Accreditation Standards

IV Procedural Sedation and Analgesia for Adults

April 7, 2020
INTRODUCTION

Intravenous procedural sedation and analgesia must only be performed in non-hospital facilities accredited by the College of Physicians and Surgeons of BC. IV procedural sedation and analgesia is administered to provide analgesia and amnesia resulting in depression of the patient’s level of consciousness so as to facilitate the performance of a diagnostic, therapeutic or invasive procedure and to minimize the adverse psychological effect associated with the procedure. IV procedural sedation and analgesia medications are to be administered in small incremental doses that are titrated until the desired level of sedation/analgesia is achieved.

As per the American Society of Anesthesiologists’ (ASA) Continuum of Depth of Sedation, the functional characteristics of minimal and moderate sedation are as follows:

- **Minimal sedation (anxiolysis)** is a drug-induced state during which the patient responds normally to verbal commands, and although cognitive function and coordination may be impaired, ventilatory and cardiovascular functions are unaffected.

- **Moderate sedation** is a drug-induced depression of consciousness during which the patient responds purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, spontaneous ventilation is adequate and cardiovascular function is usually maintained.

- **Deep sedation** is a drug-induced state during which the patient cannot be easily aroused but responds purposefully following repeated or painful stimulation. Reflex withdrawal from a painful stimulus is not considered a purposeful response. Airway intervention may be required, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

Patients displaying the functional characteristics of moderate sedation must be monitored in accordance with the requirements for moderate sedation. When the intended level of sedation is moderate sedation, patients must be monitored in accordance with the requirements for moderate sedation.

When administering IV procedural sedation and analgesia medications intended for general anesthesia (e.g. propofol, ketamine, etomidate), patient care must be consistent with that required for general anesthesia, and the physician administering any of these medications must be able to identify and manage patients from unintended deep sedation or general anesthesia. Other regulated health professionals (e.g. registered nurses) are not permitted to prepare and/or administer IV procedural sedation and analgesia medications intended for general anesthesia (e.g. propofol, ketamine, etomidate).
This standard does not apply to: general or major conduction anesthesia (e.g. spinal or epidural/caudal block), peripheral nerve blocks, local or topical anesthesia, 50% or less nitrous oxide in oxygen with no other sedative or analgesia medications by any route or single, oral sedative, or analgesic medication administered in doses appropriate for the treatment of anxiety or pain.
### IVS1.0 IV PROCEDURAL SEDATION AND ANALGESIA FOR ADULTS

| IVS1.1 | Anesthesiologists who administer IV procedural sedation/analgesia are qualified.  
*Guidance: This section applies to IV procedural sedation and analgesia under the care of an anesthesiologist.* |
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| **IVS1.1.1** | Each anesthesiologist is licensed with the College of Physicians and Surgeons of BC.  
*Guidance: The medical director confirms anesthesiologist licensure from the College annually.* |
| **IVS1.1.2** | Each anesthesiologist holds non-hospital privileges.  
*Guidance: IV procedural sedation and analgesia under the care of an anesthesiologist includes: anesthesiologist assessment and management of a patient during a procedure or treatment; administration of intravenous sedatives, hypnotics, analgesics and anesthetic medications commonly used for the induction/maintenance of general anesthesia (GA); recognizing “deep” sedation, managing its consequences and adjusting the level of sedation to a “moderate” or lesser level; being able to convert to a GA when necessary and intervene to rescue a patient’s airway and allow for the safe administration of a maximal depth of sedation in excess of that provided during intravenous procedural sedation administration.* |
| **IVS1.1.3** | Each anesthesiologist that has not practiced anesthesia in a hospital setting within three years holds current ACLS training.  
*Guidance: Anesthesiologists that hold hospital privileges in the practice of anesthesia or that did hold hospital privileges in the practice of anesthesia within the last three years are not required to hold current ACLS training. ACLS courses may be taken directly through the Heart and Stroke Foundation of Canada (HSFC) and/or from a third-party provider. Medical directors must ensure third-party providers instruct in accordance to the HSFC guidelines. Following initial certification, re-certification is required every two years.* |
| **IVS1.1.4** | Each anesthesiologist that has not practised anesthesia in a hospital setting within three years has completed a difficult airway management course.  
*Guidance: Anesthesiologists that hold hospital privileges in the practice of anesthesia or that did hold hospital privileges in the practice of anesthesia within the last three years are not required to have completed a difficult airway management course. Courses may be taken through a third-party provider. Medical directors must ensure that the course content includes both theory and in-person/hands-on components which meet necessary skills competencies for the non-hospital setting. Difficult airway management course re-certification must be completed every three years.* |

| IVS1.2 | Physicians who administer or direct the administration of IV procedural sedation and analgesia are qualified.  
*Guidance: This section applies to non-anesthesiologist physicians who administer and or direct the administration of IV procedural sedation and analgesia (IV-PSA).* |
| --- | --- |
| **IVS1.2.1** | Each physician is licensed with the College of Physicians and Surgeons of BC.  
*Guidance: The medical director confirms physician licensure from the College annually.* |
IVS1.2.2    M    Each physician holds non-hospital facility privileges to provide IV procedural sedation and analgesia (IV-PSA).

