Statement on Granting Privileges for Administration of Moderate Sedation to Practitioners Who are Not Anesthesia Professionals

Committee of Origin: Ad Hoc Committee on Credentialing
Committee of Review: Ambulatory Surgical Care

(Approved by the ASA House of Delegates on October 25, 2005, and reaffirmed on October 13, 2021)

The American Society of Anesthesiologists is vitally interested in patient safety and the safe administration of sedation and anesthesia. As such, it has concern for any system or set of practices, used either by its members or the members of other disciplines that would adversely affect the safety of anesthesia administration. It has genuine concern that individuals, however well intentioned, who are not anesthesia professionals may not recognize that sedation and general anesthesia are on a continuum and thus deliver levels of sedation that are, in fact, general anesthesia without having the training and experience to recognize this state and respond appropriately.

The intent of this statement is to suggest a framework for granting privileges that will help ensure competence of individuals who administer or supervise the administration of moderate sedation. Only physicians, dentists or podiatrists who are qualified with appropriate education, training and licensure to administer moderate sedation should supervise the administration of moderate sedation. Additionally, the individual monitoring the patient should be distinct from the individual performing the diagnostic or therapeutic procedure. This statement can be used by any facility—hospital, ambulatory care or physician’s, dentist’s or podiatrist’s office—in which an internal or external credentialing process is required for administration of sedative and analgesic drugs to establish a level of moderate sedation.

REFERENCES

ASA has produced many documents over the years related to the topic addressed by this statement, among them the following:

*Guidelines for Delineation of Clinical Privileges in Anesthesiology* (Approved by the ASA House of Delegates on October 15, 2003, and last amended on October 17, 2018)

*Statement on Qualifications of Anesthesia Providers in the Office-Based Setting* (Approved by the ASA House of Delegates on October 13, 1999; last amended on October 21, 2009; and reaffirmed on October 23, 2019)

*Statement on Safe Use of Propofol* (Approved by the ASA House of Delegates on October 27, 2004, and amended on October 23, 2019)

*Guidelines for Office-Based Anesthesia* (Approved by the ASA House of Delegates on October 13, 1999, and last amended on October 23, 2019)
Guidelines for Ambulatory Anesthesia and Surgery (Approved by the ASA House of Delegates on October 15, 2003, last amended on October 22, 2008, and reaffirmed on October 17, 2018)


Continuum of Depth of Sedation – Definition of General Anesthesia and Levels of Sedation/Analgesia (Approved by the ASA House of Delegates on October 13, 1999, and last amended on October 23, 2019)


American Society of Anesthesiologists Safe Sedation Training – Moderate. https://www.asahq.org/education-and-career/educational-and-cme-offerings/safe-sedation-training---moderate?&ct=37632e079c340c744682904fc28a324e259206e528b2f217233bead7575bac1a1e99ca924bafa120abf34ea5dfb19761aa826a7772368652dd34caadac1f7e4

Society for Pediatric Sedation - Sedation Provider Course for pediatric moderate sedation https://learnpedsedation.org/

The Ad Hoc Committee on Sedation Credentialing Guidelines for Non-anesthesiologists took the contents of the above documents into consideration when developing this statement.
DEFINITIONS

**Anesthesia Professional**: An anesthesiologist, nurse anesthetist or anesthesiologist assistant (AA).

**Non-anesthesiologist Sedation Practitioner**: A licensed physician (allopatic or osteopathic), dentist or podiatrist who has not completed postgraduate training in anesthesiology but is specifically trained to personally administer or supervise the administration of moderate sedation.

Single-operator sedation: A procedurist who simultaneously performs a diagnostic and/or therapeutic procedure while administering sedative or anesthetic drugs.

**Supervised Sedation Professional**: A licensed registered nurse, advanced practice nurse or physician assistant who is trained to administer medications and monitor patients during moderate sedation under the direct supervision of a non-anesthesiologist sedation practitioner or an anesthesiologist.

