



NON-HOSPITAL MEDICAL AND SURGICAL FACILITIES
ACCREDITATION PROGRAM

Accreditation Standards

Intravenous Use of Ketamine for the
Treatment of Mood Disorders

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INTRODUCTION

Ketamine administration for the treatment of mood disorders such as major depressive disorder (MDD) by the intravenous (IV) route **must** be performed in an accredited non-hospital facility. This standard does **not** apply to intranasal esketamine (SPRAVATO®), intramuscular (IM), subcutaneous (SC), or oral (PO) ketamine administration in a non-accredited facility (e.g. physician office/clinic) which are addressed in the College’s interim guidance [Ketamine Administration via Intramuscular, Oral, Sublingual, and Intranasal Routes as Treatment for Mental Health Conditions and Chronic Pain in the Community Setting](#).

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.

KET1.0 INTRAVENOUS USE OF KETAMINE FOR THE TREATMENT OF MOOD DISORDERS

KET1.1	Pre-admission evaluation ensures all patients scheduled for treatment are appropriate for the non-hospital setting.
<i>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).</i>	
KET1.1.1	M Pre-admission evaluation and selection is in accordance with the NHMSFAP Pre-admission Evaluation and Selection standard. <i>Guidance: All sections of the NHMSFAP Pre-admission Evaluation and Selection standard apply. Generally, patients under consideration for ketamine should have exceeded minimum criteria for treatment resistance such as trials of at least two (2) first-line antidepressants from different classes and at least one (1) adjunctive medication.</i>
KET1.1.2	M Patients are aged 19 years or older. <i>Guidance: The Canadian Network for Mood and Anxiety Treatments (CANMAT) Task Force Recommendations state that there is insufficient evidence to recommend IV ketamine for pediatric or geriatric populations.</i>

KET1.1.3	M	Pre-admission evaluation includes a comprehensive psychiatric assessment and management plan. <i>Guidance: This must be completed by the referring psychiatrist. Generally, patients under consideration for ketamine should have exceeded minimum criteria for treatment resistance such as trials of at least two (2) first-line antidepressants from different classes and at least one (1) adjunctive medication.</i>
KET1.1.4	M	Pre-admission evaluation includes pre-treatment screening based upon contraindications to and precautions with ketamine use. <i>Guidance: Patients with cardiac, pulmonary, or central nervous system comorbidities, significant hypertension, hyperthyroidism, renal or liver disease may not be suitable for this treatment.</i>
KET1.1.5	M	Pre-admission evaluation includes pre-treatment laboratory and/or diagnostic testing based upon contraindications to and precautions with ketamine use. <i>Guidance: Laboratory and diagnostic testing as indicated by the patient's medical status and contraindications to and precautions with ketamine use are completed and reviewed prior to treatment, e.g. 12 lead ECG, liver and renal function tests.</i>
KET1.1.6	M	Pre-admission assessment includes obstructive sleep apnea (OSA) screening using a validated tool (e.g. STOP-Bang). <i>Guidance: All patients receiving ketamine for the treatment of mood disorders are screened for obstructive sleep apnea (OSA). OSA screening should be performed in advance of the day of treatment.</i>
KET1.2		Psychiatric assessment documentation provides an accurate account of the patient's status and supports appropriate patient selection.
KET1.2.1	M	The psychiatric assessment includes a comprehensive psychiatric history. <i>Guidance: The history includes past and current psychiatric diagnoses, psychotic or aggressive ideas and behaviours, suicidal ideas, intentional self-injury, hospitalization and emergency department visits for psychiatric issues, psychiatric treatments (type, duration, and where applicable doses) and response to psychiatric treatments. The baseline assessment should include system severity to allow for comparative evaluation of clinical change with treatment. The treatment history should confirm previous adequate trials of antidepressant treatments.</i>
KET1.2.2	M	The psychiatric assessment includes a medical history. <i>Guidance: The medical history includes relevant past or current medical illnesses, hospitalizations, treatments, surgery and other procedures including physical trauma, cardiopulmonary status, endocrinology disease, sexual and reproductive history, infectious disease (e.g. STIs, HIV, tuberculosis), neurological or neurocognitive disorders or symptoms, symptoms or conditions associated with significant pain and discomfort.</i>
KET1.2.3	M	The psychiatric assessment includes allergies or drug sensitivities.
KET1.2.4	M	The psychiatric assessment includes a medication history. <i>Guidance: The medication history includes both prescribed and non-prescribed medications, herbal and nutritional supplements, and vitamins and the side effects of these medications.</i>