Guidance: Intravenous procedural sedation and analgesia (IV-PSA) may be administered by qualified non-anesthesiologist physicians. Physicians administering or directing the administration of IV-PSA must be able to recognize “deep” sedation, manage its consequences, and adjust the level of sedation to a “moderate” or lesser level. IV-PSA includes assessment and management of a patient during a procedure or treatment, and administration of sedatives, hypnotics and analgesics only. Medications used for the induction/maintenance of general anesthesia (e.g. propofol) must not be administered by non-anesthesiologists. Non-anesthesiologist physicians who administer ketamine possess the requisite training and currency and have been granted special privileges by the medical director to administer IV ketamine. Ketamine will produce general anesthesia and must be used with caution as there is no specific reversal agent. Although associated with less cardiorespiratory depression than other sedatives, airway obstruction, laryngospasm and pulmonary aspiration may occur with ketamine use. IV-PSA ketamine administered by a non-anesthesiologist physician is limited to a single weight-based dose of 0.25 mg/kg to a maximum dose of 20 mg.

IVS1.2.3    M    Each physician that administers or directs the administration of IV-PSA has completed post-graduate training in IV procedural sedation.

Guidance: Physicians, dentists, oral maxillofacial surgeons or podiatric surgeons who personally administer and/or direct the administration of IV-PSA have completed post-graduate training in IV procedural sedation. IV procedural sedation courses may be taken through a third-party provider. Medical directors must ensure that the course content includes both theory and in-person/hands-on components which meet necessary skills competencies for the non-hospital setting. IV procedural sedation refresher training is required every five years. At the discretion of the medical director, physicians, dentists, oral maxillofacial surgeons or podiatric surgeons currently administering and/or directing the administration of IV-PSA that have not completed post-graduate training in IV procedural sedation within the last 5 years may be grandparented until June 2021, after which time evidence of IV procedural sedation refresher training must be on file.

IVS1.2.4    M    Each physician that administers or directs the administration of IV-PSA holds current ACLS training.

Guidance: Physicians that administer or direct the administration of IV-PSA must possess the requisite knowledge and skills to assess the patient care requirements during procedural sedation and recovery. The medical director is responsible for ensuring facility staff have the proper qualifications, training and knowledge and possess the competencies required for their role, which would include all specialized skill courses such as Basic Life Support (BLS) Provider, ACLS and airway management. ACLS courses may be taken directly through the Heart and Stroke Foundation of Canada (HSFC) and/or from a third-party provider. Medical directors must ensure third party providers instruct in accordance to the HSFC guidelines. Following initial certification, re-certification is required every two years.

IVS1.3    M    Registered nurses who administer IV procedural sedation or monitor a patient under IV procedural sedation are qualified.

IVS1.3.1    M    Each registered nurse holds practising registration with the British Columbia College of Nursing Professionals.

Guidance: Registered nurses (RN) are the only other regulated health professional whose scope of practice may include IV procedural sedation. It is not within a licensed practical nurse’s (LPN) scope of practice to administer medications for the purposes of procedural sedation. LPNs who may be involved in the monitoring of patients under IV procedural sedation do so in a team-nursing approach with an RN (i.e. the RN is present in the room at all times).
### IVS1.3.2 M Each registered nurse has completed a procedural sedation management course.

*Guidance:* Registered nurses that administer IV-PSA or monitor a patient under IV-PSA must possess the competencies required to carry out this activity. IV procedural sedation courses may be taken through a third-party provider. Medical directors must ensure that the course content includes both theory and in-person/hands-on components which meet necessary skills competencies for the non-hospital setting. IV procedural sedation refresher training is required every five years. At the discretion of the medical director, registered nurses currently administering and/or monitoring patients under IV-PSA that completed an IV procedural sedation management course more than 5 years ago may be grandparented until June 2021, after which time evidence of IV procedural sedation refresher training must be on file. Post-anesthesia care registered nurses are required to complete a procedural sedation management course as they acquire the necessary education to administer IV sedation and/or monitor a patient under IV sedation through their education and experience in critical care/post-anesthesia care nursing. Post-anesthesia care registered nurses are not required to complete IV procedural sedation refresher training provided they have worked in a hospital post-anesthesia care unit and/or critical care unit within the last three years.

