NON-HOSPITAL MEDICAL AND SURGICAL FACILITIES ACCREDITATION PROGRAM

Accreditation Standards

Ketamine and Lidocaine Infusions for the Treatment of Chronic Pain

Non-Hospital Medical and Surgical Facilities Accreditation Program
College of Physicians and Surgeons of British Columbia
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Accreditation Standards

Ketamine and Lidocaine Infusions for the Treatment of Chronic Pain

INTRODUCTION

Ketamine administration for the treatment of chronic pain by the intravenous (IV) route **must** be performed in an accredited non-hospital facility. Ketamine is a dissociative anesthetic agent capable of producing amnesia, analgesia and all degrees of sedation, including general anesthesia. Ketamine has the potential for serious side effects including tachyarrhythmias, hypertension, hallucinations and delirium.

Lidocaine administration for the treatment of chronic pain by the intravenous (IV) route **must** be performed in an accredited non-hospital facility. Lidocaine is a local anesthetic agent and antiarrhythmic drug. It is sometimes used to treat neuropathic pain or other painful conditions in patients where standard conventional pain therapies have been unsuccessful.

Descriptor		Description	Change
PMI1.0		**KETAMINE AND LIDOCAINE INFUSIONS FOR THE TREATMENT OF CHRONIC PAIN**	
PMI1.1		**Pre-admission evaluation ensures all patients scheduled for treatment are appropriate for the non-hospital setting.** *Intent: Patient evaluation is to take place in advance of the day of the procedure (e.g. several days to weeks) to allow for optimal patient preparation and pre-treatment work-up including the necessary testing and consultation(s).*	
PMI1.1.1	**M**	Pre-admission evaluation and selection is in accordance with the NHMSFAP Pre-admission Evaluation and Selection standard. *Guidance: All sections of the NHMSFAP Pre-admission Evaluation and Selection standard apply. Generally, patients under consideration for treatment with ketamine or lidocaine infusions should have persistent, life-altering pain (e.g. average daily pain intensity ≥ 6/10 over a period of at least six months)* ***and*** *standard conventional pharmacological and complementary pain therapy (e.g. physical therapy, massage therapy) have been unsuccessful.*	
PMI1.1.2	**M**	Patients are aged 19 years or older.	

Descriptor		Description	Change
PMI1.1.3	**M**	Pre-admission evaluation includes a comprehensive pain assessment and management plan. *Guidance: A comprehensive pain assessment and management plan must be documented for all patients. Generally, patients under consideration for treatment with ketamine or lidocaine infusions should have persistent, life-altering pain (e.g. average daily pain intensity ≥ 6/10 over a period of at least six months)* ***and*** *standard conventional pharmacological and complementary pain therapy (e.g. physical therapy, massage therapy) have been unsuccessful. This assessment should also include consultations by other members of the interdisciplinary pain management team.*	
PMI1.1.4	**M**	Pre-admission evaluation includes pre-treatment screening based upon contraindications to and precautions with ketamine or lidocaine use. *Guidance: Patients with cardiac, pulmonary, or central nervous system comorbidities, significant hypertension, hyperthyroidism, renal or liver disease may not be suitable for this treatment.*	
PMI1.1.5	**M**	Pre-admission evaluation includes pre-treatment laboratory and/or diagnostic testing based upon contraindications to and precautions with ketamine or lidocaine use. *Guidance: Laboratory and diagnostic testing as indicated by the patient's medical status and contraindications to and precautions with ketamine or lidocaine use are completed and reviewed prior to treatment (e.g. 12 lead ECG, liver and renal function tests, serum lidocaine levels).*	
PMI1.1.6	**M**	Pre-admission assessment includes obstructive sleep apnea (OSA) screening using a validated tool (e.g. STOP-Bang). *Guidance: All patients receiving ketamine or lidocaine infusions for the treatment of chronic pain are screened for obstructive sleep apnea (OSA). OSA screening should be performed in advance of the day of treatment.*	
PMI1.2		**Pain assessment documentation provides an accurate account of the patient's status and supports appropriate patient selection.**	
PMI1.2.1	**M**	The pain assessment includes a comprehensive pain history including strategies used to relieve pain. *Guidance: The pain history includes intensity of pain at its worst, at rest and on movement, effects of pain on activities of daily living, sleep and mood, psychosocial assessment (e.g. anxiety, depression, coping responses to stress and pain), strategies used to relieve pain (e.g. analgesic doses taken regularly and for breakthrough pain) including non-pharmacological/complementary pain therapies, (e.g. physical therapy, massage therapy), factors that relate to pain tolerance, extent of pain relief achieved (response), side effects of medications for pain, level of sedation and barriers to implementing the treatment plan. The baseline assessment should include system severity to allow for comparative evaluation of clinical change with treatment. The treatment history should confirm persistent life-altering pain (e.g. average daily pain intensity ≥ 6/10 over a period of at least six months)* ***and*** *that standard conventional pharmacological and complementary pain therapy (e.g. physical therapy, massage therapy) have been unsuccessful. Pain reassessments are to be performed regularly and documented.*	