**Credentialing**: The process of documenting and reviewing a practitioner’s credentials.

**Credentials**: The professional qualifications of a practitioner including education, training, experience and performance.

**Privileges**: The clinical activities within a health care organization that a practitioner is permitted to perform based on the practitioner’s credentials.

**Guidelines**: A set of recommended practices that should be considered but permit discretion by the user as to whether they should be applied under any particular set of circumstances.

*Moderate Sedation*: “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.”

*Deep Sedation*: “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.”

*Rescue*: “Rescue of a patient from a deeper level of sedation than intended is an intervention by a practitioner proficient in airway management and advanced life support. The qualified practitioner corrects adverse physiologic consequences of the deeper-than intended level of sedation (such as hypoventilation, hypoxia and hypotension) and returns the patient to the originally intended level of sedation.”

*General Anesthesia*: “General Anesthesia is 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.”

*The definitions marked with an asterisk are extracted verbatim from “Continuum of Depth of Sedation – Definition of General Anesthesia and Levels of Sedation/Analgesia” (Approved by ASA House of Delegates on October 13, 1999, and last amended on October 23, 2019).
STATEMENT

The following statement is designed to assist health care organizations develop a program for the delineation of clinical privileges for practitioners who are not anesthesia professionals to administer sedative and analgesic drugs to establish a level of moderate sedation. (Moderate sedation is also known as “conscious sedation.”) The statement is written to apply to every setting in which an internal or external credentialing process is required for granting privileges to administer sedative and analgesic drugs to establish a level of moderate sedation (e.g., hospital, freestanding procedure center, ambulatory surgery center, physician’s, dentist’s or podiatrist’s office, etc.). The statement is not intended nor should it be applied to the granting of privileges to administer deep sedation or general anesthesia.

The granting, reappraisal and revision of clinical privileges should be awarded on a time-limited basis in accordance with rules and regulations of the health care organization, its medical staff, organizations accrediting the health care organization and relevant local, state and federal governmental agencies.

I. NON-ANESTHESIOLOGIST SEDATION PRACTITIONERS

Only physicians, dentists or podiatrists who are qualified by education, training and licensure to administer moderate sedation should supervise the administration of moderate sedation. Non-anesthesiologist sedation practitioners may directly supervise patient monitoring and the administration of sedative and analgesic medications by a supervised sedation professional. Alternatively, they may personally perform these functions, with the provision that the individual monitoring the patient should be distinct from the individual performing the diagnostic or therapeutic procedure (see Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018). Single operator sedation should not be permitted and is deemed unsafe.

A. Education and Training

The non-anesthesiologist sedation practitioner who is to supervise or personally administer medications for moderate sedation should have satisfactorily completed a formal training program in: (1) the safe administration of sedative and analgesic drugs used to establish a level of moderate sedation, and (2) the rescue of patients who exhibit adverse physiologic consequences of a deeper-than-intended level of sedation including emergency airway management. This training may be a part of a recently completed residency or fellowship training (e.g., within two years), or may be a separate educational program. A knowledge-based test may be used to verify the practitioner’s understanding of these concepts.** The following subject areas should be included:

1. Contents of the following ASA documents that should be understood by practitioners who administer sedative and analgesic drugs to establish a level of moderate sedation:
   - American Society of Anesthesiologists. Practice guidelines for moderate procedural sedation and analgesia 2018

**The post-test included with the ASA Safe Sedation Training – Moderate may be considered for this purpose.
• **Continuum of Depth of Sedation – Definition of General Anesthesia and Levels of Sedation/Analgesia**

2. Appropriate methods for obtaining informed consent through pre-procedure counseling of patients regarding risks, benefits and alternatives to the administration of sedative and analgesic drugs to establish a level of moderate sedation.

3. Skills for obtaining the patient’s medical history and performing a physical examination to assess risks and co-morbidities, including assessment of the airway for anatomic and mobility characteristics suggestive of potentially difficult airway management. The non-anesthesiologist sedation practitioner should be able to recognize those patients whose medical condition suggests that moderate sedation should be provided by an anesthesia professional, for example, pediatric patients with syndromes that make sedation unsafe.