### IVS1.3.3 M Each registered nurse holds current ACLS training.

*Guidance:* Registered nurses that administer IV-PSA or monitor a patient under IV-PSA must possess the requisite knowledge and skills to assess the patient care requirements during procedural sedation and recovery. ACLS courses may be taken directly through the Heart and Stroke Foundation of Canada (HSFC) and/or from a third-party provider. Medical directors must ensure third-party providers instruct in accordance to the HSFC guidelines. Following initial certification, re-certification is required every two years.

### IVS1.4 The procedure room is appropriately staffed during IV procedural sedation and analgesia under the care of an anesthesiologist and when both the scrub and circulating roles are required for the procedure being performed.

| IVS1.4.1 M | An anesthesiologist is dedicated to the operating/procedure room from the start to the finish of each procedure. *Guidance:* A minimum of four health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, the scrub nurse, and the circulating nurse. For example, cataract procedures performed under MAC require a scrub nurse and a circulating nurse in addition to the anesthesiologist administering and monitoring the patient under IV procedural sedation. |

| IVS1.4.2 M | A physician is dedicated to the operating/procedure room from the start to the finish of each procedure. *Guidance:* A minimum of four health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, the scrub nurse, and a circulating nurse. |
**IVS1.4.3**  | **M**  | A perioperative scrub nurse is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of four health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, the scrub nurse, and a circulating nurse. The scrub role is assigned to either a perioperative RN or an LPN who has completed a perioperative nursing program. In this staffing scenario, the scrub nurse and the circulating nurse are not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore are not required to have completed a procedural sedation management course and hold current ACLS.*

**IVS1.4.4**  | **M**  | A perioperative registered nurse is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of four health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, the scrub nurse, and a circulating nurse. In accordance with the Operating Room Nurses Association of Canada (ORNAC), the primary circulating role shall be assigned only to a perioperative registered nurse. In this staffing scenario, the scrub nurse and the circulating nurse are not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore are not required to have completed a procedural sedation management course and hold current ACLS.*

**IVS1.5**  | **The procedure room is appropriately staffed during IV procedural sedation and analgesia under the care of an anesthesiologist and when the circulating role is required for the procedure being performed.**

**IVS1.5.1**  | **M**  | An anesthesiologist is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of three health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, and the circulating RN to assist the physician (i.e. specimens, patient positioning).*

**IVS1.5.2**  | **M**  | A physician is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of three health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, and the circulating nurse to assist the physician (i.e. specimens, patient positioning).*

**IVS1.5.3**  | **M**  | A nurse is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of three health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, and a nurse to assist the physician (i.e. specimens, patient positioning). For procedures that do not require a scrub role (e.g. endoscopy), only one nurse is required to be present in the circulating role to assist the physician (i.e. specimens, patient positioning). In this staffing scenario, the nurse is not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore is not required to have completed a procedural sedation management course and hold current ACLS.*
### IVS1.6
The procedure room is appropriately staffed during IV procedural sedation and analgesia under the care of an anesthesiologist when the scrub role and circulating role are not required for the procedure being performed.

| IVS1.6.1 | **M** | An anesthesiologist is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of two health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, and the physician who performs the procedure. When the room is staffed with only two health professionals, there must be a third regulated health professional immediately available to assist in the event of an emergency. The third regulated health professional may be an RN, LPN or another physician.* |
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| IVS1.6.2 | **M** | A physician is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: A minimum of two health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, and the physician who performs the procedure. When the room is staffed with only two health professionals, there must be a third regulated health professional immediately available to assist in the event of an emergency. The third regulated health professional may be an RN, LPN or another physician.* |
| IVS1.6.3 | **M** | A third regulated health professional is immediately available.  
*Guidance: When the room is staffed with only two health professionals, there must be a third regulated health professional immediately available to assist in the event of an emergency. The third regulated health professional may be an RN, LPN or another physician.* |

### IVS1.7
The procedure room is appropriately staffed during IV procedural sedation and analgesia given in the absence of an anesthesiologist (IV-PSA) and when both the scrub role and circulating role are required for the procedure being performed.

