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COLLEGE OF PHYSICIANS
& SURGEONS OF ALBERTA

Dental/Oral & Maxillofacial Surgery (OMFS) Standards

Version March 2016 – v2

(For Dentist/OMFS Owned and Operated Facilities)

Date	**March 2016 – v2**
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Originating Committee:	**Advisory Committee on Non-Hospital Surgical Facilities**

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1.0 Introduction

Alberta's *Health Professions Act* provides for the accreditation of medical services in non-hospital facilities by the College of Physicians & Surgeons of Alberta. Section 8.1 in Schedule 21 of the *Act* states:

> **8.1(1)** A regulated member shall not provide a prescribed health service, or cause a prescribed health service to be provided, in a facility unless the facility is an accredited medical facility or a facility referred to in subsection (2).
>
> **(2)** Subsection (1) does not apply with respect to a prescribed health service provided in
>
> (a) an approved hospital within the meaning of the *Hospitals Act*,
>
> (b) a hospital operated by the Government of Canada,
>
> (c) a health care facility operated by the Government of Canada or the Government of Alberta,
>
> (d) a hospital, clinic or centre operated by a regional health authority under the *Regional Health Authorities Act*,
>
> (e) a facility within the meaning of the *Mental Health Act* or an accredited health centre established for the purpose of section 49(b) of the *Mental Health Act*, or
>
> (f) a facility that is prescribed in the regulations.

Non-Hospital Surgical Facility services are one of many health services for which the CPSA requires accreditation. A complete list of prescribed health services is contained in the CPSA's by-laws and available on the CPSA's website.

The Advisory Committee on Non-Hospital Surgical Facilities is a standing committee of the College of Physicians & Surgeons of Alberta (hereinafter referred to as CPSA) which advises the Medical Facility Accreditation Committee (MFAC) of the CPSA with respect to all matters pertaining to non-hospital surgical facilities.

The Committee considers all issues related to the provision of surgical and anesthesia services with the facilities that may include but are not restricted to the following:

1. Develop and maintain evidence based standards and guidelines for anaesthetic and surgical care in NHSFs;
2. Inspect and audit the medical practices in NHSFs to ensure that medical services provide safe and effective patient care;
3. Provide advice to promote safe and effective practices in NHSFs;
4. Assess physicians' qualifications for privileges in NHSFs;
5. Inspect and audit of business practices in NHSFs to the extent necessary to ensure compliance with relevant CPSA by-laws.

The CPSA requires all accredited medical facilities to have a Medical Director (i.e. a practitioner who is registered with the Alberta College of Physicians & Surgeons) who is accountable for the practice of medicine within the facility. Medical Directors shall be satisfied as to the standing of other professionals (e.g. Dentists/OMFS, Nurses, Podiatrists) with their respective regulatory bodies and as to the safety of their practices.

NOTE: This document incorporates standards in a diagnostic and treatment facility approved by the Council:

- **"shall" is used when a section is a requirement for accreditation;**
- **"should" is used when a section is recommended; and**
- **"may" is used when a section is discretionary.**

2.0 Role of the CPSA

2.1 Accreditation of Facilities

2.1.1 All non-hospital diagnostic and treatment facilities, in which medical and surgical procedures are deemed by Council as having a sufficient risk of potential harm to a patient, shall register with and maintain accreditation by the College of Physicians & Surgeons of Alberta as a Non-Hospital Surgical Facility. In general, those procedures include:

1. Administration of general anesthesia, IV sedation requiring the monitoring of vital signs, or major regional blocks (See 3.0 Definitions); or
2. Surgical or diagnostic procedures with risks of bleeding from major vessels, gas embolism, perforation of internal organs, or other life-threatening complications; or
3. Surgical or diagnostic procedures requiring sterile precautions to prevent blood-borne, deep closed cavity, or implant-related infections.

2.1.2 Applications for accreditation of new facilities shall be made to the College of Physicians & Surgeons of Alberta.

2.1.3 The Standards of Practice as established by the Council of the College are applicable. (The Standards define the practice of medicine and outline the responsibility of physicians for aspects of practice other than the direct care of patients.) The Medical Director's responsibilities include:

1. The qualifications and supervision of all staff who participate in patient care;
2. The safety and quality of medical equipment used in the facility;
3. The access to and confidentiality of medical records; and
4. The propriety and accuracy of all claims for payment made by the facility for medical services provided in the facility but not for claims for payment made by individual members of the medical staff.

2.1.4 Accreditation involves:

1. Completion of a pre-assessment data verification form;
2. An on-site assessment by one or more physicians (with expertise in the appropriate area of medical practice) designated by the CPSA;
3. A review of all applications for privileges at the facility; and
4. Review of the facility's compliance with the CPSA's standards.

2.1.5 In facilities owned and operated by a registered dentist/OMFS where the physician's only role is to administer anesthesia, accreditation relates to the practice of medicine and anesthesia only. The dentist/OMFS-owner is responsible for surgical standards and related administrative functions. The Medical Director shall be satisfied as to the safe and effective care of patients in the facility but may share the responsibilities listed (Section 4.1.2) with the dentist/OMFS-owner. Infection prevention and control standards applicable in these facilities are those established by the Alberta Dental Association and CPSA. This exception does not apply to physician-owned and operated facilities.

2.1.6 "Full Accreditation" is granted to those facilities with no identified deficiencies.