KET1.2.5	M	The psychiatric assessment includes a substance use history. <i>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. JAMA Psychiatry's consensus statement on the use of ketamine in the treatment of mood disorders strongly recommends baseline urine toxicology screening to ensure the accuracy of the reported substance use and medication record.</i>
KET1.2.6	M	The psychiatric assessment includes a physical exam including mental status and review of systems. <i>Guidance: The physical exam includes height, weight and body mass index (BMI), vital signs, skin including any signs of trauma, self-injury or drug use, coordination and gait, involuntary movements of abnormalities of motor tone, speech (fluency and articulation), mood, level of anxiety, thought process and a review of systems. The review of systems should include general/systemic, skin, HEENT, respiratory, cardiovascular, gastrointestinal, genitourinary, musculoskeletal, neurological, hematological, endocrine. The review of systems should also evaluate potential risk factors associated with ketamine treatment. The physical exam including mental status and review of systems can be performed by the psychiatrist 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.</i>
KET1.2.7	M	The psychiatric assessment includes relevant laboratory and other diagnostic testing. <i>Guidance: This includes but is not limited to laboratory testing, ECG. Testing should be made according to established guidelines such as "Choosing Wisely" and should be based upon the patient's clinical characteristics.</i>
KET1.2.8	M	The psychiatric management plan includes the clinical impression, treatment and follow-up plan including the rationale for treatment selection.
KET1.2.9	M	The psychiatric management plan includes documentation of the consent discussion. <i>Guidance: The psychiatrist requesting the administration of ketamine for the treatment of mood disorder(s) 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 psychiatrist 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.</i>
KET1.3		Admission and pre-treatment care confirms appropriate patient selection and patient preparation. <i>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).</i>
KET1.3.1	M	Admission and pre-treatment care is in accordance with the NHMSFAP Admission and Pre-procedure Care standard. <i>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.</i>
KET1.3.2	M	Patients are not under the influence of alcohol or other drugs. <i>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.</i>

KET1.3.3	M	Patients with a known or suspected latex sensitivity or allergy are managed in accordance with the NHMSFAP Latex Allergy standard.
KET1.3.4	M	Intravenous access is established. <i>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.</i>
KET1.4		Consent is obtained for all medical treatments performed in a non-hospital medical/surgical facility.
KET1.4.1	M	Consent is obtained in accordance with the NHMSFAP Consent standard. <i>Guidance: All sections of the NHMSFAP Consent standard apply with the following exceptions: Consent confirmation during the surgical safety checklist does not apply.</i>
KET1.4.2	M	The consent discussion is documented in the patient's medical record. <i>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 psychiatrist 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.</i>
KET1.4.3	M	A written consent form is completed. <i>Guidance: As the administration of ketamine is not for anesthesia associated with an invasive procedure, a consent form must be completed when ketamine is administered for the treatment of mood disorders.</i>
KET1.4.4	M	Confirmation that consent remains valid is documented at each patient visit, if a "rolling" consent is used. <i>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.</i>
KET1.5		Intravenous ketamine for the treatment of mood disorders is safely prepared and administered.
KET1.5.1	M	Ketamine intravenous infusion dosing is congruent with clinical guidelines and consensus statements for this treatment indication. <i>Guidance: The Canadian Network for Mood and Anxiety Treatments (CANMAT) Task Force summary of recommendations (2021) advise that the typical protocol for IV ketamine is a weight-based dose of 0.5 mg/kg IV over 40 minutes, given as a single infusion, or as a course of repeated infusions administered 2 to 3 times per week for a total of 4 to 8 infusions.</i>
KET1.5.2	M	Ketamine infusions are administered using a dedicated line.
KET1.5.3	M	Ketamine infusions are only administered using an infusion control device/syringe pump with a locked control panel.