| IVS1.7.1 | **M** | A physician is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance: During procedures in the absence of an anesthesiologist, the IV procedural sedation (IV-PSA) is administered by the operating physician or given by the registered nurse as directed by the non-anesthesiologist physician. A minimum of four health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication; a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation); a scrub nurse; and a circulating nurse.* |
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| IVS1.7.2 | **M** | A registered nurse is solely dedicated to the monitoring of the patient from the start to the finish of each procedure.  
*Guidance: A minimum of four health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication; a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation); a scrub nurse; and a circulating nurse. In this staffing scenario, the RN solely dedicated to the monitoring of the patient during IV procedural sedation must have completed a procedural sedation management course and hold current ACLS. The scrub nurse and the circulating nurse are not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore are not required to have completed a procedural sedation management course and hold current ACLS.* |
| IVS1.7.3 | M | A perioperative scrub nurse is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance:* A minimum of four health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, a scrub nurse, and a circulating nurse. The scrub role is assigned to either a perioperative RN or an LPN who has completed a perioperative nursing program. In this staffing scenario, the RN solely dedicated to the monitoring of the patient during IV procedural sedation must have completed a procedural sedation management course and hold current ACLS. The scrub nurse and the circulating nurse are not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore are not required to have completed a procedural sedation management course and hold current ACLS. |
|----------------|---|--------------------------------------------------------------------------------------------------|
| IVS1.7.4 | M | A perioperative registered nurse is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance:* A minimum of four health professionals are dedicated to the operating/procedure room from the start to the finish of each procedure: the anesthesiologist administers the IV procedural sedation and analgesia and is solely dedicated to the monitoring of the patient, the physician who performs the procedure, a scrub nurse, and a circulating nurse. In accordance with the Operating Room Nurses Association of Canada (ORNAC), the primary circulating role shall be assigned only to a perioperative registered nurse. In this staffing scenario, the RN solely dedicated to the monitoring of the patient during IV procedural sedation must have completed a procedural sedation management course and hold current ACLS. The scrub nurse and the circulating nurse are not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore are not required to have completed a procedural sedation management course and hold current ACLS. |
| IVS1.8 | The procedure room is appropriately staffed during IV procedural sedation and analgesia given in the absence of an anesthesiologist (IV-PSA) and when the circulating role is required for the procedure being performed. |
| IVS1.8.1 | M | A physician is dedicated to the operating/procedure room from the start to the finish of each procedure.  
*Guidance:* During procedures in the absence of an anesthesiologist, the IV procedural sedation (IV-PSA) is administered by the operating physician or given by the registered nurse as directed by the non-anesthesiologist physician. A minimum of three health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication; a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation); and a nurse (i.e. LPN or RN) to assist the physician (i.e. specimens, patient positioning). |
IVS 1.8.2  M A registered nurse is solely dedicated to the monitoring of the patient from the start to the finish of each procedure.

Guidance: A minimum of three health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication; a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation); and a nurse (i.e. LPN or RN) to assist the physician (i.e. specimens, patient positioning). This RN has no other competing responsibilities and is solely dedicated to the monitoring of the patient during IV procedural sedation. The role of this RN may include the administration of IV procedural sedation as directed by the non-anesthesiologist physician. In this staffing scenario, the RN solely dedicated to the monitoring of the patient during IV procedural sedation must have completed a procedural sedation management course and hold current ACLS. The second nurse is not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore is not required to have completed a procedural sedation management course and hold current ACLS.

IVS 1.8.3  M A second nurse is dedicated to the operating/procedure room from the start to the finish of each procedure that requires the circulating role.

Guidance: A minimum of three health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication; a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation); and a nurse (i.e. LPN or RN) to assist the physician (i.e. specimens, patient positioning). In this staffing scenario, the RN solely dedicated to the monitoring of the patient during IV procedural sedation must have completed a procedural sedation management course and hold current ACLS. The second nurse is not administering and/or monitoring the patient under IV procedural sedation and analgesia and therefore is not required to have completed a procedural sedation management course and hold current ACLS.

IVS 1.9  The procedure room is appropriately staffed during IV procedural sedation and analgesia given in the absence of an anesthesiologist (IV-PSA) when the scrub role and circulating role are not required for the procedure being performed.

IVS 1.9.1  M A physician is dedicated to the operating/procedure room from the start to the finish of each procedure.

Guidance: During procedures in the absence of an anesthesiologist, the IV procedural sedation (IV-PSA) is administered by the operating physician or given by the registered nurse as directed by the non-anesthesiologist physician. A minimum of two health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication and a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation). When the room is staffed with only two health professionals, there must be a third regulated health professional immediately available to assist in the event of an emergency. The third regulated health professional may be an RN, LPN or another physician.
A registered nurse is solely dedicated to the monitoring of the patient from the start to the finish of each procedure.  