Descriptor		Description	Change
PMI1.2.2	**M**	The pain assessment includes a medical history. *Guidance: The medical history includes relevant past or current medical illnesses, hospitalizations, treatments, surgery and other procedures including physical trauma, cardiopulmonary status, endocrinology disease, neurological or neurocognitive disorders, psychiatric and psychosocial factors and any other symptoms or conditions associated with significant pain and discomfort.*	
PMI1.2.3	**M**	The pain assessment includes allergies or drug sensitivities.	
PMI1.2.4	**M**	The pain assessment includes a medication history. *Guidance: The medication history includes both prescribed and non-prescribed medications, herbal and nutritional supplements, and vitamins and the side effects of these medications.*	
PMI1.2.5	**M**	The pain assessment includes a substance use history. *Guidance: The substance use history includes use of tobacco, alcohol, and other substances (e.g. marijuana, cocaine, heroin, hallucinogens) and any misuse of prescribed or over-the-counter medications or supplements.*	NEW
PMI1.2.6	**M**	The pain assessment includes a physical exam including review of systems. *Guidance: The physical exam includes height, weight and body mass index (BMI), vital signs and a review of systems. The review of systems should include general/systemic, skin, HEENT, respiratory, cardiovascular, gastrointestinal, genitourinary, musculoskeletal, neurological, hematological, endocrine and evaluate potential risk factors associated with ketamine or lidocaine treatment. The physical exam including mental status and review of systems can be performed by the anesthesiologist or can be performed by another physician (e.g. general practitioner). Assessment may occur directly or by review of the results of a recent assessment by another clinician.*	
PMI1.2.7	**M**	The pain assessment includes relevant laboratory and other diagnostic testing. *Guidance: This includes but is not limited to laboratory testing and ECG. Testing should be made according to established guidelines such as "Choosing Wisely" and should be based upon the patient's clinical characteristics.*	
PMI1.2.8	**M**	The pain management plan includes the clinical impression, treatment and follow-up plan including the rationale for treatment selection. *Guidance: The pain management plan should include assessment findings, baseline characteristics of pain, physical, psychological and sociocultural factors shaping the experience of pain, etiology, most effective pharmacological and non-pharmacological strategies, management interventions and current and future primary treatment plans.*	

Descriptor		Description	Change
PMI1.2.9	**M**	The pain management plan includes documentation of the consent discussion. *Guidance: The physician requesting the administration of ketamine or lidocaine for the treatment of chronic pain must document their consent discussion in the patient's medical record. The consent discussion includes the nature of the health care proposed, the risks, benefits and alternative(s) discussed with the patient and any specific additional issues or concerns that arose through the discussion and how they were addressed.* ***Both the physician*** *prescribing this treatment* ***and the anesthesiologist or other qualified physician (e.g. critical care medicine, emergency medicine, family practice anesthesia)*** *administering or ordering the administration of this treatment at the facility* ***must have a consent discussion with the patient.***	
PMI1.3		**Admission and pre-treatment care confirms appropriate patient selection and patient preparation.** *Intent: Patient evaluation is to take place in advance of the day of the procedure (e.g. several days to weeks) to allow for optimal patient preparation and pre-treatment work-up including the necessary testing and consultation(s).*	
PMI1.3.1	**M**	Admission and pre-treatment care is in accordance with the NHMSFAP Admission and Pre-procedure Care standard. *Guidance: All sections of the NHMSFAP Admission and Pre-procedure Care standard apply with the following exceptions: Surgical site marking does not apply (section 1.4), and pre-operative checklist does not apply (section 1.5). Patients should refrain from eating two hours prior to the administration of ketamine and refrain from drinking fluids 30 minutes prior to the administration of ketamine.*	
PMI1.3.2	**M**	Patients are not under the influence of alcohol or other drugs. *Guidance: Patients should abstain from alcohol and other drugs that may affect their mental alertness and/or motor coordination in the 24 hours prior to administration of ketamine.*	NEW
PMI1.3.3	**M**	Patients with a known or suspected latex sensitivity or allergy are managed in accordance with the NHMSFAP Latex Allergy standard.	NEW
PMI1.3.4	**M**	Intravenous access is established. *Guidance: A tested saline lock or running IV 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 standard.*	
PMI1.4		**Consent is obtained for all medical treatments performed in a non-hospital medical/surgical facility.**	
PMI1.4.1	**M**	Consent is obtained in accordance with the NHMSFAP Consent standard. *Guidance: All sections of the NHMSFAP Consent standard apply with the following exceptions: Consent confirmation during the surgical safety checklist does not apply.*	

Descriptor		Description	Change
PMI1.4.2	**M**	The consent discussion is documented in the patient's medical record. *Guidance: The anesthesiologist or other qualified physician (e.g. critical care medicine, emergency medicine, family practice anesthesia) administering or ordering the administration of this treatment at the facility must document their consent discussion in the patient's medical record. The consent discussion includes the nature of the health care proposed, the risks, benefits and alternative(s) discussed with the patient and any specific additional issues or concerns that arose through the discussion and how they were addressed.* ***Both the physician*** *prescribing this treatment* ***and the anesthesiologist or other qualified physician (e.g. critical care medicine, emergency medicine, family practice anesthesia)*** *administering or ordering the administration of this treatment at the facility* ***must have a consent discussion with the patient.***	
PMI1.4.3	**M**	A written consent form is completed. *Guidance: As the administration of ketamine or lidocaine is not for anesthesia associated with an invasive procedure, a consent form must be completed when ketamine or lidocaine is administered for the treatment of chronic pain.*	
PMI1.4.4	**M**	Confirmation that consent remains valid is documented at each patient visit, if a "rolling" consent is used. *Guidance: A "rolling" consent may be suitable for the same treatment performed consecutively. In accordance with the Ministry of Health's Health Care Providers' Guide to Consent in Health Care (July 2011), the patient may be asked to consent to a number of similar procedures that are part of an overall course of health care, including repetitions of certain procedures. The health care can then continue until there is a change in the course of treatment, there is a change in the adult's condition, or until the adult refuses the health care.*	
PMI1.5		**Intravenous ketamine for the treatment of chronic pain is safely prepared and administered.**	
PMI1.5.1	**M**	Ketamine intravenous infusion dosing is congruent with clinical guidelines and consensus statements for this treatment indication. *Guidance: The Consensus Guidelines on the Use of Intravenous Ketamine Infusions for Chronic Pain from the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medication and the American Society of Anesthesiologists (2018) advise that the typical dosing for one-day outpatient IV ketamine is a weight-based dose of 0.5–2.0 mg/kg.*	
PMI1.5.2	**M**	Ketamine infusions are administered using a dedicated line.	
PMI1.5.3	**M**	Ketamine infusions are **only** administered using an infusion control device/syringe pump with a locked control panel.	
PMI1.5.4	**M**	Ketamine loading doses and re-boluses are administered **only** by an anesthesiologist or other qualified physician. *Guidance: Loading doses and re-boluses cannot be administered by an RN.*	
PMI1.5.5	**M**	Ketamine infusions are administered by continuous infusion **only.** *Guidance: There is no bolus dosing and patient-controlled devices are not used. The intravenous infusion can be initiated by an RN with a patient-specific order; it does not need to be started by the anesthesiologist/other qualified physician.*	