KET1.5.4	M	Ketamine infusions are administered by continuous infusion only . <i>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.</i>
KET1.5.5	M	An independent double-check is performed prior to initiating the ketamine infusion. <i>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.</i>
KET1.6		Anesthesiologists who order or administer ketamine for the treatment of mood disorders are qualified. <i>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).</i>
KET1.6.1	M	Each anesthesiologist with privileges at the facility holds current licensure with the College of Physicians and Surgeons of British Columbia. <i>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.</i>
KET1.6.2	M	Each anesthesiologist is in good standing with the College of Physicians and Surgeons of British Columbia. <i>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.</i>
KET1.6.3	M	An initial application for privileges is on file for each anesthesiologist. <i>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 for the treatment of mood disorders and explicitly confirms privileges for the administration of ketamine in the treatment of mood disorders, 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.</i>

KET1.6.4	<p>M Anesthesiologists administering ketamine for the treatment of mood disorders at the facility have the requisite credentials for privileges as outlined in the Provincial Privileging Dictionaries.</p> <p><i>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.</i></p>
KET1.6.5	<p>M Each anesthesiologist that has not practiced anesthesia in a hospital setting within three years holds current ACLS training.</p> <p><i>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, re-certification is required every two years.</i></p>
KET1.6.6	<p>M The current and professional performance of each anesthesiologist is evaluated annually through performance review and renewal of appointment processes.</p> <p><i>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 re-certification 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.</i></p>
KET1.7	<p>Critical care medicine, emergency medicine or family practice anesthesia physicians who order or administer ketamine for the treatment of mood disorders are qualified.</p> <p><i>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).</i></p>
KET1.7.1	<p>M Each physician with privileges at the facility holds current licensure with the College of Physicians and Surgeons of British Columbia.</p> <p><i>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.</i></p>

KET1.7.2	<p>M Each physician is in good standing with the College of Physicians and Surgeons of British Columbia. <i>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.</i></p>
KET1.7.3	<p>M An initial application for privileges is on file for each physician. <i>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 for the treatment of mood disorders and explicitly confirms privileges for the administration of ketamine in the treatment of mood disorders ONLY, their qualifications and evidence of current experience in practice relevant to the administration of ketamine in the treatment of mood disorders 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.</i></p>
KET1.7.4	<p>M Critical care medicine, emergency medicine and family practice anesthesia physicians administering ketamine for the treatment of mood disorders at the facility have the requisite credentials for privileges as outlined in the Provincial Privileging Dictionaries. <i>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 for the treatment of mood disorders 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.</i></p>
KET1.7.5	<p>M Each critical care medicine, emergency medicine and family practice anesthesia physician that has not practiced in their discipline in a hospital setting within three years holds current ACLS training. <i>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, re-certification is required every two years.</i></p>

KET1.7.6	<p>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.</p> <p><i>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 re-certification 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.</i></p>
KET1.8	<p>Registered nurses who monitor patients receiving ketamine for the treatment of mood disorders are qualified.</p> <p><i>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.</i></p>
KET1.8.1	<p>M Each registered nurse holds practicing registration with the BC College of Nurses and Midwives.</p> <p><i>Guidance: Registered nurses (RN) are the only other regulated health professional whose scope of practice may include the monitoring of patients receiving ketamine for the treatment of mood disorders. 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.</i></p>
KET1.8.2	<p>M Each registered nurse holds current basic life support certification.</p> <p><i>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.</i></p>

KET1.8.3	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. <i>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.</i>
KET1.8.4	M	Each registered nurse holds current ACLS training. <i>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, re-certification is required every two years.</i>
KET1.9		The treatment unit/area/room is appropriately staffed. <i>Intent: The NHMSFAP Post-anesthesia Care standard does not apply.</i>
KET1.9.1	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. <i>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.</i>
KET1.9.2	M	One-to-one (1:1) regulated health professional to patient ratios are observed. <i>Guidance: One-to-one nurse to patient ratios or one-to-one anesthesiologist/other qualified physician to patient ratios are observed.</i>
KET1.9.3	M	There is a third regulated health professional immediately available. <i>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.</i>
KET1.9.4	M	An anesthesiologist or other qualified physician is on site and immediately available. <i>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 and/or psychiatrist may need to attend to the treatment unit/area/room in the event that the patient experiences prominent transient dissociative or psychotomimetic effects.</i>