Guidance: A minimum of two health professionals are dedicated to the operating/procedure room: the physician who performs the procedure, orders the medication and may administer the medication and a registered nurse who is solely dedicated to the monitoring of the patient during IV procedural sedation (the role of this RN may include the administration of IV procedural sedation). This RN may assist with minor interruptible tasks (e.g. opening an additional suture, tying a gown). However, assisting with biopsies, specimens or patient positioning are not considered minor interruptible tasks. In this staffing scenario, the RN solely dedicated to the monitoring of the patient during IV procedural sedation must have completed a procedural sedation management course and hold current ACLS. When the room is staffed with only two health professionals, there must be a third regulated health professional immediately available to assist in the event of an emergency. The third regulated health professional may be an RN, LPN or another physician.

A third regulated health professional is immediately available.  

Guidance: When the room is staffed with only two health professionals, there must be a third regulated health professional immediately available to assist in the event of an emergency. The third regulated health professional may be an RN, LPN or another physician.

Patient evaluations confirm appropriate patient selection and patient preparation.

Appropriate pre-procedural patient evaluation is completed including all necessary testing and consultation(s).  

Guidance: Pre-admission assessment includes but is not limited to: physical exam within the last 90 days, medical history including indication(s) for surgery, comorbidities, previous surgery, medications, allergies and sensitivities, height, weight and body mass index, obstructive sleep apnea (OSA) screening (i.e. STOP-Bang), preoperative testing based upon the patient’s clinical conditions (e.g. laboratory testing, ECG), and consultations as appropriate (e.g. anesthesia, cardiology, internal medicine). For patients with a BMI ≥ 40 and/or ASA 3, anesthesia should be limited to topical, local or peripheral nerve block anesthesia, or anesthesia with single agent oral sedation if needed. However, under certain circumstances at the discretion of the preoperative and intra-operative anesthesiologists, the delivery of a higher level of anesthesia (i.e. IV procedural sedation) may be acceptable. If considering IV procedural sedation for patients with a BMI ≥ 40 and/or an ASA 3, the patient must have a medical history, physical examination and appropriate laboratory and diagnostic investigations within 60 days of the procedure, and a documented preoperative anesthetic consultation must be completed before admission for the procedure not more than 28 days before the procedure and at minimum one day prior to the procedure. Pre-procedural evaluation should be performed in advance of the day of the procedure (e.g. several days to weeks) to allow for optimal patient preparation. Patients with a STOP-Bang score of 5 or greater require pre-admission screening by an anesthesiologist to determine whether the patient is appropriate for sedation in the non-hospital setting or whether an anesthesia consultation is needed. STOP-Bang screening can be performed with the patient over the telephone in advance of the day of the procedure. In addition, the following NHMSFAP guidelines should be followed: ASA Physical Status Classification, Obesity and Fasting. For further information, refer to the NHMSFAP Pre-Admission Evaluation and Selection standard.
### IV Procedural Sedation and Analgesia for Adults

**Guidance:** Positive patient identification precedes commencement of the procedure. As part of routine practices, a risk assessment is performed upon admission. Admission assessment confirms appropriate patient selection and patient preparation. The admission assessment includes but is not limited to: baseline physical assessment, vital signs, obstructive sleep apnea screening, medications, allergies and sensitivities, and fasting status. It is recommended that the pre-procedure evaluation be performed in advance of the day of the procedure (e.g. several days to weeks) to allow for optimal patient preparation. STOP-Bang screening must be performed in advance of the day of the procedure. Patients with a STOP-Bang score of 5 or greater require pre-admission screening by an anesthesiologist to determine whether the patient is appropriate for sedation in the non-hospital setting or whether an anesthesiologist consultation is needed. For further information, refer to the NHMSFAP Admission and Pre-procedure Care standard.