Descriptor		Description	Change
PMI1.5.6	**M**	An independent double-check is performed prior to initiating the ketamine infusion. *Guidance: An independent double-check involves two regulated health professionals (e.g. 1 RN and 1 anesthesiologist/other qualified physician, or 2 RNs) separately checking (alone and apart from each other, then comparing results) the infusion settings in accordance with the physician's order. This ensures the right patient, right medication, right dose, right route and right infusion pump settings (e.g. medication strength/concentration, dosing formula (e.g. mcg/kg/min, units/hr) weight). The independent double-check should be documented.*	
PMI1.6		**Intravenous lidocaine for the treatment of chronic pain is safely prepared and administered.**	
PMI1.6.1	**M**	Lidocaine intravenous infusion dosing is congruent with clinical guidelines and consensus statements for this treatment indication.	NEW
PMI1.6.2	**M**	Lidocaine infusions are administered using a dedicated line.	
PMI1.6.3	**M**	Lidocaine infusions are **only** administered using an infusion control device/syringe pump with a locked control panel.	
PMI1.6.4	**M**	Lidocaine loading doses and re-boluses are administered **only** by an anesthesiologist or other qualified physician. *Guidance: Loading doses and re-boluses cannot be administered by an RN.*	
PMI1.6.5	**M**	Lidocaine infusions are administered by continuous infusion **only.** *Guidance: There is no bolus dosing and patient-controlled devices are not used. The intravenous infusion can be initiated by an RN with a patient-specific order; it does not need to be started by the anesthesiologist/other qualified physician.*	
PMI1.6.6	**M**	An independent double-check is performed prior to initiating the lidocaine infusion. *Guidance: An independent double-check involves two regulated health professionals (e.g. 1 RN and 1 anesthesiologist/other qualified physician, or 2 RNs) separately checking (alone and apart from each other, then comparing results) the infusion settings in accordance with the physician's order. This ensures the right patient, right medication, right dose, right route and right infusion pump settings (e.g. medication strength/concentration, dosing formula (e.g. mcg/kg/min, units/hr) weight). The independent double-check should be documented.*	
PMI1.7		**Anesthesiologists who order or administer ketamine or lidocaine for the treatment of chronic pain are qualified.** *Intent: All anesthesiologists granted privileges by the medical director must be FRCPC anesthesiologists and meet the qualifications and competency requirements outlined in this standard. This section replaces section 1.3 of the NHMSFAP Human Resources standard (HR1.3 Non-hospital facility services are provided by qualified and competent anesthesiologists).*	
PMI1.7.1	**M**	Each anesthesiologist with privileges at the facility holds current licensure with the College of Physicians and Surgeons of British Columbia. *Guidance: Physician licensure is confirmed annually through the College of Physicians and Surgeons of British Columbia website and/or by contacting the College directly for relevant licence information. Confirmation of the physician's annual licensure is obtained and filed in the individual's human resource file.*	

Descriptor		Description	Change
PMI1.7.2	**M**	Each anesthesiologist is in good standing with the College of Physicians and Surgeons of British Columbia. *Guidance: The Certificate of Professional Conduct from the College of Physicians and Surgeons of BC at time of initial appointment is maintained in the individual's human resource file.*	
PMI1.7.3	**M**	An initial application for privileges is on file for each anesthesiologist. *Guidance: An anesthesiologist may apply to the medical director for a medical staff appointment to the non-hospital facility for a period of up to one year. The application specifies intravenous ketamine and/or intravenous lidocaine for the treatment of chronic pain and* ***explicitly confirms privileges for the administration of ketamine and/or lidocaine in the treatment of chronic pain****, their qualifications and evidence of current experience in practice relevant to the anesthesia procedure(s)/service(s) being requested and such applications are made on a form approved by the registrar (i.e. NHMSFAP Application for Medical Staff Appointment). The individual's human resources file should also include a copy of the NHMSFAP's letter verifying that there are no limits or conditions on the anesthesiologist's licence that would preclude the granting of the privileges requested.*	
PMI1.7.4	**M**	Anesthesiologists administering ketamine and/or lidocaine for the treatment of chronic pain at the facility have the requisite credentials for privileges as outlined in the Provincial Privileging Dictionaries. *Guidance: The services that the anesthesiologist requests privileges to perform may be core and non-core in accordance with the Provincial Privileging Dictionary. Non-core privileges may require further training, experience and demonstrated skill. The anesthesiologist may only perform those anesthesia procedures/services which are permitted within the facility and for which the anesthesiologist is privileged to perform at the non-hospital facility in accordance with the standards, rules, policies and guidelines respecting qualifications necessary for the appointment of an anesthesiologist as established by the NHMSFAP Committee.*	
PMI1.7.5	**M**	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 with the HSFC guidelines. Following initial certification, recertification is required every two years.*	

Descriptor		Description	Change
PMI1.7.6	**M**	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. The medical director is responsible for ensuring medical staff are current for emergency training prior to working in a non-hospital facility. The course content must include both theory and in-person/hands-on components which meet necessary skills and competencies for the non-hospital setting and is renewed every three years. Medical directors must ensure that providers of emergency training courses meet acceptable theory and in-person/hands-on components. When there is a nationally or internationally recognized body (e.g. Health and Stroke Foundation of Canada (HSFC)) that publishes guidelines, the medical director must ensure third party course providers instruct in accordance to those guidelines. Copies of difficult airway management course completion are maintained in the individual's human resource file.*	
PMI1.7.7	**M**	The current and professional performance of each anesthesiologist is evaluated annually through performance review and renewal of appointment processes. *Guidance: An Annual Re-application for Privileges form is on file for each anesthesiologist. Renewal credentialing and privileging procedures include comparing the clinical privileges requested with the competency and currency requirements as outlined in the provincial privileging dictionaries. Currency of emergency training courses (i.e. BLS Provider, ACLS) is also reviewed during renewal of appointment processes to plan for and complete recertification before expiration of the current certificate. Performance review is a process that should include a self-assessment to performance based upon professional standards and guidelines, seeking feedback (i.e. colleagues, staff, patients), reflecting on the self-assessment and feedback then planning and documenting professional development goals (i.e. a professional development plan) and tracking progress in achieving these goals. For solo physician non-hospital facilities, annual performance review for a health authority facility would be an appropriate substitute for an annual review. This must be documented and kept on file at the facility and along with the documents for renewal of appointment which will be reviewed at time of accreditation. For multi-physician non-hospital facilities, the medical director ensures that all physicians working in the non-hospital facility participate in annual performance review and renewal of appointment processes.*	NEW
PMI1.8		**Critical care medicine, emergency medicine or family practice anesthesia physicians who order or administer ketamine or lidocaine for the treatment of chronic pain are qualified.** *Intent: All critical care medicine, emergency medicine or family practice anesthesia physicians granted privileges by the medical director must meet the qualifications and competency requirements outlined in this standard. This section replaces section 1.2 of the NHMSFAP* Human Resources *standard (HR1.2: Non-hospital facility services are provided by qualified and competent physicians).*	NEW