4. For pediatric patients, we recommend specific education, PALS, BLS, and training in pediatric sedation. In person or online simulation-based training (see reference list for one example) may facilitate knowledge acquisition and skills maintenance. Contents of pediatric-specific guidelines for sedation should be understood, including

5. Assessment of the patient’s risk for aspiration of gastric contents as described in the ASA Practice Guidelines for Preoperative Fasting: “In urgent, emergent or other situations where gastric emptying is impaired, the potential for pulmonary aspiration of gastric contents must be considered in determining (1) the target level of sedation, (2) whether the procedure should be delayed or (3) whether the trachea should be protected by intubation.”

6. The pharmacology of (1) all sedative and analgesic drugs the practitioner requests privileges to administer to establish a level of moderate sedation, (2) pharmacological antagonists to the sedative and analgesic drugs (if there are any) and (3) vasoactive drugs and antiarrhythmics; (4) weight-based drug dosing for pediatric patients.

7. The benefits and risks of supplemental oxygen.

8. Proficiency of airway management with facemask and positive pressure ventilation. This training should include appropriately supervised experience in managing the airways of patients, or qualified instruction on an airway simulator (or both), including devices to aid supporting the pediatric airway.

9. Many of the complications associated with moderate sedation and analgesia may be avoided if adverse drug responses are detected and treated in a timely manner (i.e., before the development of cardiovascular decompensation or cerebral hypoxia). Patients given sedatives or analgesics (especially pediatric, geriatric, and patients with significant comorbidities) in unmonitored settings may be at increased risk of these complications. The use of moderate sedation must include a designated individual other than the practitioner performing the procedure to monitor the patient’s appropriate physiologic parameters and to assist in any supportive or resuscitation measures, if required, throughout the procedure. The individual responsible for monitoring the patient must be
trained in the recognition of apnea and airway obstruction and be authorized to seek additional help. The designated 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;

10. Monitoring of physiologic variables, including the following:
   a. Blood pressure
   b. Respiratory rate
   c. Oxygen saturation by pulse oximetry
   d. Electrocardiographic monitoring. Education in electrocardiographic (ECG) monitoring should include instruction in the most common arrhythmias seen during sedation and anesthesia, their causes and their potential clinical implications (e.g., hypercapnia), as well as electrocardiographic signs of cardiac ischemia.
   e. Depth of sedation. The depth of sedation should be based on the ASA definitions of “moderate sedation” and “deep sedation.” (See above)
   f. Capnography—During moderate sedation the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs and monitoring for the presence of exhaled carbon dioxide unless precluded or invalidated by the nature of the patient, procedure, and equipment. Under extenuating circumstances, the physician responsible for supervising sedation may waive the requirement. When this is done, it should be so stated (including the reasons) in a note in the patient’s medical record, such as equipment malfunction during the procedure. Absence of equipment is not an acceptable reason.

11. The importance of continuous use of appropriately set audible alarms on physiologic monitoring equipment.

12. Documenting the drugs, doses, and fluids administered, the patient’s physiologic condition and the depth of sedation at regular intervals throughout the period of sedation and analgesia, using a graphical, tabular or automated record.

13. Regardless of the availability of a “code team” or the equivalent, the non-anesthesiologist sedation practitioner will have advanced life support skills and current certificate such as those required for Advanced Cardiac Life Support (ACLS). When granting privileges to administer moderate sedation to pediatric patients, the non-anesthesiologist practitioner will have advanced life support skills and current certificate such as those required for Pediatric Advanced Life Support (PALS). Initial ACLS and PALS training and subsequent retraining shall be obtained from the American Heart Association or another vendor that includes "hands-on" training and skills demonstration of airway management and automated external defibrillator (AED) use.