<table>
<thead>
<tr>
<th>IVS1.10.2</th>
<th>M</th>
<th>An admission assessment is performed in accordance with the NHMSFAP Admission and Pre-procedure Care standard. <strong>Guidance:</strong> Positive patient identification precedes commencement of the procedure. As part of routine practices, a risk assessment is performed upon admission. Admission assessment confirms appropriate patient selection and patient preparation. The admission assessment includes but is not limited to: a baseline physical assessment, vital signs, obstructive sleep apnea screening, medications, allergies and sensitivities, and fasting status. It is recommended that the pre-procedure evaluation be performed in advance of the day of the procedure (e.g. several days to weeks) to allow for optimal patient preparation. STOP-Bang screening must be performed in advance of the day of the procedure. Patients with a STOP-Bang score of 5 or greater require pre-admission screening by an anesthesiologist to determine whether the patient is appropriate for sedation in the non-hospital setting or whether an anesthesiologist consultation is needed. For further information, refer to the NHMSFAP Admission and Pre-procedure Care standard.</th>
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<tbody>
<tr>
<td>IVS1.11</td>
<td>The procedure room is appropriately equipped and the patient prepared for the administration of IV procedural sedation and analgesia.</td>
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<tr>
<td>IVS1.11.1</td>
<td>M</td>
<td>The room is equipped with a pulse oximeter. <strong>Guidance:</strong> The pulse oximeter has both audible and visual alarms. There is a selection of pulse oximeter probes available to the patient population (e.g. adult ear probes, finger probes).</td>
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<tr>
<td>IVS1.11.2</td>
<td>M</td>
<td>The room is equipped with an automatic blood pressure monitor. <strong>Guidance:</strong> The automatic blood pressure monitor includes a selection of cuff sizes appropriate to the patient population.</td>
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<tr>
<td>IVS1.11.3</td>
<td>M</td>
<td>A cardiac monitor is immediately available for all levels of sedation. <strong>Guidance:</strong> It is not always possible to predict how an individual patient will respond to a procedure or to procedural sedation. Although continuous cardiac monitoring is not required for every patient, cardiac monitoring equipment must be present in the room during all levels of procedural sedation. Cardiac monitoring equipment may be portable (i.e. moved from room to room). The cardiac monitor has both audible and visual alarms. The cardiac monitor is equipped with appropriate cables and electrodes. The cardiac monitor has print-out capabilities. Cardiac monitoring equipment is in addition to an automated external defibrillator located on the facility’s emergency cart.</td>
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<tr>
<td>IVS1.11.4</td>
<td>M</td>
<td>Capnography is required for all moderate and deep sedation. <strong>Guidance:</strong> Sedation is a continuum and it is not always possible to predict how an individual patient will respond. Capnography (continuous monitoring of end-tidal CO2) is considered best practice and is <strong>highly recommended</strong> for all patients under any level of sedation. Capnography is in continuous use throughout the administration of all moderate and deep procedural sedation unless capnography monitoring is precluded by the nature of the procedure (i.e. facial and ear, nose and throat (ENT) procedures). Capnography must also be established for any patient whose pre-procedural assessment identified an increased risk for respiratory depression or airway obstruction such as obesity or obstructive sleep apnea. Capnography equipment may be portable (i.e. moved from room to room). The capnography has both audible and visual alarms.</td>
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<tr>
<td>IVS1.11.5</td>
<td>M</td>
<td>The room is equipped with oxygen equipment. <strong>Guidance:</strong> Oxygen equipment includes oxygen supply and regulator, nasal cannulas, masks and oral airways. The use of supplemental oxygen during procedural sedation/analgesia is recommended. This oxygen equipment is in addition to the oxygen equipment located on the facility’s emergency cart.</td>
</tr>
</tbody>
</table>
| IVS1.11.6 | M | The room is equipped with suction equipment.  
  *Guidance: Suction equipment includes suction canisters and liners, tubing, suction tips and catheters. This suction equipment is in addition to the suction equipment located on the facility’s emergency cart.* |
| IVS1.11.7 | M | Intravenous access is established.  
  *Guidance: A tested saline lock or running IV line is initiated and maintained until the patient meets established discharge criteria (i.e. objective discharge scoring system and other patient specific discharge criteria). For further information, see the NHMSFAP Discharge accreditation standard.* |
| IVS1.11.8 | M | Reversal agents are immediately available in the procedure room. |
| IVS1.12 | **The patient is continuously monitored throughout the procedure.** |
| IVS1.12.1 | M | Continuous pulse oximetry monitoring is established.  
  *Guidance: Monitoring cardiac rate and rhythm, blood pressure, respiratory rate, oxygen saturation, end-tidal CO2 and level of consciousness/depth of sedation supports the early recognition of cardiac and respiratory depression. Oxygen saturation must be continuously monitored as displayed by pulse oximeter. At a minimum, blood pressure, respiratory rate, oxygen saturation (as displayed continuously by pulse oximeter) and level of consciousness/depth of sedation (ability to follow directions and maintain own airway) are monitored and recorded at baseline and then every five minutes thereafter.* |
| IVS1.12.2 | M | Continuous cardiac monitoring is established throughout the administration of moderate and deep procedural sedation.  
  *Guidance: Monitoring cardiac rate and rhythm, blood pressure, respiratory rate, oxygen saturation, end-tidal CO2, and level of consciousness/depth of sedation supports the early recognition of cardiac and respiratory depression. Cardiac monitoring is required for all moderate sedation and for deep sedation. For minimally invasive procedures in suitable patients without significant cardiorespiratory disease, and where dysrhythmias are not anticipated, the requirement for cardiac monitoring may be waived if continuous pulse oximetry is used and the level of sedation achieved is only minimal to moderate. The cardiac rhythm is interpreted at baseline prior to start of the procedure and a rhythm strip is secured into the patient’s medical record. In addition, the cardiac rhythm is interpreted if there is any change from baseline (e.g. bradycardia, tachycardia, life-threatening rhythm) and another rhythm strip is secured into the patient’s medical record. Heart rate and rhythm must be continuously monitored using a dedicated cardiac monitor. Using an automated external defibrillator (AED) with Lead II monitoring capability is not considered an appropriate alternative to having dedicated cardiac monitoring equipment.* |
| IVS1.12.3 | M | End-tidal carbon dioxide concentration is continuously monitored throughout the administration of moderate and deep procedural sedation.  
  *Guidance: Sedation is a continuum and it is not always possible to predict how an individual patient will respond. Capnography (continuous monitoring of end-tidal CO2) is considered best practice and is highly recommended for all patients under any level of sedation. Capnography equipment is in continuous use throughout the administration of all moderate and deep procedural sedation unless capnography monitoring is precluded by the nature of the procedure (i.e. facial and ear, nose and throat (ENT) procedures). Capnography must also be established for any patient whose pre-procedural assessment identifies an increased risk for respiratory depression or airway obstruction such as obesity or obstructive sleep apnea. Capnography equipment may be portable (i.e. moved from room to room). The capnography has both audible and visual alarms.* |
| IVS1.12.4 | M | Level of consciousness and depth of sedation is monitored throughout the procedure.  
Guidance: The patient’s level of consciousness and depth of sedation is assessed every 5 minutes. Depth of sedation is assessed using an objective scale (e.g. Ramsay Sedation Scale (RSS), ASA Depth of Sedation Continuum). |
| IVS1.12.5 | M | Blood pressure and respiratory rate are monitored throughout the procedure.  
Guidance: At a minimum, blood pressure, respiratory rate, oxygen saturation (as displayed continuously by pulse oximeter) and level of consciousness/depth of sedation (ability to follow directions and maintain own airway) are monitored and recorded at baseline and then every five minutes thereafter. |