Descriptor		Description	Change
PMI1.8.1	**M**	Each physician with privileges at the facility holds current licensure with the College of Physicians and Surgeons of British Columbia. *Guidance: Physician licensure is confirmed annually through the College of Physicians and Surgeons of British Columbia website and/or by contacting the College directly for relevant licence information. Confirmation of the physician's annual licensure is obtained and filed in the individual's human resource file.*	NEW
PMI1.8.2	**M**	Each physician is in good standing with the College of Physicians and Surgeons of British Columbia. *Guidance: The certificate of professional conduct from the College of Physicians and Surgeons of BC at time of initial appointment is maintained in the individual's human resource file.*	NEW
PMI1.8.3	**M**	An initial application for privileges is on file for each physician. *Guidance: A critical care medicine, emergency medicine or family practice anesthesia physician may apply to the medical director for a medical staff appointment to the non-hospital facility for a period of up to one year. The application specifies intravenous ketamine and/or intravenous lidocaine for the treatment of chronic pain and **explicitly confirms privileges for the administration of ketamine and/or lidocaine in the treatment of chronic pain ONLY**, their qualifications and evidence of current experience in practice relevant to the administration of ketamine or lidocaine in the treatment of chronic pain and such applications are made on a form approved by the registrar (i.e. NHMSFAP Application for Medical Staff Appointment). The individual's human resources file should also include a copy of the NHMSFAP's letter verifying that there are no limits or conditions on the physician's licence that would preclude the granting of the privileges requested.*	NEW
PMI1.8.4	**M**	Critical care medicine, emergency medicine and family practice anesthesia physicians administering ketamine and/or lidocaine for the treatment of chronic pain at the facility have the requisite credentials for privileges as outlined in the Provincial Privileging Dictionaries. *Guidance: The services that the critical care medicine, emergency medicine and family practice anesthesia physician requests privileges to perform may be core and non-core in accordance with the Provincial Privileging Dictionary. Non-core privileges may require further training, experience and demonstrated skill. These physicians may only administer or order the administration of ketamine and/or lidocaine for the treatment of chronic pain at a non-hospital facility in accordance with the standards, rules, policies and guidelines respecting qualifications necessary for the appointment of a physician as established by the NHMSFAP Committee.*	NEW

Descriptor		Description	Change
PMI1.8.5	**M**	Each critical care medicine, emergency medicine and family practice anesthesia physician that has not practised in their discipline in a hospital setting within three years holds current ACLS training. *Guidance: Critical care medicine, emergency medicine and family practice anesthesia physicians that hold hospital privileges in their respective discipline or that did hold hospital privileges in their respective discipline 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 with the HSFC guidelines. Following initial certification, recertification is required every two years.*	NEW
PMI1.8.6	**M**	Each critical care medicine, emergency medicine and family practice anesthesia physician that has not practised anesthesia in a hospital setting within three years has completed a difficult airway management course. *Guidance: Critical care medicine, emergency medicine and family practice anesthesia physicians that hold hospital privileges in their respective discipline or that did hold hospital privileges in their respective discipline within the last three years are not required to have completed a difficult airway management course. The medical director is responsible for ensuring medical staff are current for emergency training prior to working in a non-hospital facility. The course content must include both theory and in-person/hands-on components which meet necessary skills and competencies for the non-hospital setting and is renewed every three years. Medical directors must ensure that providers of emergency training courses meet acceptable theory and in-person/hands-on components. When there is a nationally or internationally recognized body, e.g. Health and Stroke Foundation of Canada (HSFC) that publishes guidelines, the medical director must ensure third party course providers instruct in accordance to those guidelines. Copies of difficult airway management course completion are maintained in the individual's human resource file.*	NEW
PMI1.8.7	**M**	The current and professional performance of each critical care medicine, emergency medicine and family practice anesthesia physician is evaluated annually through performance review and renewal of appointment processes. *Guidance: An Annual Re-application for Privileges form is on file for each physician. Renewal credentialing and privileging procedures include comparing the clinical privileges requested with the competency and currency requirements as outlined in the provincial privileging dictionaries. Currency of emergency training courses (i.e. BLS Provider, ACLS) is also reviewed during renewal of appointment processes to plan for and complete recertification before expiration of the current certificate. Performance review is a process that should include a self-assessment to performance based upon professional standards and guidelines, seeking feedback (i.e. colleagues, staff, patients), reflecting on the self-assessment and feedback then planning and documenting professional development goals (i.e. a professional development plan) and tracking progress in achieving these goals. For solo physician non-hospital facilities, annual performance review for a health authority facility would be an appropriate substitute for an annual review. This must be documented and kept on file at the facility and along with the documents for renewal of appointment which will be reviewed at time of accreditation. For multi-physician non-hospital facilities, the medical director ensures that all physicians working in the non-hospital facility participate in annual performance review and renewal of appointment processes.*	NEW