2.1.7 "Provisional Accreditation" may be granted for a 30 day period to those facilities with minor deficiencies to allow for their correction. A written response to each deficiency is required. A follow-up assessment may be required at the sole discretion of the CPSA. "Full Accreditation" will be granted when responses to deficiencies have been corrected to the satisfaction of the CPSA.

2.1.8 Requirements shall be met before accreditation will be granted or renewed by the CPSA.

2.1.9 The CPSA may revoke accreditation if practice in the facility is considered unsafe.

2.1.10 A "Certificate of Accreditation" will be issued by the College of Physicians & Surgeons of Alberta to all facilities with full accreditation.

2.1.11 Accreditation is limited to 4 years from the last date of approval unless extended by the CPSA and may be renewed through a process of reaccreditation which will follow the same steps as those for accreditation (refer to Section 2.1.4).

2.1.12 Payment to the CPSA for the cost of the assessment is the responsibility of the Medical Director of the facility.

2.1.13 "Spot" assessments conducted without prior notice may also be conducted. These are at no cost to the facility.

2.2 Administration

2.2.1 A record of each facility will be kept on file at the College of Physicians & Surgeons of Alberta.

2.2.2 The CPSA shall be advised of:

1. Any change of ownership of the medical practice or Medical Director of the facility;
2. Any major structural changes to patient care areas,
3. Any major change in types of procedures or practices.
4. Any significant increase in volumes of procedures performed (>50% of the previously recorded volume).

2.2.3 Each facility is required to pay an annual fee, set by Council, for the administration of the accreditation program.

3.0 Definitions

3.1 Anesthesia

3.1.1 General anesthesia is regarded as being a continuum of depressed central nervous system function from pharmacologic agents resulting in loss of consciousness, recall, and somatic and autonomic reflexes.

3.1.2 IV sedation is an altered or depressed state of awareness or perception of pain brought about by pharmacologic agents and which is accompanied by varying degrees of depression of respiration and protective reflexes in which verbal contact with the patient can be maintained. No distinction is made between light and deep IV sedation for credentialing or monitoring purposes. The provision of IV sedation includes, but is not limited to, the use of any IV agent for this purpose or of nitrous oxide in a greater than 50% concentration. All of the above require the monitoring of vital signs. For the purposes of this document, the use of oral pre-medication alone or in combination with local anesthesia is NOT defined as IV sedation.

3.1.3 Major regional blocks include, but are not limited to, brachial and lumbosacral plexus blocks, periorbital blocks, spinal and epidural blocks, and IV regional blocks. The risk of inadvertent CNS block of a higher level than intended mandates preparedness for support of vital functions.

3.2 Procedures

3.2.1 For the purpose of this document, "surgery" includes dental/OMFS procedures.

3.2.2 Procedures not permitted in physicians' offices or unapproved facilities are described in the CPSA's by-laws. Those procedures may be provided in accredited non-hospital surgical facilities with approval from the Advisory Committee advising on privileges in these facilities. The Committee will rely on expert opinion and available evidence in preparing its decisions.

4.0 Personnel

4.1 Medical Director

4.1.1 Qualifications

The Medical Director of each NHSF shall be a physician licensed to practice medicine in Alberta.

4.1.2 Duties

The Medical Director shall personally ensure the following:

1. The safe and effective care of patients in the facility;
2. That appropriate and up-to-date policy and procedures manuals are in place;
3. That the duties and responsibilities of all personnel are written and understood;
4. Ensure a policy is in place to provide safe care for patients requiring prolonged stay, beyond the regular hours of operation that includes a planning process that is documented and communicated to all team members.
5. That applications for privileges in anesthesia or surgery in the facility and changes to these privileges are approved by the appropriate College;
6. That training and experience is appropriate for procedures being performed – e.g. pediatrics.
7. That sufficient numbers of appropriately trained personnel are present during procedures;
8. That procedures and equipment are appropriate and safe;
9. That arrangements are in place for the emergency transfer and admission of patients to hospital through agreements with admitting physicians to those hospitals;
10. That complete and accurate confidential patient records and documentation relating to the operation of the facility and procedures performed are kept;
11. That a quality assurance process shall in be place that identifies and monitors infection & medical complication rates involving the multiple health care professionals within the facility;
12. When complications are identified via the quality assurance process, the medical director will report such to the appropriate College(s); and
13. That documentation and fees required by the CPSA are submitted as required.

4.2 Physicians Requesting Privileges

4.2.1 Qualifications

1. All physicians who administer general anesthesia in a Dental/OMFS NHSF shall:

   a. Be registered in Alberta and be recognized as a specialist in anesthesia;

   -and-

   Maintain an active Regional (or hospital) medical staff appointment and active hospital anesthetic privileges **or** hold active certification in Advanced Cardiac Life Support (ACLS) as specified by the Heart and Stroke Foundation of Canada;

   -or-

   b. Be registered in Alberta and be approved by Council to administer anesthetics as a non-specialist;

   -and-

   Maintain an active hospital medical staff appointment and active hospital anesthetic privileges in the same community **and** hold current certification in Advanced Cardiac Life Support (ACLS) as specified by the Heart and Stroke Foundation of Canada;

   -or-

2. All physicians who administer IV sedation in a Dental/OMFS NHSF shall:

   a. Be qualified to administer general anesthesia in an NHSF and be registered in Alberta;

   -or-

   b. Have completed training in the administration and monitoring of IV sedation and provide an evaluation of his or her skills acceptable to the CPSA; and

      i. Hold active certification in Advanced Cardiac Life Support (ACLS)

      -or-

      ii Have immediate access to an on-site "code team" consisting of at least one physician and one registered nurse, each with active certification in Advanced Cardiac Life Support (ACLS)

3. All physicians with any of the above privileges shall maintain competence through appropriate continuing education and should be observed periodically and evaluated (formally or informally) by peers who perform the same procedures.