### IVS1.13 Patient assessment and monitoring supports the delivery of safe post-IV procedural sedation levels of care.

| IVS1.13.1 | M | Patients are assessed and monitored in accordance with the NHMSFAP Post-anesthesia Care standard.  
Guidance: PACU staffing supports safe patient care. The PACU is appropriately equipped. Patient assessment, monitoring and healthcare team communication supports the delivery of safe post-IV procedural sedation levels of care. The most responsible physician (e.g. anesthesiologist, surgeon) remains at the facility until the patient meets minimum discharge score requirements for discharge. |
| IVS1.13.2 | M | The patient is continually assessed and vital signs taken at regular intervals until the patient meets discharge criteria.  
Guidance: Patient assessment and vital signs are at regular intervals (e.g. every 5 to 15 minutes) and more frequently if clinically indicated. Oxygen saturation is continually monitored until the patient is no longer at risk for hypoxemia. |
| IVS1.13.3 | M | The patient remains in the post-anesthesia recovery area for an appropriate length of time.  
Guidance: Minimum length of stay is 30 minutes after the last dose of IV sedation or analgesia is given and 120 minutes after the last dose of IV reversal agent is given. A longer length of stay is recommended for patients with OSA. |
| IVS1.13.4 | M | Intravenous access is maintained until the patient meets discharge criteria.  
Guidance: IV access is maintained until the patient is no longer at risk for cardiorespiratory depression. |
| IVS1.13.5 | M | Patients are appropriately prepared for discharge in accordance with the NHMSFAP Discharge standard.  
Guidance: An order for discharge is written by the most responsible physician. Other patient specific discharge criteria are met prior to discharge (e.g. obstructive sleep apnea). Discharge instructions are reviewed with the patient. Written discharge instructions are provided to the patient, and patients are accompanied from the facility by a responsible adult. If not accompanied by a responsible adult, the patient is assessed for discharge suitability by the most responsible physician (e.g. anesthesiologist, surgeon). |

### IVS1.14 Policies and procedures contain all the information necessary for the safety of patients, staff and visitors.