Descriptor		Description	Change
PMI1.9		**Registered nurses who monitor patients receiving ketamine for the treatment of mood disorders are qualified.** *Intent: All registered nurses in the pre-admission, admission and treatment room areas must meet the qualifications and competency requirements outlined in this standard. This section replaces sections 1.6 through 1.11 of the NHMSFAP Human Resources standard.*	
PMI1.9.1	**M**	Each registered nurse holds practicing registration with the BC College of Nurses and Midwives. *Guidance: Registered nurses (RN) are the only other regulated health professional whose scope of practice may include the monitoring of patients receiving ketamine or lidocaine for the treatment of chronic pain. It is **not** within the licensed practical nurse (LPN) scope of practice to independently monitor patients who have received an anesthetic agent; they may only do so in a team-nursing approach with a registered nurse to jointly review the patient's care needs and determine how the care needs will be met between them.*	
PMI1.9.2	**M**	Each registered nurse holds current basic life support certification. *Guidance: Every registered nurse holds current basic life support certification for health-care professionals (health-care provider or equivalent level (i.e. BLS Provider)). The medical director is responsible for ensuring medical staff are current for emergency training prior to working in a non-hospital facility. BLS courses must include an in person/hands-on component and be renewed every two years. Medical directors must ensure that providers of emergency training courses meet acceptable theory and in-person/hands-on components. When there is a nationally or internationally recognized body (e.g. Heart and Stroke Foundation of Canada (HSFC)) that publishes guidelines the medical director must ensure third party course providers instruct in accordance to those guidelines. Copies of BLS certification for all perioperative nurses are maintained in the individual's human resource file.*	
PMI1.9.3	**M**	Each registered nurse has completed a post-secondary educational institution post-anesthesia care or critical care nursing program or has the equivalent in education and experience. *Guidance: All registered nurses in the pre-admission, admission and treatment room areas hold Canadian Nurses Association (CNA) peri-anesthesia certification or critical care certification, have completed a post-secondary educational institution peri-anesthesia nursing or critical care nursing program (e.g. British Columbia Institute of Technology), have completed a health authority peri-anesthesia or critical care education program and/or have post-anesthesia and/or critical care experience in the hospital setting. In-house peri-anesthesia nursing care training by a non-hospital facility is not considered the equivalent in education and experience. Evidence of completion of a post-secondary educational institution program or the equivalent in education and experience (i.e. resume, certificate, work experience) is maintained in the individual's human resource file.*	
PMI1.9.4	**M**	Each registered nurse holds current ACLS training. *Guidance: Registered nurses that monitor patients receiving ketamine for the treatment of mood disorders must 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 with the HSFC guidelines. Following initial certification, recertification is required every two years.*	

Descriptor		Description	Change
PMI1.10		**The treatment unit/area/room is appropriately staffed.** *Intent: The NHMSFAP Post-anesthesia Care standard does not apply.*	
PMI1.10.1	**M**	Two registered nurses **or** one registered nurse and one anesthesiologist/other qualified physician are present in the treatment unit/area/room at all times when a patient is receiving care. *Guidance: This minimum staffing requirement is observed at all times even when there may be only one patient in the treatment unit/area/room. Each registered nurse has completed a post-secondary educational institution post-anesthesia care or critical care nursing program or has the equivalent in education and experience.*	
PMI1.10.2	**M**	One-to-one (1:1) regulated health professional to patient ratios are observed. *Guidance: One-to-one nurse to patient ratios or one-to-one anesthesiologist/other qualified physician to patient ratios are observed for the first hour of the infusion and any time the patient is hemodynamically unstable (e.g. blood pressure drop of 15 mmHg or increase of 30 mmHg (systolic or diastolic) or a change in pulse rate of 20 beats/minute), has a respiratory rate less than 6 breaths/minute and/or has a sedation score equal to 3. After the first hour for stable patients, a one-to-two (1:2) regulated health professional to patient ratio may be observed and both patients must be stable.*	
PMI1.10.3	**M**	There is a third regulated health professional immediately available. *Guidance: When the treatment unit/area/room is staff with one RN and one anesthesiologist/other qualified physician there must be a third regulated health professional immediately available (i.e. can attend to the treatment unit/area/room without undue delay) to assist in the event of an emergency.*	REVISED
PMI1.10.4	**M**	An anesthesiologist or other qualified physician is on site and immediately available. *Guidance: An anesthesiologist or other qualified physician (e.g. critical care medicine, emergency medicine, family practice anesthesia) must be in continuous attendance at the facility (i.e. throughout the patient's treatment until the patient meets discharge criteria) and is immediately available (i.e. can attend to the treatment unit/area/room without undue delay). The anesthesiologist/other qualified physician may need to attend to the treatment unit/area/room in the event that the patient experiences adverse effect(s).*	
PMI1.11		**The treatment unit/area/room is appropriately equipped.** *Intent: The NHMSFAP Post-anesthesia Care standard does not apply.*	
PMI1.11.1	**M**	Capnography is immediately available in the treatment unit/area/room. *Guidance: It is not always possible to predict how an individual patient will respond to the sedative effects of ketamine or lidocaine. Capnography (continuous monitoring of end-tidal CO2) is considered best practice and is **highly recommended** for all patients receiving anesthetic medication that may result in any level of sedation. 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 treatment space to treatment space). The capnography has both audible and visual alarms.*	NEW

Descriptor		Description	Change
PMI1.11.2	**M**	Each treatment chair/bed/stretcher is equipped with cardiac monitoring. *Guidance: 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.*	
PMI1.11.3	**M**	Each treatment chair/bed/stretcher space is equipped with automatic blood pressure monitoring.	NEW
PMI1.11.4	**M**	Each treatment chair/bed/stretcher space is equipped with pulse oximetry.	NEW
PMI1.11.5	**M**	Each treatment chair/bed/stretcher space is equipped with suction equipment. *Guidance: Suction equipment includes suction canisters and liners, tubing, suction tips and catheters.*	
PMI1.11.6	**M**	Each treatment chair/bed/stretcher space is equipped with oxygen equipment. *Guidance: Oxygen equipment includes oxygen supply and regulator, nasal cannulas, masks and oral airways.*	
PMI1.11.7	**M**	Each treatment chair/bed/stretcher space is equipped with a bag-valve-mask device.	
PMI1.11.8	**M**	Each treatment chair/bed/stretcher space is equipped with artificial airways. *Guidance: Various types and sizes of artificial airways.*	NEW
PMI1.11.9	**M**	Temperature monitoring equipment is readily available in the treatment unit/area/room.	NEW
PMI1.11.10	**M**	Clinical support supplies are readily available in the treatment unit/area/room. *Guidance: Clinical support supplies include but are not limited to stethoscope, intravenous (IV) catheters and solutions and medications.*	
PMI1.12		**Patient assessment and continuous monitoring supports the safe administration of ketamine or lidocaine for the treatment of chronic pain.**	
PMI1.12.1	**M**	Continuous cardiac monitoring is established throughout the treatment and post-treatment monitoring phase. *Guidance: The cardiac rhythm should be interpreted at baseline prior to start of the treatment and a rhythm strip secured into the patient's medical record. In addition, the cardiac rhythm should be interpreted if there is any change from baseline (e.g. bradycardia, tachycardia, life-threatening rhythm) and another rhythm strip secured into the patient's medical record.*	
PMI1.12.2	**M**	Continuous pulse oximetry monitoring is established throughout the treatment and post-treatment monitoring phase.	