4. All oral surgeons or dentists who perform surgery under general anesthesia or IV sedation in a Dental/OMFS NHSF shall:

   a. Be registered in Alberta as a dentist/OMFS;

   - and -

   b. Have successfully completed supervised training and provide an evaluation of his or her skills in the particular (or substantially similar) procedure performed in accordance with standards of training and performance acceptable to the Alberta Dental Association and CPSA;

5. All practitioners with any of the above privileges should participate in mock drills for the management of life-threatening emergencies related to the procedures each performs.

4.2.2 Application

1. A physician seeking privileges in anesthesia* or surgery** in an NHSF approved by Council shall apply in writing to the Medical Director of the facility. (Dentists/OMFS do not apply through the Medical Directors.)

   *NOTE: *Anesthesiologists with privileges in a Regional Health Authority need only apply once to the CPSA for approval to provide services in NHSFs in Alberta. Medical Directors must request confirmation of this approval from the CPSA prior to services being provided in their facility.*

   ***Only those surgical procedures approved by Council will be considered for approval. (*Refer to *Approved Procedures for Non-Hospital Surgical Facilities* at www.cpsa.ca.)

2. Any application by a physician seeking privileges who DOES NOT hold those privileges in facilities administered by a Regional Health Authority shall include, at a minimum:

   a. the physician's name, address, and registration number with the CPSA;
   b. details of the same or similar privileges, if any, currently held in other facilities;
   c. numbers of general anesthetics and IV sedations during the past year similar to those for which he/she is seeking privileges and the name(s) of the facilities in which they were performed;
   d. any other relevant past experience; and

e. letters from two physicians attesting to the skill and judgment of the applicant to perform such procedures.

3. Any application by a physician seeking privileges who DOES hold these privileges in facilities administered by a Regional Health Authority shall include:

   a the physician's name, address, and registration number with the CPSA;
   b. description of the privileges currently held in a Regional facility; and
   c. letter from the Regional Health Authority confirming the privileges held and the good standing of the applicant.

4. In the case of urgently required privileges the Medical Director may grant temporary privileges for no greater than 5 working days when he/she has sufficient knowledge of the competence of the applicant in the procedures requested and the good standing of the applicant with their College. The Medical Director shall notify the appropriate College of any such privileges in writing within one week.

5 The Medical Director shall forward a copy of all physician applications for privileges, including those of the Medical Director, to the CPSA together with his/her assessment of the suitability of the applicant and the privileges requested.

6. Except as described in section (4.2.2.4) above, no privileges may be granted by the Medical Director until approved by the appropriate College.

7. The Advisory Committee designated by the Council shall consider all applications and make recommendations as to privileges.

8. Interim recommendations may be made by the Registrar, to be amended or confirmed at the next meeting of the Advisory Committee designated by Council.

9. The decision of the Advisory Committee will be sent to the physician for privileges and to the Medical Director.

10. Appeals of the Committee's decision shall be made in the first instance to the Registrar, who may refer it back to the Committee for reconsideration.

11. A further appeal may be made to Council if necessary.

12. It may be considered unbecoming conduct for a medical practitioner to perform any procedure in a Non-Hospital Surgical Facility for which privileges have not been recommended by the CPSA.

13. The Medical Director shall maintain an up-to-date list of all privileges approved for each physician and dentist/OMFS in the facility and a file with all applications and reapplications for privileges for inspection by the CPSA upon request.

14. Applications for additional privileges of a different type than currently held in the facility by the physician shall be sent by the Medical Director to the CPSA for review by its Advisory Committee.

4.2.3 Annual Facility Renewal of Privileges

1. On an annual basis, physicians shall provide to the Medical Director a copy of the regional health authorities' confirmation of privilege renewal in the region.

2. Physicians that do not hold regional privileges shall make re-application to the Medical Director annually and include:

    a. The approximate total of general anesthetics and IV sedations performed during the previous year;
    b. Any changes to privileges in this or other health care facilities during the previous year;
    c. A summary of CME and any performance reviews undertaken during the previous year;
    d. The outcome of discipline for professional conduct or competence during the previous year by any professional body; and
    e. Any other matters which may affect a physician's competence or performance

3. The Medical Director shall also keep on file confirmation of renewal of regional health authority privileges; or, as in 4.2.3.2 if regional privileges are not held.

4. The Medical Director shall advise the appropriate college or regulatory body of any information contained in a re-application for privileges which, in his/her opinion, could adversely affect a decision to continue privileges.

5.0 Patient Care

5.1 Pre-Operative Evaluation

5.1.1 Patient Selection

All patients undergoing anesthesia (as defined in Section 3.1.) in an NHSF shall be assigned an American Society of Anesthetists (ASA) classification of physical status by an anesthesiologist. Class III and IV patients may be accepted only if the patient's disease entity could not reasonably be expected to be affected adversely by the anesthetic or the procedure. A discussion shall occur between the surgeon and anesthesiologist, well in advance of the scheduled procedure, for all Class III and IV cases, and for any patient with a BMI > 35. The discussion will focus on the appropriateness of the NHSF setting, the pre-operative evaluation and care, and the intra-operative and post-operative requirements for safe performance of the procedure. This shall be documented on the patient's record.