KET1.9.5	M	The treating psychiatrist is available without delay throughout treatment until the patient is discharged. <i>Guidance: At minimum, the prescribing psychiatrist must be available by telephone without delay in the event that the patient experiences prominent transient dissociate or psychotomimetic effects.</i>
KET1.10		The treatment unit/area/room is appropriately equipped. <i>Intent: The NHMSFAP Post-anesthesia Care standard does not apply.</i>
KET1.10.1	M	Capnography is immediately available in the treatment unit/area/room. <i>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.</i>
KET1.10.2	M	Cardiac monitoring is immediately available in the treatment unit/area/room. <i>Guidance: It is not always possible to predict how an individual patient will respond to the effects of ketamine. Although continuous cardiac monitoring is not required for every patient, cardiac monitoring equipment must be present in the room. Cardiac monitoring equipment may be portable (i.e. moved from treatment chair to treatment chair). 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.</i>
KET1.10.3	M	Each treatment chair/bed/stretcherspace is equipped with automatic blood pressure monitoring.
KET1.10.4	M	Each treatment chair/bed/stretcherspace is equipped with pulse oximetry.
KET1.10.5	M	Each treatment chair/bed/stretcherspace is equipped with suction equipment. <i>Guidance: Suction equipment includes suction canisters and liners, tubing, suction tips and catheters.</i>
KET1.10.6	M	Each treatment chair/bed/stretcherspace is equipped with oxygen equipment. <i>Guidance: Oxygen equipment includes oxygen supply and regulator, nasal cannulas, masks and oral airways.</i>
KET1.10.7	M	Each treatment chair/bed/stretcherspace is equipped with a bag-valve-mask device.
KET1.10.8	M	Each treatment chair/bed/stretcherspace is equipped with artificial airways. <i>Guidance: Various types and sizes of artificial airways.</i>
KET1.10.9	M	Temperature monitoring equipment is readily available in the treatment unit/area/room.
KET1.10.10	M	Clinical support supplies are readily available in the treatment unit/area/room. <i>Guidance: Clinical support supplies include but are not limited to stethoscope, intravenous (IV) catheters and solutions and medications.</i>
KET1.11		Patient assessment and continuous monitoring supports the safe administration of ketamine for the treatment of mood disorders.

KET1.11.1	M	Continuous cardiac monitoring is established throughout the treatment and post-treatment monitoring phase for patients with hypertension or other cardiac comorbidities. <i>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.</i>
KET1.11.2	M	Continuous pulse oximetry monitoring is established throughout the treatment and post-treatment monitoring phase.
KET1.11.3	M	End-tidal carbon dioxide concentration is continuously monitored when the patient exhibits a sedation scale of ≥ 2 . <i>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.</i>
KET1.11.4	M	Oxygen saturation is frequently assessed during treatment and the post-treatment monitoring phase. <i>Guidance: At a minimum, the patient's oxygen saturation is recorded at baseline, 5 minutes into the infusion, mid-way through the infusion, end of the infusion and 1 hour post-infusion.</i>
KET1.11.5	M	Level of consciousness and depth of sedation is monitored during treatment and the post-treatment monitoring phase. <i>Guidance: At a minimum, the patient's level of consciousness and level of sedation must be documented at baseline, 5 minutes into the infusion, mid-way through the infusion, end of the infusion and 1 hour post-infusion.</i>
KET1.11.6	M	Blood pressure and respiratory rate are frequently assessed during treatment and post-treatment monitoring phase. <i>Guidance: At a minimum, the patient's blood pressure and respiratory rate must be documented at baseline, 5 minutes into the infusion, mid-way through the infusion, end of the infusion, and 1 hour post-infusion.</i>
KET1.11.7	M	The patient remains in the treatment room/area/unit for an appropriate length of time. <i>Guidance: Minimum length of stay is 60 minutes in the treatment room/area/unit after the IV infusion is discontinued.</i>
KET1.11.8	M	Intravenous access is maintained until the patient meets discharge criteria.
KET1.12		Patients are safely discharged from the facility.
KET1.12.1	M	Patient is prepared for discharge in accordance with the NHMSFAP Discharge standard. <i>Guidance: Patients should be advised not to drive, operate hazardous machinery or engage in hazardous activities for at least 24 hours following ketamine administration.</i>
KET1.12.2	M	The psychiatrist or anesthesiologist/other qualified physician assesses the patient just prior to discharge to evaluate the patient for potential behavioural risks including suicidal ideation.
KET1.13		The patient's medical record is kept secure, held confidential and provides an accurate and comprehensive account of the care provided.