Descriptor		Description	Change
PMI1.12.3	**M**	End-tidal carbon dioxide concentration is continuously monitored when the patient exhibits a sedation scale of ≥ 2. *Guidance: It is not always possible to predict how an individual patient will respond to the sedative effects of ketamine. Capnography (continuous monitoring of end-tidal CO2) is considered best practice and is **highly recommended** for all patients receiving anesthetic medication that may result in any level of sedation. 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 treatment space to treatment space). The capnography has both audible and visual alarms.*	NEW
PMI1.12.4	**M**	Oxygen saturation is frequently assessed during treatment and the post-treatment monitoring phase. *Guidance: At a minimum, the patient's oxygen saturation is documented at baseline, every five minutes for the first 15 minutes of the infusion, then at 30 minutes, 45 minutes and 60 minutes, then every hour for the next three hours, then every four hours until the infusion is completed, at the end of the infusion and 60 minutes post-infusion. Ongoing patient assessment and documentation is completed more frequently as indicated (e.g. unstable patient, medication dosage, dose increase etc.).*	REVISED
PMI1.12.5	**M**	Level of consciousness and depth of sedation is monitored during treatment and the post-treatment monitoring phase. *Guidance: At a minimum, the patient's level of consciousness and level of sedation must be documented at baseline, every five minutes for the first 15 minutes of the infusion, then at 30 minutes, 45 minutes and 60 minutes, then every hour for the next three hours, then every four hours until the infusion is completed, at the end of the infusion and 60 minutes post-infusion. Ongoing patient assessment and documentation is completed more frequently as indicated (e.g. unstable patient, medication dosage, dose increase etc.).*	REVISED
PMI1.12.6	**M**	Blood pressure and respiratory rate are frequently assessed during treatment and post-treatment monitoring phase. *Guidance: At a minimum, the patient's blood pressure and respiratory rate must be documented at baseline, every five minutes for the first 15 minutes of the infusion, then at 30 minutes, 45 minutes and 60 minutes, then every hour for the next three hours, then every four hours until the infusion is completed, at the end of the infusion and 60 minutes post-infusion. Ongoing patient assessment and documentation is completed more frequently as indicated (e.g. unstable patient, medication dosage, dose increase etc.).*	REVISED
PMI1.12.7	**M**	The patient remains in the treatment room/area/unit for an appropriate length of time. *Guidance: Minimum length of stay is 60 minutes in the treatment room/area/unit after the infusion is discontinued.*	REVISED
PMI1.12.8	**M**	Intravenous access is maintained until the patient meets discharge criteria.	
PMI1.13		**Patients are safely discharged from the facility.**	
PMI1.13.1	**M**	Patient is prepared for discharge in accordance with the NHMSFAP Discharge standard. *Guidance: Patients should be advised not to drive, operate hazardous machinery or engage in hazardous activities for at least 24 hours following ketamine administration.*	

Descriptor		Description	Change
PMI1.13.2	**M**	The anesthesiologist/other qualified physician assesses the patient after the infusion is discontinued to determine suitability for discharge. *Guidance: Determining suitability for discharge is the responsibility of the anesthesiologist/other qualified physician.*	REVISED
PMI1.14		**The patient's medical record is kept secure, held confidential and provides an accurate and comprehensive account of the care provided.**	
PMI1.14.1	**M**	Patient information, medical records, medical record systems and documentation is in accordance with the NHMSFAP Medical Records and Documentation standard. *Guidance: The following sections of the NHMSFAP Medical Records and Documentation standard do not apply: intraoperative documentation; operative report; and overnight stay documentation.*	NEW
PMI1.14.2	**M**	Care and monitoring by the anesthesiologist/other qualified physician is documented using an anesthetic or critical care record. *Guidance: The anesthetic or critical care record documentation includes: pre-treatment assessment of patient, ASA physical status classification, height, weight and BMI, confirmation of safety checks, (as appropriate) airway management technique(s), medication administration, monitored physiologic variables, pain assessment using a standardized tool and patient status prior to discharge.*	NEW
PMI1.14.3	**M**	Care and monitoring by the registered nurse is documented using a sedation and/or post-anesthesia care record. *Guidance: The sedation and/or post-anesthesia record documentation includes ASA physical status classification height, weight and BMI, confirmation of safety checks, (as appropriate) supplemental oxygen use, monitored physiologic variables, pain assessment using a standardized tool, medications, lines and fluids administered, consultation, direction and/or orders from a health professional, completion of discharge teaching, date and time of discharge.*	NEW
PMI1.15		**The facility and staff are prepared for medical and non-medical emergencies.**	
PMI1.15.1	**M**	The facility and staff are prepared for emergencies in accordance with the NHMSFAP Emergency Preparedness standard. *Guidance: All sections of the NHMSFAP Emergency Preparedness standard apply with the following exceptions: policy and procedures for malignant hyperthermia, local anesthetic systemic toxicity and fire in the operating room are not required.*	
PMI1.15.2	**M**	The emergency cart is stocked in accordance with the NHMSFAP Class 1 General Anesthesia Facility Emergency Cart standard with the exception of succinylcholine. *Guidance: If the anesthesiologist/other qualified physician chooses to stock succinylcholine, even for emergency purposes only, then the facility must also have a malignant hyperthermia kit in accordance with the NHMSFAP Malignant Hyperthermia standard as well as policy and procedures for this medical emergency in accordance with the NHMSFAP Emergency Preparedness standard.*	
PMI1.16		**Safe medication practices are in place.**	