ASA Physical Status Classification

ASA I	A normal healthy patient
ASA II	A patient with mild systemic disease
ASA III	A patient with severe systemic disease limiting activity but NOT INCAPACITATING
ASA IV	A patient with INCAPACITATING systemic disease that is a constant threat to life
ASA V	A moribund patient not expected to live 24 hours with or without operation

5.1.2 Patient Assessment & Care

1. Each patient who is to undergo a general anesthetic or who is to be sedated and monitored by an anesthesiologist, shall have a documented, dated and signed, pre-operative anesthetic assessment not more than 2 weeks before the anesthetic.

2. The pre-operative anesthetic assessment should be carried out by the anesthesiologist who is to provide the anesthetic services.

3. The pre-operative anesthetic assessment shall include:

    a. A review of the patient's clinical record;
    b. A medical interview with the patient;
    c. A physical examination relative to anesthetic aspects of care;
    d. A review and ordering of tests as indicated;
    e. A review or request for medical consultations as necessary for patient assessment and planning of peri-operative care; and

f. Orders for pre-operative preparation such as fasting, medication, or other instructions as indicated.

4. The patient or responsible adult shall be given adequate opportunity to provide information, to ask questions and to have a satisfactory explanation of the procedure and of the proposed choice of anesthetic by the dentist/OMFS and physician responsible for each.

5.1.3 Surgical Safety Checklist

1. A Surgical Safety Checklist shall be completed by all members of the surgical team to communicate safety checks at three critical points:

   a. Briefing – before induction of anesthesia

   b. Time out – before procedure

   c. Debriefing – before patient leaves the OR

2. Completion of the Checklist shall be documented.

3. There shall be a policy and procedure for the use of the Surgical Safety Checklist.

5.1.4 Patient/Site/Side Identification

1. There shall be a process to verify, with a written policy and procedure, the identity of the patient and the correct surgical site.

2. This shall be documented and include:

   a. A detailed pre-operative identification/verification process; (information gathering, beginning with the determination to do the procedure, continuing through all settings and interventions involved in the pre-operative preparation of the patient, up to and including the "time out" just before the start of the procedure).

   b. Marking the operative site when extraoral procedures are performed. The intended site must be marked such that the mark will be visible after the patient has been prepped and draped. For intraoral procedures, a dental treatment plan shall be available.

   c. "Time out" immediately before starting the procedure; (active communication among all members of the surgical/procedure team, consistently initiated by a designated member of the team, conducted in a" fail-safe" mode whereby the procedure is not started until any questions or concerns are resolved).

5.1.5 Signed informed consent

1. The patient or legal guardian shall give signed informed consent for the procedure/anesthetic and this shall be part of the patient's clinical record.

5.2 Intra-Operative Management: Anesthesia & IV Sedation

This section deals with the requirements for managing patients undergoing general anesthesia and for sedated patients where awareness and protective reflexes may be obtunded.

5.2.1 General anesthesia shall be administered by a qualified physician with privileges in these procedures. The anesthesiologist shall remain with the patient at all times throughout the conduct of the anesthetic until the patient is transferred to the recovery area.

5.2.3 Patients undergoing a general anesthetic shall be continuously evaluated with at least the following:

1. Visualization of some portion of the patient under appropriate lighting;
2. Pulse oximeter with audible signal recognition;
3. End tidal carbon dioxide monitoring for each intubated patient, including endotracheal tube or laryngeal mask;
4. Apparatus to measure blood pressure with an appropriately sized cuff;
5. ECG with audible signal recognition;
6. Peripheral nerve stimulator whenever muscle relaxants are used; and
7. Agent-specific gas monitor, whenever inhalation anesthetic agents are used.

5.2.4 Patients undergoing IV sedation shall be continuously evaluated with at least the following:

1. Visualization of patient airway under appropriate lighting;
2. Pulse oximeter with audible signal recognition; and
3. Apparatus to measure blood pressure with an appropriately sized cuff.

5.2.5 In addition to items listed above in 5.2.3 and 5.2.4, devices or drugs which shall be immediately available include:

1. A stethoscope.

2. A source of oxygen.

3. A means of delivering positive pressure oxygen such as a self-inflating bag-valve-mask device.

4. An emergency resuscitation cart which includes:

    a. A cardiac monitor;

b. A manual defibrillator or an automatic or a semi-automatic external defibrillator (AED/SAED);
c. Facilities providing **IV sedation only may** have an automatic or a semi-automatic external defibrillator (AED/SAED) only and are not required to have a cardiac monitor.
[AED/SAED models must be compliant with current requirements of the American Heart Association and be approved for pediatric use if providing care for patients <8yrs old]
d. Endotracheal tubes, laryngeal masks, stylets, airways and facemasks in a selection of sizes appropriate to the expected range of patient sizes and ages; two functioning laryngoscopes and a variety of sizes of laryngoscope blades;
e. Magill forceps;
f. IV supplies and accessory equipment such as syringes, needles, ECG leads, sponges, tape, etc. These shall be stored in an orderly manner and be easily accessible;
g. Cricothyrotomy kit;
h. A backboard for CPR if the surgical chair/table or recovery stretcher are not suitable; and
i. Drugs as listed in Appendix A.

