical condition and/or the potential need to convert to a general or regional anesthetic.

Monitored anesthesia care includes all aspects of anesthesia care, a pre-procedure visit, intra-procedure care and post-procedure anesthesia management. During monitored anesthesia care, the anesthesiologist provides or medically directs a number of specific services, including but not limited to:

- Diagnosis and treatment of clinical problems that occur during the procedure
- Support of vital functions
- Administration of sedatives, analgesics, hypnotics, anesthetic agents or other medications as necessary for patient safety
- Psychological support and physical comfort
- Provision of other medical services as needed to complete the procedure safely.

MAC may include varying levels of sedation, analgesia, and anxiolysis as necessary. The provider of MAC must be prepared and qualified to convert to general anesthesia when necessary. If the patient loses consciousness and the ability to respond purposefully, the anesthesia care is a general anesthetic, irrespective of whether airway instrumentation is required.

In 2004, the ASA defined 4 levels of sedation/analgesia as follows:
I. **Minimal sedation (anxiolysis)** is a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilator and cardiovascular function are unaffected.

II. **Moderate sedation/analgesia (conscious sedation)** is a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.

III. **Deep sedation/analgesia** is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

IV. **General anesthesia** is a drug-induced depression of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilator function is often impaired. Patients often require assistance in maintaining a patent airway, and positive-pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

Because sedation is a continuum, it is not always possible to predict how an individual patient will respond. Hence, practitioners intending to produce a given level of sedation should be able to rescue patients whose level of sedation becomes deeper than initially intended. Individuals administering moderate sedation/analgesia (conscious sedation) should be able to rescue patients who enter a state of deep sedation/analgesia, while those administering deep sedation/analgesia should be able to rescue patients who enter a state of general anesthesia.

According to the American Society of Anesthesiologists' (ASA) standard for monitoring, MAC should be provided by qualified anesthesia personnel, including physicians and nurse specialists. By this standard, the personnel must be in addition to the proceduralist and must be present continuously to monitor the patient and provide anesthesia care. MAC may include varying levels of sedation, analgesia, and anxiolysis, including but not limited to moderate sedation. For patients at high risk of an unsuccessful procedure under moderate sedation, this allows for the safe continuation of the procedure under deep sedation or general anesthesia by trained personnel. MAC includes all aspects of anesthesia care—a pre-procedure visit, intra-procedure care, and post-procedure anesthesia management. During MAC, the anesthesia personnel provide or medically direct a number of specific services such as administration of sedatives, analgesics, hypnotics, anesthetic agents, or other medications as necessary.

Sedation and anesthesia services that are provided in outpatient settings should be administered by qualified and appropriately trained personnel. Moderate sedation is generally sufficient for many diagnostic and uncomplicated therapeutic procedures. Moderate sedation using benzodiazepines, with or without narcotics, is usually administered by, or under the supervision of, the proceduralist.

Moderate sedation can be achieved using pharmacologic agents for sedation, anxiolysis, and analgesia. A frequently used combination is an opioid and benzodiazepine, for example fentanyl with midazolam, at doses individualized to obtain the desired sedative effect. Other combinations have also been utilized for this purpose. While both benzodiazepines and opioids can cause respiratory depression, effective reversal agents exist for both.

Propofol is an agent that has been increasingly used to provide sedation for procedures. Propofol is associated with a rapid onset of action and fast recovery from sedation. However, there have been concerns about potential side effects and safety when used by non-anesthesiologists. Propofol has the potential to induce general anesthesia, and there is no pharmacologic antagonist to reverse its action. When used as moderate sedation, propofol may be administered by anesthesia personnel or under the direction of the proceduralist. ASA has offered practice guidelines for the provision of sedation by non-
anesthesiologists, stating that personnel must be prepared to respond to deep sedation and loss of airway protection should these complications inadvertently occur during sedation.

Monitored Anesthesia (00100-01999) or Moderate Conscious Sedation (99148-99150) codes provided by a second physician or other qualified health care professional other than the health care professional performing the procedure, may be considered medically necessary when there is documentation that the any of the specific risk factors listed below are met

- Increased risk for complications due to severe comorbidity (ASA P3* or greater)
  
  *American Society of Anesthesiologists (ASA) physical status classification system for assessing a patient before surgery:

  - P3 – A patient with severe systemic disease
  - P4 – A patient with severe systemic disease that is a constant threat to life
  - P5 – A moribund patient who is not expected to survive without the operation

- Morbid obesity (BMI [body mass index] >40)

- Severe sleep apnea (oxygen and bi-pap required during sleep)

- Inability to follow simple commands (cognitive dysfunction, intoxication, or psychological impairment)

- Spasticity or movement disorder complicating procedure

- History or anticipated intolerance to standard sedatives, such as
  
  - Chronic opioid use
  - Chronic benzodiazepine use
  - Patients with active medical problems related to drug or alcohol abuse

- Patients of extreme age, i.e., younger than age 12 or age 70 years or older

- Patients who are pregnant

- Patients with increased risk for airway obstruction due to anatomic variation, such as

  - Documented history of sleep apnea or stridor
  - Dysmorphic facial features
  - Oral abnormalities (e.g., macroglossia)
  - Neck abnormalities (e.g., neck mass)
  - Jaw abnormalities (e.g., micrognathia)

- Acutely agitated, uncooperative patients

- Prolonged or therapeutic gastrointestinal endoscopy procedures requiring deep sedation.

Medical Criteria

Policy

Monitored Anesthesia Care (MAC) when rendered by another provider not performing the procedure, including the anesthesia specialty, is medically necessary for any procedure in appendix G of the CPT Coding Book, only when there is documentation that supports that the member has specific risk factors as defined above.
Coverage

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, or Benefit Booklet for applicable anesthesia/surgery services coverage/benefits.

Coding

**Monitored Anesthesia Care (MAC) Coding:**

Anesthesia codes 00100-01999

The procedure codes listed in Appendix G of the Current Procedural Terminology (CPT) all include conscious sedation as inherent to the procedure.

**Moderate (Conscious) Sedation Policy:**

Reimbursement for moderate sedation is built into the compensation valuation for procedures listed in CPT Appendix G. The oversight of the physician is inherent in the procedure allowance and the staff time is inherent in the facility allowance. Therefore, moderate sedation by the physician performing the procedure is not separately reimbursed (CPT codes 99143, 99144, 99145).

Moderate conscious sedation, in conjunction with any of the procedures listed in Appendix G, when rendered by a separate provider (codes 99148, 99149, 99150) other than the provider performing the procedure, is considered medically necessary and is separately reimbursed only when there is documentation that the medical criteria listed above has been met.

**Moderate Sedation Coding:**

Please note: Moderate sedation performed in a facility setting is eligible for separate reimbursement by a second provider in situations where a patient's medical condition requires the dedication of a separate physician. For example, Emergency medicine (specialty code 093), critical care (specialty code 079), anesthesia specialties, or another physician who is credentialed/qualified to perform these services. (Codes 99148, 99149, 99150)

**Also Known As**

None

**Related Policies**

**Publication**

Provider Update, March 2013

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member’s subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific
benefits, call the provider call center. If you provide services to a member which are
determined to not be medically necessary (or in some cases medically necessary
services which are non-covered benefits), you may not charge the member for the
services unless you have informed the member and they have agreed in writing in
advance to continue with the treatment at their own expense. Please refer to your
participation agreement(s) for the applicable provisions. This policy is current at the time
of publication; however, medical practices, technology, and knowledge are constantly
changing. BCBSRI reserves the right to review and revise this policy for any reason and
at any time, with or without notice.