KET1.13.1	M	Patient information, medical records, medical record systems and documentation is in accordance with the NHMSFAP Medical Records and Documentation standard. <i>Guidance: The following sections of the NHMSFAP Medical Records and Documentation standard do not apply: Intraoperative documentation, operative report and overnight stay documentation.</i>
KET1.13.2	M	Care and monitoring by the anesthesiologist/other qualified physician is documented using an anesthetic or critical care record. <i>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 and patient status just prior to discharge, including evaluation of potential behavioural risks.</i>
KET1.13.3	M	Care and monitoring by the registered nurse is documented using a sedation and/or post-anesthesia care record. <i>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, medications, lines and fluids administered, consultation, direction and/or orders from a health professional, completion of discharge teaching and date and time of discharge.</i>
KET1.14		The facility and staff are prepared for medical and non-medical emergencies.
KET1.14.1	M	The facility and staff are prepared for emergencies in accordance with the NHMSFAP Emergency Preparedness standard. <i>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.</i>
KET1.14.2	M	The emergency cart is stocked in accordance with the NHMSFAP Class 1 General Anesthesia Facility Emergency Cart standard with the exception of succinylcholine. <i>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.</i>
KET1.15		Safe medication practices are in place.
KET1.15.1	M	Medication inventory, preparation, administration, storage and wastage is in accordance with the NHMSFAP Medication Management standard. <i>Guidance: All sections of the NHMSFAP Medication Management standard apply.</i>
KET1.15.2	M	Ketamine is securely stored to protect against loss or theft. <i>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.</i>

KET1.15.3	M	Ketamine intravenous infusions are prepared only by a pharmacy. <i>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.</i>
KET1.15.4	M	Ketamine administration is entered into PharmaNet. <i>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.</i>
KET1.16		Medical and patient care equipment including infusion control devices/syringe pumps are safely operated and maintained.
KET1.16.1	M	Equipment is managed in accordance with the NHMSFAP Equipment Management standard. <i>Guidance: All sections of the NHMSFAP Emergency Management standard apply.</i>
KET1.16.2	M	Equipment manufacturer's operator manual for each make/model of infusion/syringe pump in use at the facility is available for reference. <i>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.</i>
KET1.16.3	M	Staff receive training on the safe operation of each make/model of infusion/syringe pump in use at the facility. <i>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.</i>
KET1.16.4	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. <i>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</i>
KET1.17		Infection prevention and control strategies are in place.
KET1.17.1	M	A clean environment is provided in accordance with the NHMSFAP Environmental Cleaning standard. <i>Guidance: All sections of the NHMSFAP Environmental Cleaning standard apply.</i>
KET1.17.2	M	Routine practices and additional precautions are adhered to in accordance with the NHMSFAP Routine Practices and Additional Precautions standard. <i>Guidance: All sections of the NHMSFAP Routine Practices and Additional Precautions standard apply.</i>