5.3 Intra Operative Management

To be assessed by the ADA&C.

5.4 Recovery Room Management

5.4.1 A recovery room, which may be the operating room if not required for another case, shall be available for the patient's safe emergence from anesthesia.

5.4.2 Requirements for post-operative care and monitoring following **general anesthesia/IV sedation** during the post-anesthetic recovery period include:

1. An anesthesiologist shall remain continuously available while the patient is intubated and be in attendance for extubation.

2. After general anesthesia, an anesthesiologist shall accompany the patient to the recovery room, communicate the appropriate information, and provide written orders for the attending nursing personnel.

3. Until such time as a patient meets documented criteria for discharge from the recovery room after general anesthesia or IV sedation: an anesthesiologist or a registered nurse trained in patient assessment and recovery room procedures shall remain in continuous attendance of the patient. A registered nurse who is responsible for these duties shall possess the skills described below:

a. Maintaining a patent airway;
b. Monitoring vital signs;
c. Venipuncture;

d. Recording appropriate records;
e. Administering medications as required;
f. Assisting in emergency procedures, including the use of a bag-valve-mask device;
g. Current ACLS certification; and
h. Current PALS certification if care is provided to patients 8 years of age or younger.

4. Ongoing assessment of each patient shall include an evaluation of heart rate, blood pressure, oxygen saturation by pulse oximetry, color, level of consciousness, respiration and activity.

5. ECG monitoring shall be immediately available for use on patients in the recovery room.

6. Suction, oxygen and a bag-valve-mask device shall be immediately available.

7. Adequate intravenous and other medical/surgical supplies, and medication required for patient care post-operatively shall be immediately available.

8. Patients who are resuscitated after a cardiac arrest shall be transferred to hospital by emergency medical services accompanied by the attending anesthesiologist as soon as safely possible but always within one hour of return of circulation.

5.5 Discharging the Patient

5.5.1 All patients shall be advised of the necessity of being accompanied from the facility by a responsible adult.

5.5.2 For patients who are unable or unwilling to arrange to be accompanied by a responsible adult, the following additional measures shall be undertaken:

1. The attending physician shall document in the patient's chart that:

   a. the patient was advised of the importance of an accompanying adult at the time of discharge,
   b. the attending physician agrees that it is in the patient's best interests to proceed with the surgery in spite of the absence of an accompanying adult.

2. The attending physician should obtain the patient's signature confirming their understanding of the risks.

3. The patient shall remain in the facility until the attending physician determines that the patient's cognitive and physical parameters exceed facility criteria and that the patient can function independently. If the patient does not meet these criteria, then the attending physician shall make arrangements for ongoing care.

4. A discharge order shall be written by the attending physician that includes documentation of: patient cognition, vital signs and readiness for discharge without a responsible adult.

6. The method of transportation reported by the patient shall be documented as acceptable to the attending physician.

5.5.3 Appropriate verbal and written post-discharge instructions shall be given to the patient and an accompanying adult.

5.5.4 The anesthesiologist or other physician qualified to administer IV sedation or general anesthesia shall remain on the premises of the NHSF until the patient meets documented pre-determined recovery criteria using a validated grading system (e.g. Analgesia and Anesthesia…,Current Researches, Volume 49(6): 924-934, Nov-Dec 1970. "A Postanesthetic Recovery Score" by J.A. Aldrete and D. Kroulik.).

5.5.5 The anesthesiologist is responsible for writing the discharge order. However, the actual decision for discharge from the recovery room, based upon established written criteria, may be delegated to trained recovery room personnel.

5.5.6 Instructions not to drive or operate hazardous equipment for 24 hours after a general anesthetic or IV sedation shall be given to the patient and accompanying adult if appropriate for age.

5.5.7 Instructions shall be given to the patient and an accompanying adult explaining the procedure for accessing emergency care if necessary.

5.5.8 Instructions shall be given to the patient and an accompanying adult informing them that the facility should be notified in the event of any unexpected admission to a hospital within 10 days of treatment at the facility.

6.0 Infection Prevention and Control

These standards have been adapted from Provincial Infectious Diseases Advisory Committee - Best Practices for Cleaning, Disinfection and Sterilization in all Health Care Settings; the Canadian Committee on Antibiotic Resistance – Infection Prevention and Control Best Practices for Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinic, and Health Canada – Infection Control Guidelines – Hand Washing, Cleaning, Disinfection and Sterilization in Health Care and Health Canada – Infection Control Guidelines – Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care.

Routine infection control practices shall be incorporated into everyday patient care.
Institutional policy shall provide for education of every care provider in the principles of routine precautions, provision of adequate equipment to implement them, and a means by which compliance with practice can be monitored and audited.
In situations requiring additional precautions, these precautions must be instituted as soon as indicated by triggering mechanisms such as diagnosis, symptoms of infection, laboratory information, or assessment of risk factors.

The institution/facility is responsible for ensuring that appropriate precautions are taken for specific patients.

All personnel (physicians, nurses, technologists/technicians, students, volunteers and others) are responsible for complying with routine and additional precautions and for tactfully calling observed infractions to the attention of all offenders. There are no hierarchical exceptions to precautions, and everyone has a responsibility to monitor his or her own practice as well as the practice of other care providers. There are no exceptions, and all should teach by example.

