



Name of Policy:**Anesthesia/Sedation for Dental or Oral Surgery Procedures**

Policy #: 243

Latest Review Date: July 2009

Category: Administrative

Policy Grade: D

Background:

As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.

The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:

- 1. The technology must have final approval from the appropriate government regulatory bodies;*
- 2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;*
- 3. The technology must improve the net health outcome;*
- 4. The technology must be as beneficial as any established alternatives;*
- 5. The improvement must be attainable outside the investigational setting.*

Description of Procedure or Service:

Sedation and analgesia comprise a continuum of states ranging from minimal sedation (anxiolysis) through general anesthesia. Definitions of levels of sedation–analgesia, as developed by the American Society of Anesthesiologists (ASA); approved by the ASA House of Delegates October 13, 1999 and adopted by the ASA, are:

- *Minimal Sedation (Anxiolysis)* = a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected.
- *Moderate Sedation/Analgesia (Conscious Sedation)* = 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.
- *Deep Sedation/Analgesia* = 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.

- *General Anesthesia* = a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory 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.

Monitoring of patient response to verbal commands should be routine during moderate sedation, except in patients who are unable to respond appropriately (e.g., young children, mentally impaired or uncooperative patients), or during procedures where movement could be detrimental. During deep sedation, patient responsiveness to a more profound stimulus should be sought, unless contraindicated, to ensure that the patient has not drifted into a state of general anesthesia. Note that a response limited to reflex withdrawal from a painful stimulus is not considered a purposeful response and thus represents a state of general anesthesia.

All patients undergoing sedation/analgesia should be monitored by pulse oximetry with appropriate alarms. If available, the variable pitch “beep,” which gives a continuous audible indication of the oxygen saturation reading, may be helpful. In addition, ventilatory function should be continually monitored by observation or auscultation. Monitoring of exhaled carbon dioxide should be considered for all patients receiving deep sedation and for patients whose ventilation cannot be directly observed during moderate sedation. When possible, blood pressure should be determined before sedation/analgesia is initiated. Once sedation–analgesia is established, blood pressure should be measured at 5-min intervals during the procedure, unless such monitoring interferes with the procedure (e.g., pediatric magnetic resonance imaging, where stimulation from the blood pressure cuff could arouse an appropriately sedated patient). Electrocardiographic monitoring should be used in all patients undergoing deep sedation. It should also be used during moderate sedation in patients with significant cardiovascular disease or those who are undergoing procedures where dysrhythmias are anticipated.

A designated individual, other than the practitioner performing the procedure, should be present to monitor the patient throughout procedures performed with sedation/analgesia. During deep sedation, this individual should have no other responsibilities. However, during moderate sedation, this individual may assist with minor, interruptible tasks once the patient’s level of sedation–analgesia and vital signs have stabilized, provided that adequate monitoring for the patient’s level of sedation is maintained.

Policy:

Anesthesia in the hospital or ambulatory surgery center (ASC) setting for dental or oral surgery procedures meets Blue Cross and Blue Shield of Alabama's medical criteria for coverage including, but not limited to, the following circumstances:

- Children age 8 or under;
- Neurobehavioral delays;
- Multiple procedures performed at the same session i.e., extraction of six or more teeth;
- Complex procedures such as difficult extraction of impacted teeth;
- Conditions requiring intubation including but not limited to:
 - Sleep apnea;
 - Decreased oropharyngeal patency;
 - Enlarged tonsils;
 - Dental skeletal deformities such as mandibular hypoplasia;
 - Severe esophageal reflux
- Medical conditions:
 - Multiple system failures;
 - Significant cardiac arrhythmias i.e. >5 premature ventricular contractions (PVC's) per minute on electrocardiogram, sick sinus syndrome, etc.;
 - Poorly controlled diabetic or widely fluctuating blood sugars in spite of multiple insulin doses and vigorous attempts at control;
 - Presence of prosthetic valves and anticoagulation therapy;
 - Continuous need for anticoagulation therapy;
 - Presence of bleeding disorders such as hemophilia;
 - Myelodysplastic disease;
 - Significant history of sickle cell disease with multiple hospitalizations;
 - Documented latex allergy;
 - Advanced liver disease, i.e., cirrhosis with bleeding problems;
 - Acute or chronic renal failure needing multiple procedures or requiring difficult procedures;
 - Dementia, sequela of closed head trauma, or stroke causing inability to cooperate with directions;
 - Post traumatic stress disorder requiring management with multiple medications;
 - Unstable or poorly controlled psychiatric disorders;
 - Conditions causing increased intracranial pressure;
 - Head and neck radiation;
 - Significant congestive heart failure (CHF) with limitations of normal activity and/or dyspnea;
 - Unstable angina;
 - Recent (within last six months) myocardial infarction (MI);
 - Epilepsy treated with one or more medications;
 - Advanced pulmonary disease, i.e., emphysema or bronchitis requiring supplemental oxygen therapy;
 - Neurological/neurosurgical conditions, i.e., aneurysm;
 - Untreated hyperthyroidism;
 - Severely compromised nutritional status.