When the practitioner is being granted moderate sedation privileges for pediatric patients, the education and training requirements enumerated in #1-11 above should be appropriately tailored to qualify the practitioner to administer sedative and analgesic drugs to pediatric patients.
B. Licensure

1. The non-anesthesiologist sedation practitioner should have a current active, unrestricted medical, osteopathic, dental or podiatric license in the state, district or territory of practice. (Exception: practitioners employed by the federal government may have a current active license in any U.S. state, district or territory.)

2. The non-anesthesiologist sedation practitioner should have a current unrestricted Drug Enforcement Administration (DEA) registration (schedules II-V).

3. The credentialing process should require disclosure of any disciplinary action (final judgments) against any medical, osteopathic or podiatric license by any state, district or territory of practice and of any sanctions by any federal agency, including Medicare/Medicaid.

4. Before granting or renewing privileges to administer or supervise the administration of sedative and analgesic drugs to establish a level of moderate sedation, the health care organization should search for any disciplinary action recorded in the National Practitioner Data Bank (NPDB) and take appropriate action regarding any Adverse Action Reports.

C. Practice Pattern

1. Before granting initial privileges to administer or supervise administration of sedative and analgesic drugs to establish a level of moderate sedation, a process should be developed to evaluate the practitioner’s performance. For recent graduates (e.g., within two years), this may be accomplished through letters of recommendation from directors of residency or fellowship training programs which include moderate sedation as part of the curriculum. For those who have been in practice since completion of their training, this may be accomplished through communication with department heads, supervisors, and/or peer review at the institution where the individual holds privileges to administer moderate sedation. Alternatively, the non-anesthesiologist sedation practitioner could be proctored or supervised by a physician, dentist or podiatrist who is currently privileged to administer sedative and analgesic agents to provide moderate sedation. The facility should establish an appropriate number of procedures to be supervised.

2. Before granting ongoing privileges to administer or supervise administration of sedative and analgesic drugs to establish a level of moderate sedation, a process should be developed to re-evaluate the practitioner’s performance at regular intervals. For example, the practitioner’s performance could be reviewed by an anesthesiologist or a non-anesthesiologist sedation practitioner who is currently privileged to administer sedative and analgesic agents to provide moderate sedation. The facility should establish an appropriate number of procedures that will be reviewed.

D. Performance Improvement

Credentialing in the administration of sedative and analgesic drugs to establish a level of moderate sedation should require active participation in an ongoing process that evaluates the
practitioner’s clinical performance and patient care outcomes through a formal program of continuous performance improvement.

1. The organization in which the practitioner practices should conduct peer review of its clinicians.

2. The performance improvement process should assess up-to-date knowledge as well as ongoing competence in the skills outlined in the educational and training requirements described above.

3. The performance improvement process should monitor and evaluate patient outcomes, use of reversal agents, and adverse events, based upon established national, regional, or institutional reporting protocols (e.g., adverse events, unsatisfactory sedation).

4. Periodically update the quality improvement process to keep up with new technology, equipment or other advances in moderate procedural sedation/analgesia.

5. The outcomes must be systematically aggregated and analyzed to enhance patient safety and performance. Moderate sedation adverse events must be reported, reviewed, trended, and analyzed in a similar fashion as operating room anesthesia adverse events, as part of the credentialing process.

II. SUPERVISED SEDATION PROFESSIONAL

A. Education and Training

The supervised sedation professional who is granted privileges to administer sedative and analgesic drugs under supervision of a non-anesthesiologist sedation practitioner or anesthesiologist and to monitor patients during moderate sedation can be a registered nurse who has graduated from a qualified school of nursing or a physician assistant who has graduated from an accredited physician assistant program. They may only administer sedative and analgesic medications on the order of an anesthesiologist or non-anesthesiologist sedation practitioner. Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018 states “a designated individual other than the practitioner performing the procedure to monitor the patient’s appropriate physiologic parameters and to assist in any supportive or resuscitation measures, if required, throughout the procedure. The individual responsible for monitoring the patient must be trained in the recognition of apnea and airway obstruction and be authorized to seek additional help. The designated 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;” They should have satisfactorily completed a formal training program in 1) the safe administration of sedative and analgesic drugs used to establish a level of moderate sedation, 2) use of reversal agents for opioids and benzodiazepines, 3) monitoring of patients’ physiologic parameters during sedation, and 4) recognition of abnormalities in monitored variables that require intervention by the non-anesthesiologist sedation practitioner or anesthesiologist. Training should include the following:
1. Contents of the following ASA documents:
   - Practice Guidelines for Moderate Procedural Sedation and Analgesia 2018
   - Continuum of Depth of Sedation – Definition of General Anesthesia and Levels of Sedation/Analgesia