All efforts should be made to prevent the transmission and acquisition of infections at the facility. The NHSF is expected to have well designed facilities, well documented policies and procedures, properly trained personnel, and an orderly pattern of work flow, all of which contribute to an improved standard of care and a lower risk of nosocomial infections.

6.1 Occupational Health/Immunization

To be assessed by the ADA&C.

6.2 General Infection Prevention Measures

6.2.1 Hand hygiene (washing with soap and water or using alcohol-based hand rub [ABHR]) shall be performed before contact with a patient or the patient's environment, before a clean or aseptic procedure, after exposure to blood, body fluids or touching contaminated items, following removal of gloves and after contact with a patient or patient's environment. Hands should be washed with soap and water if they are visibly soiled.

6.2.2 Alcohol-based hand rub (ABHR) products and/or hand hygiene sinks shall be available at the point of care.

a. ABHR products shall contain 60-90% alcohol.
b. Hand hygiene sinks shall be used only for the purpose of hand hygiene and not used for equipment cleaning, waste disposal or food preparation.
c. Single use towels shall be available and used to dry hands following hand washing.

6.2.3 Clean non-sterile gloves shall be worn:

a. for contact with blood, body fluids, secretions and excretions, mucous membranes, draining wounds or non-intact skin (open skin lesions or exudative rash);
b. when handling items visibly soiled with blood, body fluids, secretions or excretions;
c. when the healthcare worker has open lesions on the hands.

6.2.4 Gloves are to be removed and hand hygiene performed immediately after completion of care or procedure; at point of use and before touching clean environmental surfaces.

6.2.5 A new virus filter shall be placed at the patient end of the circuit or a clean anesthetic circuit shall be used for each patient.

6.3 Additional Precautions

Airborne, droplet and contact transmission precautions to be assessed by the ADA&C

6.4 Patient Care Practices

To be assessed by the ADA&C.

6.5 Reprocessing (Cleaning, Disinfection, and Sterilization)

Only for anesthesia equipment.

6.5.1 General

6.5.1.1 There shall be no re-use of critical or semi-critical medical equipment labeled as single-use by the manufacturer.

6.5.1.2 All critical medical equipment shall be sterilized before each patient use. (medical equipment that enters sterile tissues, including the vascular system)

6.5.1.3 All semi-critical medical equipment shall receive a minimum of high level disinfection before each patient use. (medical equipment that comes in contact with non-intact skin or mucous membranes)

6.5.1.4 There shall be current written policies and procedures on all steps of reprocessing readily available for staff.

6.5.1.5 There shall be written information from the manufacturer on the safe and appropriate reprocessing of this medical equipment, included in the written procedures.

6.5.1.6 There shall be a designated reprocessing area that is separate from patient care areas.

6.5.1.7 Hand hygiene stations for staff shall be readily available in the reprocessing area. (Either handwashing sinks or alcohol dispensers.)

6.5.1.8 Clean Personal Protective Equipment (PPE) shall be worn by staff when reprocessing. (Eye protection or face shields, masks, gowns, gloves.)

6.5.1.9 There shall be a designated staff member responsible for reprocessing.

6.5.1.10 There shall be documented training process for staff performing reprocessing.

6.5.2 Cleaning

6.5.2.1 Cleaning detergent and solutions shall be used according to the manufacturer's written instructions.

6.5.2.2 Cleaning with detergent or enzymatic solutions and clean water shall always precede subsequent high-level disinfection or sterilization processes.

6.5.2.3 Cleaning shall always be performed as soon as possible after use to prevent bio-burden from hardening.

6.5.2.4 Instruments may be immersed in an appropriate solution if cleaning will be delayed.

6.5.2.5 Detergent or enzymatic cleaning solutions shall be discarded after each use.

6.5.2.6 Manual cleaning using friction shall be performed using cleaning accessories (brushes or sponges).

6.5.2.7 Cleaning accessories shall be disposable or thoroughly cleaned and shall be high level disinfected or sterilized between uses.

6.5.2.8 If mechanical cleaning is performed with automated washer-decontaminators/disinfectors, pre-cleaning shall be performed manually.

6.5.2.9 If ultrasonic washers are used, equipment shall be thoroughly rinsed with clean water prior to additional reprocessing steps.

6.5.2.10 Automatic washers and ultrasonic cleaners shall be used in accordance with the manufacturer's written instruction.

6.5.2.11 There shall be documented preventative maintenance of the automatic washer as specified by the manufacturer.

6.5.2.12 Cleaning protocol/procedure shall include the following steps prior to high level disinfection or sterilization:

a. disassembly (if applicable);
b. sorting and soaking;
c. physical removal of organic material;
d. rinsing;
e. drying;
f. physical inspection;
g. wrapping (if applicable).

6.5.2.13 There shall be a designated area for soiled instruments and equipment. This area shall be physically separated from patient care areas and from areas housing clean and sterile supplies.

6.5.2.14 The soiled area should have:

1. Adequate counter space to receive soiled instruments and equipment.
2. A double utility sink to rinse and clean soiled items.
3. A flushing device for the disposal of body fluid wastes.

6.5.2.15 The clean area shall have adequate counter space for receiving washed equipment for storage or wrapping.

6.5.2.16 There shall be a sink dedicated to hand washing or alcohol hand rub available in the reprocessing area.

6.5.3 High Level Disinfection (HLD)

6.5.3.1 The HLD product used shall have a Drug Identification Number (DIN) from Health Canada.

6.5.3.2 HLDs shall be prepared and used correctly to achieve the manufacturer's recommended dilution and time of immersion required to attain HLD.