Descriptor		Description	Change
PMI1.16.1	**M**	Medication inventory, preparation, administration, storage and wastage is in accordance with the NHMSFAP Medication Management standard. *Guidance: All sections of the NHMSFAP Medication Management standard apply.*	
PMI1.16.2	**M**	Ketamine is securely stored to protect against loss or theft. *Guidance: Controlled drugs and substances, such as ketamine, are stored in a metal safe that is securely anchored to the building. If refrigerated, ketamine must be stored in a locked compartment of the refrigerator. Ketamine is counted as part of the start and end of day counts.*	REVISED
PMI1.16.3	**M**	Ketamine intravenous infusions are prepared **only** by a pharmacy. *Guidance: The ketamine infusion bag dispensed by the pharmacy should be for a named patient (i.e. following receipt of a prescription for a named patient). Facility staff **do not** prepare ketamine infusion bags (i.e. draw up ketamine and add it to an IV bag). Whenever possible, a single standard concentration of ketamine should be used. All IV medications must be delivered from the community pharmacy directly to the facility (not brought to the clinic by the patient) to ensure the integrity of the product is maintained and chain-of-custody requirements are met.*	
PMI1.16.4	**M**	Ketamine administration is entered into PharmaNet. *Guidance: If the ketamine infusion bag is not labelled by the pharmacy as being dispensed for a named patient, then the physician must enter the information into PharmaNet. If the ketamine infusion bag is labelled by the pharmacy as being dispensed to a named patient, then it is assumed that the prescription for IV ketamine has been entered into PharmaNet by the community pharmacy.*	NEW
PMI1.16.5	**M**	Lidocaine intravenous infusions are prepared **only** by a pharmacy or are commercially premixed bags. *Guidance: Lidocaine infusion bags dispensed by the pharmacy should be for a named patient (i.e. following receipt of a prescription for a named patient). Facility staff **do not** prepare lidocaine infusion bags (i.e. draw up lidocaine and add it to an IV bag). Whenever possible, a single standard concentration of lidocaine should be used. All IV medications must be delivered from the community pharmacy directly to the facility (not brought to the clinic by the patient) to ensure the integrity of the product is maintained and chain-of-custody requirements are met.*	
PMI1.17		**Medical and patient care equipment including infusion control devices/syringe pumps are safely operated and maintained.**	
PMI1.17.1	**M**	Equipment is managed in accordance with the NHMSFAP Equipment Management standard. *Guidance: All sections of the NHMSFAP Emergency Management standard apply.*	

Descriptor		Description	Change
PMI1.17.2	**M**	Equipment manufacturer's operator manual for each make/model of infusion/syringe pump in use at the facility is available for reference. *Guidance: A manual from the manufacturer that has installation (where appropriate), operation and maintenance instructions is available for each make/model of infusion/syringe pump in use at the facility. The operator's manual should be clear and readily available to staff. The makes/models of infusion/syringe pumps available within the facility should be limited. Having only one or two makes/models is recommended.*	
PMI1.17.3	**M**	Staff receive training on the safe operation of each make/model of infusion/syringe pump in use at the facility. *Guidance: Staff may receive education and training of medical and patient care equipment through initial and refresher in-services, from the equipment user instruction manual and by other staff who have been trained on the proper use of the equipment (e.g. nurse demonstrates for new staff nurse how to work the infusion/syringe pump). The responsibility for ensuring that staff is appropriately trained in the use of equipment is that of the medical director. Training should be documented.*	
PMI1.17.4	**M**	Staff competence in the safe operation of each make/model of infusion/syringe pump in use at the facility is evaluated when new pumps are introduced and at minimum every two years. *Guidance: The makes/models of infusion/syringe pumps available within the facility should be limited. Having only one or two makes/models is recommended. Competency assessments are documented*	NEW
PMI1.18		**Infection prevention and control strategies are in place.**	
PMI1.18.1	**M**	A clean environment is provided in accordance with the NHMSFAP Environmental Cleaning standard. *Guidance: All sections of the NHMSFAP Environmental Cleaning standard apply.*	
PMI1.18.2	**M**	Routine practices and additional precautions are adhered to in accordance with the NHMSFAP Routine Practices and Additional Precautions standard. *Guidance: All sections of the NHMSFAP Routine Practices and Additional Precautions standard apply.*	
PMI1.18.3	**M**	Injection practices, single-use device practices and multi-dose vial practices are in accordance with the NHMSFAP Single-use Devices and Multi-dose Vials standard. *Guidance: All sections of the NHMSFAP Single-use Devices and Multi-dose Vials standard apply.*	
PMI1.18.4	**M**	The hand hygiene program and hand hygiene practices are in accordance with the BC Ministry of Health's Best Practices for Hand Hygiene in All Healthcare Settings and Programs. *Guidance: The BC Ministry of Health's Best Practices for Hand Hygiene in All Healthcare Settings and Program has been adopted by the NHMSFAP Committee as the standard for all non-hospital facilities.*	