| IVS1.14.1 | M | There is policy and procedures pertaining to intravenous procedural sedation and analgesia.  
Guidance: Policy and procedures outline staff qualifications, staffing levels, patient selection and preparation, patient monitoring, and post IV procedural sedation and analgesia care and discharge. |
## Summary of changes

| 2019-10-28 | - Introduction updated to include functional definitions of mild sedation and moderate sedation and provide examples of what is considered mild and moderate sedation.  
- IVS1.9.2 guidance updated to specify that the RN solely dedicated to the monitoring of the patient may assist with minor interruptible tasks (e.g. opening an additional suture, tying a gown).  
- IVS1.11.3 standard changed from “The room is equipped with a cardiac monitor” to “A cardiac monitor is immediately available for all levels of sedation” and the guidance updated to specify that the equipment may be portable (i.e. moved from room to room), that cardiac monitoring is not required for every patient however, cardiac monitoring equipment must be present in the room during all levels of procedural sedation.  
- IVS1.11.4 standard changed from “The room is equipped with capnography” to “Capnography is required for all moderate and deep sedation” and the guidance updated to specify that:  
  - capnography is required for all moderate sedation, including when two or more IV sedation and analgesia medications are utilized, and for deep sedation,  
  - capnography is highly recommended for all patients under any level of sedation,  
  - capnography is in continuous use throughout the administration of all moderate and deep procedural sedation unless precluded by the nature of the procedure (i.e. facial and ear, nose and throat (ENT) procedures),  
  - capnography must be established for any patient whose pre-procedural assessment identifies an increased risk for respiratory depression or airway obstructions such as obesity or obstructive sleep apnea, and  
  - the equipment may be portable (i.e. moved from room to room).  
- IVS1.11.7 standard changed from “continuous intravenous infusion is established” to “intravenous access is established” and guidance updated to include a tested saline lock.  
- IVS1.12.2 guidance updated to specify that cardiac monitoring is required for all moderate sedation, including when two or more IV sedation and analgesia medication are utilized and that for minimally invasive procedures, cardiac monitoring may be waived in suitable patient where dysrhythmias are not anticipated.  
- IVS1.12.3 guidance updated to specify that:  
  - capnography is required for all moderate sedation, including when two or more IV sedation and analgesia medications are utilized, and for deep sedation, and  
  - capnography is highly recommended for all patients under any level of sedation:  
    - capnography is in continuous use throughout the administration of all moderate and deep procedural sedation unless precluded by the nature of the procedure (i.e. facial and ear, nose and throat (ENT) procedures),  
    - capnography must be established for any patient whose pre-procedural assessment identifies an increased risk for respiratory depression or airway obstructions such as obesity or obstructive sleep apnea, and  
    - the equipment may be portable (i.e. moved from room to room). |
### Staff qualifications:
- Physicians (non-anesthesiologists), dentists, oral maxillofacial surgeons or podiatric surgeons who personally administer and/or direct the administration of IV-PSA are required to complete post-graduate training in IV procedural sedation. IV procedural sedation refresher training is also required every five years. At the discretion of the medical director, physicians, dentists, oral maxillofacial surgeons or podiatric surgeons currently administering and/or directing the administration of IV-PSA that have not completed post-graduate training in IV procedural sedation within the last five years may be grandparented until June 2021, after which time evidence of IV procedural sedation refresher training must be on file.
- Registered nurses who administer IV-PSA or monitor a patient under IV-PSA are required to complete IV procedural sedation refresher training every five years. At the discretion of the medical director, RNs currently administering and/or monitoring patients under IV-PSA that completed an IV procedural sedation management course more than five years ago may be grandparented until June 2021, after which time evidence of IV procedural sedation refresher training must be on file.

### Staffing levels:
- There must be a regulated health professional solely dedicated to the monitoring of the patient during IV procedural sedation procedures (i.e. anesthesiologist, registered nurse). This individual may not perform any other duties (i.e. scrub role, circulating role, specimen handling, patient positioning, assisting the procedural physician).

### Room equipment:
- The room must be equipped with a cardiac monitor.
- The room must be equipped with capnography.

### Patient monitoring and care:
- Continuous cardiac monitoring is established for moderate and deep sedation.
- Continuous end-tidal carbon dioxide concentration monitoring is established for moderate and deep sedation.
- Using two or more IV procedural sedation and analgesia medications increases the potential for moderate sedation levels. Administering a second dose of an IV procedural sedation and analgesia medication also increases the potential for moderate sedation. Therefore, if two or more IV procedural sedation and analgesia medications are used and/or a second dose of an IV procedural sedation and analgesia medication is administered then continuous cardiac monitoring and continuous end-tidal carbon dioxide concentration monitoring is established.
- IV access is established with a continuous IV infusion.

### Other:
- Substantial format changes and guidance added.

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### Introduction:
- Removed examples of what is considered minimal and moderate sedation.
- Added definition of deep sedation.
• Clarified that patients displaying functional characteristics of moderate sedation must be monitored in accordance with the requirements for moderate sedation.

• Clarified that when the intended level of sedation is moderate sedation, patients must be monitored in accordance with the requirements for moderate sedation.

IVS1.11.4, IVS1.12.2, and IVS1.12.3

• Revised guidance to remove reference to two or more IV procedural sedation agents.
REFERENCES