6.5.3.3 When preparing HLD solutions, sources of extrinsic contamination (contaminated containers/preparation area) shall be prevented.

6.5.3.4 HLD concentration shall be checked daily at a minimum with an appropriate chemical test strip; and shall be discarded/changed if the concentration is less than the minimum effective concentration (MEC).

6.5.3.5 The HLD product shall be discarded/changed when the shelf life recommended by the manufacturer is reached.

6.5.3.6 There shall be a log kept of dates when HLD is changed.

6.5.3.7 Test strips shall not be used past the expiry date listed on the container.

6.5.3.8 There shall be a quality control procedure for checking test strips each time a new bottle is opened and shall be performed according to the manufacturer's recommendation.

6.5.3.9 A log shall be kept of the quality control procedure on test strips.

6.5.3.10 Rinsing of medical equipment following HLD shall be performed with three separate rinses with clean water. Sterile or sub-micron filtered tap water is recommended.

6.5.3.11 All reprocessed equipment shall be stored in a manner to keep them clean and dry.

6.5.4 Thermal Disinfection of Semi-Critical Devices:

6.5.4.1 Thermal disinfection equipment (e.g. pasteurizer, washer-disinfector) shall have a Health Canada Medical Device License.

6.5.4.2 Devices shall be cleaned and rinsed prior to pasteurization/thermal disinfection.

Air pockets shall be displaced from the load and all devices shall be completely submerged during the pasteurization cycle.

6.5.4.3 Devices shall be processed at a minimum temperature of 71○C with a contact time of 30 minutes.

6.5.4.4 If a washer –disinfector is used to terminally disinfect semi-critical devices, the efficacy of the washer-disinfector shall be validated for this purpose.

6.5.4.5 The washer-disinfector shall be equipped with accessory manifolds and attachments designed for the devices to be disinfected.

6.5.4.6 For each reprocessing cycle, the pasteurizer or washer-disinfector shall provide a permanent record of date, temperature, exposure time and confirmation that cycle parameters have been met.

6.5.4.7 Following pasteurization/thermal disinfection, devices shall be handled to prevent contamination and transferred to a HEPA filtered drying cabinet that is used only for the drying of disinfected devices

6.5.4.8 The pasteurizer or washer disinfector shall be maintained according to manufacturer's instructions.

6.5.5 Sterilization

6.5.5.1 Flash sterilization shall only be used in emergency situations and must never be used for implantable devices.

6.5.5.2 All sterilization processes/equipment shall follow the manufacturer's instructions for installation, operation and preventative maintenance of equipment.

6.5.5.3 A log shall be kept of preventative maintenance performed on sterilization equipment.

6.5.5.4 Equipment to be sterilized shall be wrapped and secured in materials that allow sterilant penetration, and shall be appropriate to the sterilization method and provide a barrier to contamination.

6.5.5.5. Bowie Dick air removal test (high vacuum sterilizers only) shall be done daily and documented.

6.5.5.6 Each load shall be monitored with mechanical digital indicators (time, temperature, pressure).

6.5.5.7 Each load/package shall be monitored with the appropriate chemical indicators (internal and external).

6.5.5.8 A log shall be kept of mechanical indicator results.

6.5.5.9 If mechanical or chemical indicators suggest inadequate processing, the items shall not be used.

6.5.5.10 Sterilizers shall be monitored with the appropriate biological indicator each day the sterilizer is used. (With every load if sterilizing implantable devices.)

6.5.5.11 At least one unprocessed control biological indicator from each lot of biological indicators shall be incubated according to the biological indicator manufacturer's instructions and results documented.

6.5.5.12 If processed biological indicator is positive, the load shall be recalled and the equipment not used.

6.5.5.13 A log shall be kept of biological indicator monitoring results.

6.5.5.14 A log shall be kept of all maintenance and interventions associated with a positive biological indicator.

6.5.5.15 A log is kept of each sterilization cycle that documents load number and load contents.

6.5.5.16 Wrapped sterilized packages shall be labeled with a load number, sterilizer and date.

6.5.5.17 There shall be a process in place that clearly identifies a non-reprocessed piece of equipment from one that has been reprocessed.

6.5.5.18 The sterile storage area shall be well-ventilated and protected from dust, moisture, insects, and temperature (to avoid excessive humidity) extremes.

6.5.5.19 Critical equipment that is sterilized unwrapped shall be used immediately and not stored.

6.5.5.20 Semi-critical equipment sterilized unwrapped shall be stored in a clean, dry area until use.

6.5.5.21 Equipment shall be cleaned and dried before an unwrapped sterilization cycle. Lumens shall be flushed with sterile water prior to sterilization.

6.5.5.22 Sterility of unwrapped devices shall be maintained during removal from the sterilizer and direct transport to point of use. Sterilized wrapped goods shall not be handled until cooled to maintain sterility.

6.5.5.23 Supplies shall be stored off the floor.

6.5.5.24 Outside shipping cartons and any corrugated cardboard containers shall not be kept in the clean supply area. De-boxing of the cartons shall not be carried out in the clean area or in the patient care areas.

6.5.5.25 The following is a list of documents which describe guidelines for sterilization. They should be consulted as necessary but do not necessarily constitute CPSA standards.