Descriptor		Description	Change
PMI1.18.5	**M**	Cleaning, disinfection and sterilization of critical and semi-critical medical devices is in accordance with the Ministry of Health Best Practice Guidelines for the Cleaning, Disinfection and Sterilization of Critical and Semi-critical Medical Devices, as appropriate. *Guidance: Non-hospital facilities using **any reusable medical devices** are required to be in conformance with the Ministry of Health requirements for reprocessing.*	
PMI1.18.6	**M**	Waste is managed in accordance with the NHMSFAP Waste Management standard. *Guidance: All sections of the NHMSFAP Waste Management standard apply as applicable to the facility.*	
PMI1.19		**The facility design, layout and infrastructure support positive patient outcomes by providing a safe and secure environment.** *Intent: The NHMSFAP Committee has adopted the Canadian Standards Association (CSA) Z8000 Canadian health care facilities standard as the physical design standard for non-hospital facilities. CSA Z8000 is a comprehensive, nationally recognized standard for the planning, design and construction of all types of health-care facilities.*	
PMI1.19.1	**M**	Each treatment chair bay is at minimum 7.5 m^2 (80 ft^2).	NEW
PMI1.19.2	**M**	Each treatment bed/stretcher bay is at minimum 9.5 m^2 (102 ft^2).	NEW
PMI1.19.3	**M**	Each treatment chair/bed/stretcher has at minimum 1,200 mm (3 ft 11 in) clearance on each side. *Guidance: Clearance is from the chair/bed/stretcher and any wall or any other fixed obstruction (e.g. cabinet).*	REVISED
PMI1.19.4	**M**	Each treatment chair/bed/stretcher has at minimum 1,800 mm (5 ft 11 in) clearance between beds. *Guidance: In areas where there is more than one chair/bed/stretcher, there is 1,800 mm (5 ft 11 in) clearance between beds (centreline of bed to centreline of next bed is at minimum 2,400 mm (7 ft 10 in) between beds).*	NEW
PMI1.19.5	**M**	Each treatment chair/bed/stretcher has at minimum 1,500 mm (4 ft 11 in) clearance from the foot. *Guidance: Clearance is from the chair/bed/stretcher and any wall or any other fixed obstruction (e.g. cabinet).*	NEW
PMI1.19.6	**M**	The heating, ventilation and air-conditioning (HVAC) system provides appropriate air exchanges of at least six total air-changes and two outside air-changes per hour. *Guidance: All new and/or renovated facilities are required to meet the HVAC requirements as specified in the CSA Z317.2 Special requirements for heating, ventilation and air-conditioning (HVAC) systems in health-care facilities standard for an examination, treatment and consulting room: minimum total air-changes per hour six; minimum outside air-changes per hour two. Existing facilities that have been granted a variance by the NHMSFAP Committee are not required to meet the HVAC requirements until the variance term specified by the committee has expired. Regular monitoring and calibration of the HVAC systems is essential to verify that the system is operating as intended and continues to do so over time. These are minimum requirements and do not preclude the use of higher rates. Air-change rates are assessed annually by an HVAC technician and documented in the HVAC service records on file at the facility.*	NEW

Descriptor		Description	Change
PMI1.19.7	**M**	Electrical systems and electrical safety is in accordance with the NHMSFAP Electrical systems and safety standard. *Guidance: All sections of the NHMSFAP Electrical systems and safety standard apply.*	
PMI1.19.8	**M**	Medical gas systems are in accordance with the NHMSFAP Medical Gas – Pipeline System standard. *Guidance: Medical gas outlets and medical vacuum outlets are provided at each treatment bay. All sections of the NHMSFAP Medical Gas – Pipeline System standard apply.*	REVISED
PMI1.20		**Effective governance, leadership and human and material resources are in place to support quality and safety.**	
PMI1.20.1	**M**	Governance and leadership is in accordance with the NHMSFAP Governance and Leadership standard. *Guidance: All sections of the NHMSFAP Governance and Leadership standard apply. In multi-service facilities, there should be a physician who is head of the ketamine and lidocaine infusions for the treatment of chronic pain program.*	NEW
PMI1.20.2	**M**	Human resources management is in accordance with the NHMSFAP Human Resources standard. *Guidance: All sections of the NHMSFAP Human Resources apply with the exception of the physician and nursing qualifications. Patients receiving ketamine or lidocaine for the treatment of chronic pain receive care from anesthesiologists/other qualified physicians and registered nurses who possess the qualifications outlined in this standard.*	NEW
PMI1.20.3	**M**	Occupational health and safety is managed in accordance with the NHMSFAP Occupational Health and Safety standard. *Guidance: All sections of the NHMSFAP Occupational Health and Safety standard apply as applicable to the facility.*	NEW
PMI1.20.4	**M**	Point-of-care testing devices are maintained and used in accordance with the NHMSFAP Point-of-Care Testing standard. *Guidance: All facilities are required to have a glucometer in accordance with the NHMSFAP Class 1 General Anesthesia Facility Emergency Cart standard.*	NEW
PMI1.21		**Policies and procedures contain all the information necessary for the safety of patients, staff and visitors.** *Intent: Policies and procedures ensure that activities/procedures are performed consistently and accurately by all personnel within the non-hospital facility.*	
PMI1.21.1	**M**	There is policy and procedures pertaining to the use of ketamine for the treatment of chronic pain. *Guidance: The policy and procedures outline staff qualifications, staffing levels, patient selection and preparation, consent, patient monitoring, discharge and post-treatment care including follow-up for continuity of care.*	
PMI1.21.2	**M**	There is policy and procedures pertaining to the use of lidocaine for the treatment of chronic pain. *Guidance: The policy and procedures outline staff qualifications, staffing levels, patient selection and preparation, consent, patient monitoring, discharge and post-treatment care including follow-up for continuity of care.*	
PMI1.22		**Quality improvement strategies are in place.**	

Descriptor		Description	Change
PMI1.22.1	**B**	A quality performance program is in place to monitor, evaluate and improve the quality of services. *Guidance: Pain medicine should be practiced in the context of an inter-professional pain management program that includes physicians, nurses, psychologists, pharmacists, social workers, occupational therapists and physiotherapists as needed.*	
PMI1.22.2	**B**	Continuity of care is established for all patients. *Guidance: Long-term pain management follow-up should be established for all patients.*	

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REVISION HISTORY

Version no.	Version date	Summary of changes
4.0	2022-07-14	• Incorporation of accreditation standards core to the practice and accreditation of any non-hospital facility • Administrative changes to reflect updated format and structure of accreditation programs standards • Subject title change (previously titled *Pain Infusion Clinic*) • Subcutaneous lidocaine infusions removed (no longer restricted to accredited facilities)
3.0	2019-06-19	• Updated airway management course requirements • Updated BMI to be congruent with revised *Obesity* guideline • Updated IV ketamine dosing • New reference added: Consensus Guidelines on the Use of Intravenous Ketamine Infusions for Chronic Pain
2.0	2017-12-30	• Program name change