KET1.17.3	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. <i>Guidance: All sections of the NHMSFAP Single-use Devices and Multi-dose Vials standard apply.</i>
KET1.17.4	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. <i>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.</i>
KET1.17.5	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. <i>Guidance: Non-hospital facilities using any reusable medical devices are required to be in conformance with the Ministry of Health requirements for reprocessing.</i>
KET1.17.6	M	Waste is managed in accordance with the NHMSFAP Waste Management standard. <i>Guidance: All sections of the NHMSFAP Waste Management standard apply as applicable to the facility.</i>
KET1.18		The facility design, layout and infrastructure support positive patient outcomes by providing a safe and secure environment. <i>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.</i>
KET1.18.1	M	Each treatment chair bay is at minimum 7.5 m ² (80 ft ²).
KET1.18.2	M	Each treatment bed/stretchers bay is at minimum 9.5 m ² (102 ft ²).
KET1.18.3	M	Each treatment chair/bed/stretchers has at minimum 1200 mm (3 ft 11 in) clearance on each side. <i>Guidance: Clearance is from the chair/bed/stretchers and any wall or any other fixed obstruction (e.g. cabinet).</i>
KET1.18.4	M	Each treatment chair/bed/stretchers has at minimum 1800 mm (5 ft 11 in) clearance between beds. <i>Guidance: In areas where there is more than one chair/bed/stretchers, there is 1800 mm (5 ft 11 in) clearance between beds (centreline of bed to centreline of next bed is at minimum 2400 mm (7 ft 10 in) between beds).</i>
KET1.18.5	M	Each treatment chair/bed/stretchers has at minimum 1500 mm (4 ft 11 in) clearance from the foot. <i>Guidance: Clearance is from the chair/bed/stretchers and any wall or any other fixed obstruction (e.g. cabinet).</i>

KET1.18.6	M	The heating, ventilation and air-conditioning (HVAC) system provides appropriate air exchanges of at least 6 total air-changes and 2 outside air-changes per hour. <i>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-changer 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.</i>
KET1.18.7	M	Electrical systems and electrical safety is in accordance with the NHMSFAP Electrical systems and safety standard. <i>Guidance: All sections of the NHMSFAP Electrical systems and safety standard apply.</i>
KET1.18.8	M	Medical gas systems are in accordance with the NHMSFAP Medical Gas – Pipeline System standard. <i>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.</i>
KET1.19		Effective governance, leadership and human and material resources are in place to support quality and safety.
KET1.19.1	M	Governance and leadership is in accordance with the NHMSFAP Governance and Leadership standard. <i>Guidance: All sections of the NHMSFAP Governance and Leadership standard apply.</i>
KET1.19.2	M	Human resources management is in accordance with the NHMSFAP Human Resources standard. <i>Guidance: All sections of the NHMSFAP Human Resources apply with the exception of the physician and nursing qualifications. Patients receiving ketamine for the treatment of mood disorders receive care from anesthesiologists/other qualified physicians and registered nurses who possess the qualifications outlined in this standard.</i>
KET1.19.3	M	Occupational health and safety is managed in accordance with the NHMSFAP Occupational Health and Safety standard. <i>Guidance: All sections of the NHMSFAP Occupational Health and Safety standard apply as applicable to the facility.</i>
KET1.19.4	M	Point-of-care testing devices are maintained and used in accordance with the NHMSFAP Point-of-Care Testing standard. <i>Guidance: All facilities are required to have a glucometer in accordance with the NHMSFAP Class 1 General Anesthesia Facility Emergency Cart standard.</i>
KET1.20		Policies and procedures contain all the information necessary for the safety of patients, staff and visitors. <i>Intent: Policies and procedures ensure that activities/procedures are performed consistently and accurately by all personnel within the non-hospital facility.</i>
KET1.20.1	M	There is policy and procedures for the psychiatrist's role and responsibilities when prescribing ketamine administration for the treatment of mood disorders. <i>Guidance: The policy and procedures clarify their role and responsibilities including pre-admission evaluation, informed consent, availability during treatment, immediate post-treatment evaluation and continuity of care.</i>

KET1.20.2	M	There is policy and procedures for the anesthesiologist's/other qualified physician's role and responsibilities when administering ketamine for the treatment of mood disorders. <i>Guidance: The policy and procedures should clarify their role and responsibilities including pre-admission evaluation, informed consent, administration of ketamine, availability during treatment, immediate post-treatment evaluation and continuity of care.</i>
KET1.20.3	M	There is policy and procedures pertaining to the use of ketamine for the treatment of mood disorders. <i>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.</i>
KET1.21		Quality improvement strategies are in place.
KET1.21.1	B	A quality performance program is in place to monitor, evaluate and improve the quality of services.
KET1.21.2	B	Continuity of care is established for all patients.



NON-HOSPITAL MEDICAL AND SURGICAL FACILITIES ACCREDITATION PROGRAM

Accreditation Standards

Intravenous Use of Ketamine for the Treatment of Mood Disorders

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