Note: This policy addresses the medical criteria for coverage for anesthesia. Even if the anesthesia meets medical criteria for coverage, the surgical procedure itself, may be considered dental by the member's contract.

Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the members' contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

Key Points:

Combinations of sedative and analgesic agents may be administered as appropriate for the procedure being performed and the condition of the patient. Ideally, each component should be administered individually to achieve the desired effect (e.g., additional analgesic medication to relieve pain; additional sedative medication to decrease awareness or anxiety). The propensity for combinations of sedative and analgesic agents to cause respiratory depression and airway obstruction emphasizes the need to appropriately reduce the dose of each component as well as the need to continually monitor respiratory function.

The literature suggests and the ASA Task Force members on Sedation and Analgesia by Non-Anesthesiologists concur that certain types of patients are at increased risk for developing complications related to sedation/analgesia unless special precautions are taken. In patients with significant underlying medical conditions (e.g., extremes of age; severe cardiac, pulmonary, hepatic, or renal disease; pregnancy; drug or alcohol abuse) the consultants agree that pre-procedure consultation with an appropriate medical specialist (e.g., cardiologist, pulmonologist) decreases the risks associated with moderate sedation and strongly agree that it decreases the risks associated with deep sedation. In patients with significant sedation-related risk factors (e.g., uncooperative patients, morbid obesity, potentially difficult airway, sleep apnea), the consultants are equivocal regarding whether pre-procedure consultation with an anesthesiologist increases the likelihood of satisfactory moderate sedation, while agreeing that it decreases adverse outcomes. The consultants strongly agree that pre-procedure consultation increases the likelihood of satisfactory outcomes while decreasing risks associated with deep sedation. The Task Force notes that in emergency situations, the benefits of awaiting pre-procedure consultations must be weighed against the risk of delaying the procedure.

For moderate sedation, the consultants are equivocal regarding whether the immediate availability of an individual with postgraduate training in anesthesiology increases the likelihood of a satisfactory outcome or decrease the associated risks. For deep sedation, the consultants agree that the immediate availability of such an individual improves the likelihood of satisfactory sedation and that it will decrease the likelihood of adverse outcomes.

For severely compromised or medically unstable patients (e.g., anticipated difficult airway, severe obstructive pulmonary disease, coronary artery disease, or congestive heart failure), or if it is likely that sedation to the point of unresponsiveness will be necessary to obtain adequate

conditions, practitioners who are not trained in the administration of general anesthesia should consult an anesthesiologist.

Key Words:

Anesthesia, monitored anesthesia care, MAC, conscious sedation, oral surgery

Approved by Governing Bodies:

Not applicable

Benefit Application:

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply

BellSouth/AT&T contracts: No special consideration

FEP contracts: Special benefit consideration may apply. Refer to member's benefit plan.

Wal-Mart: Special benefit consideration may apply. Refer to member's benefit plan.

Pre-certification requirements: Not applicable

Pre-determination requirements: Pre-determinations will be performed as a courtesy review at the request of the physician and/or subscriber.

Coding:

Not applicable

References:

1. American Dental Association. *Policy Statement: The use of sedation and general anesthesia by dentists.* October 2007.
2. American Dental Association 2007. *Guidelines: The use of sedation and general anesthesia by dentists.* October 2007.
3. American Society of Anesthesiologists Task Force on Sedation and Analgesia by Non-Anesthesiologists. *Practice guidelines for sedation and analgesia by non-anesthesiologists.* Anesthesiology 2002; 96(4): 1004-17.
4. Ross AK. *Office-based anesthesia for children.* Anesthesiol Clin North America 2002; 20(1): 195-210.

Policy History:

Medical Policy Group, July 2005 (2)

Medical Policy Group, November 2005 (2)

Medical Policy Administration Committee, November 2005

Available for comment November 3-December 17, 2005

Medical Policy Group, July 2006 (2)

Medical Policy Group, July 2009 (1)

This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i)

research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.

This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plans contracts.