2. The pharmacology of (1) all sedative and analgesic drugs the practitioner requests privileges to administer to establish a level of moderate sedation, and (2) pharmacological antagonists to the sedative and analgesic drugs; (3) weight-based drug dosing for pediatric patients.

3. The benefits and risks of supplemental oxygen.

4. Airway management with facemask and positive pressure ventilation. Recognition of apnea and airway obstruction, as well as use of supportive devices, such as ambu-bag, oral airway, and nasal trumpet. Be familiar with the equipment in the difficult airway cart to aid the clinician if necessary.

5. Monitoring and recognizing abnormalities of physiologic variables, including the following:
   a. Blood pressure
   b. Respiratory rate
   c. Oxygen saturation by pulse oximetry
   d. Electrocardiographic monitoring
   e. Depth of sedation. The depth of sedation should be based on the ASA definitions of "moderate sedation" and "deep sedation." (See above)
   f. Capnography—During moderate sedation the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs and monitoring for the presence of exhaled carbon dioxide unless precluded or invalidated by the nature of the patient, procedure, and equipment. Under extenuating circumstances, the physician responsible to supervise the sedation, may waive the requirement. When this is done, it should be so stated (including the reasons) in a note in the patient's medical record, such as equipment malfunction during the procedure. Absence of equipment is not an acceptable reason.

6. The importance of continuous use of appropriately set audible alarms on all physiologic monitors.

7. Documenting the drugs and dosages administered, the patient’s physiologic condition and the depth of sedation at regular intervals throughout the period of sedation and analgesia, using a graphical, tabular or automated record.

8. When the supervised sedation professional is being granted privileges to administer sedative and analgesic drugs to pediatric patients to establish a level of moderate sedation, the education and training requirements enumerated in #1-7 above should be appropriately tailored to qualify the practitioner to administer sedative and analgesic drugs to pediatric patients.
### B. Licensure
1. The supervised sedation professional should have a current active nursing license or physician assistant license or certification, in the U.S. state, district or territory of practice. (Exception: practitioners employed by the federal government may have a current active license in any U.S. state, district or territory.)
2. Before granting or renewing privileges for a supervised sedation professional to administer sedative and analgesic drugs and to monitor patients during moderate sedation, the health care organization should search for any disciplinary action recorded in the National Practitioner Data Bank (NPDB) and take appropriate action regarding any Adverse Action Reports.

### C. Practice Pattern
1. Before granting ongoing privileges to administer sedative and analgesic drugs to establish a level of moderate sedation, a process should be developed to re-evaluate the supervised sedation professional’s performance. The facility should establish performance criteria and an appropriate number of procedures to be reviewed.

### D. Performance Improvement
Credentialing in the administration of sedative and analgesic drugs to establish a level of moderate sedation should require active participation in an ongoing process that evaluates the practitioner’s clinical performance and patient care outcomes through a formal program of continuous performance improvement.

1. The organization in which the practitioner practices should conduct peer review of its supervised sedation professionals.
2. The performance improvement process should assess up-to-date knowledge as well as ongoing competence in the skills outlined in the educational and training requirements described above.
3. The performance improvement process should monitor and evaluate patient outcomes, use of reversal agents, and adverse events, based upon established national, regional, or institutional reporting protocols (e.g., adverse events, unsatisfactory sedation), and be aggregated to enhance patient safety and performance.
4. Periodically update the quality improvement process to keep up with new technology, equipment or other advances in moderate procedural sedation/analgesia.