Standards Reference List

The following is a list of documents used as reference in creation of the infection control standards. Facilities are not required to obtain these standards.

NOTE: *Copies of the following documents can be obtained by contacting the Canadian Standards Association at:*

1707 94 Street
Edmonton AB T6N 1E6
Phone: 1-800-463-6727
Fax: (780) 435-0998
www.csa.ca

CAN/CSA-Z314.3-09	Effective Sterilization in Health Care Facilities by the Steam Process
CAN/CSA Z314.7-03	Steam Sterilizers for Health Care Facilities
CAN/CSA-Z314.8-08	Decontamination of Reusable Medical Devices

CAN/CSA-Z314.10.1-10	Selection and Use, of gowns, drapes and wrappers in health care facilities.
CAN/CSA-Z314.10.2-10	Laundering, maintenance, and preparation of multiple-use gowns, drapes, and wrappers in health care facilities.
CAN/CSA Z314.14-10	Selection and Use of Rigid Sterilization Containers
CAN/CSA-Z314.15-10	Warehousing, Storage, and Transportation of Clean and Sterile Medical Devices
CAN/CSA-Z314.22-10	Management of Loaned, Reusable Medical Devices
CAN/CSA-Z317.13-07	Infection Control During Construction or Renovation of Health Care Facilities
CAN/CSA-Z314.23-12	Chemical Sterilization of Reusable Medical Devices
CSA PLUS 1173-12	Guide to the Selection and Use of Sterilization Indicators
CAN/CSA-ISO Z17664-06	Sterilization of medical devices – Information to be provided by the manufacturer for the processing of re-sterilizable medical devices

6.6 Housekeeping and Waste Management

To be assessed by the ADA&C.

7.0 Facility

7.1 Personnel Requirements

To be assessed by the ADA&C.

7.2 General/Physical Standards

To be assessed by the ADA&C.

7.3 Administration Standards

7.3.1 Ownership of the non-hospital surgical facility shall be clearly identified to the CPSA.

7.4 Operating Room Standards

7.4.1 There shall be backup power for any critical anesthetic and surgical equipment.

7.4.2 Adequate suction for use by the anesthesiologist shall be available in the O.R.

7.5 Recovery Room Standards

7.5.1 There shall be a recovery room which is separate from the operating room if surgical cases are carried out while other patients are recovering from anesthetics or IV sedation.

7.5.2 The size of the recovery room will depend on projected use:

1. It shall accommodate the volume of patients expected for minimum of 2 hours operating room time, i.e. 1 hour cases = 2 patients, .5 hour cases = 4 patients.

2. It shall allow easy access for transfer of a patient to or from a stretcher and performance of emergency procedures.

3. Examples of minimum sizes:

    a. 2 stretchers - minimum 2.4 x 2.7 meters with an end door.
    b. 1 stretcher - 1.4 x 2.4 meters with a side entrance + 1 recliner (separate supervised space).

7.5.3 An adequate source of suction and oxygen shall be readily available in the recovery area.

7.5.4 There shall be ready access to a sink for hand washing.

7.5.5 There shall be electrical outlets available to supply power to monitoring equipment if needed. Extension cords shall be appropriately rated and used in a safe manner.

7.5.6 An emergency lighting source shall be available in case of a power failure unless natural light is available.

8.0 Equipment/Supplies

8.1 Anesthetic and Resuscitation Equipment

(See Patient Care 5.2.5 & 5.2.6.)

8.2 Anesthetic Gas Equipment

8.2.1 All equipment for the administration of anesthetics shall be readily available, clean and properly maintained.

8.2.2 Flammable and explosive anesthetics shall not be used in the facility

8.2.3 Anesthetic materials shall be well-organized and anesthetic drugs properly stored.

8.2.4 The following is a list of documents which describe the standards for anesthetic equipment. They should be consulted when necessary but do not necessarily constitute CPSA standards.

NOTE: Copies of the following documents can be obtained by contacting the Canadian Standards Association at:

1707 94 Street
Edmonton, AB T6N 1E6
Phone: 1-800-463-6727
Fax: (780) 435-0998

CAN/CSA Z7396.1-09	Medical Gas Pipeline Systems-Part 1: Pipelines for medical gases and vacuum
CAN/CSA Z.32.2-M89	Electrical Safety in Patient Care Areas
CAN/CSA Z.32.4-M86	Essential Electrical Systems for Hospitals
CAN/CSA Z.5361-94	Tracheal Tubes
CAN/CSA Z.7228-94	Tracheal Tube Connectors
CAN3 Z.168.3-M84	Anesthetic Machines
CAN/CSA Z.5360-94	Keyed Filling Devices Applied to Anesthetic Equipment
CAN/CSA Z.168.5.1	Anesthesia Ventilators
CAN/CSA Z.168.5.2-M1991	Critical Care Ventilators
CAN/CSA Z.168.6-M89	Oxygen Analyzers
CAN/CSA Z.8382-94	Resuscitators
CAN3 Z.168.8-M82 (R1994)	Anesthetic Gas Scavenging Systems
CAN/CSA Z.168.9-92	Breathing Systems for Use in Anesthesia
CAN/CSA Z.305.1-92	Nonflammable Medical Gas Piping Systems
CAN/CSA Z.305.2-M88	Low-pressure Flexible Connecting Assemblies for Medical Gas Systems
CAN/CSA Z.305.3-M87	Pressure Regulators, Gauges and Flow Metering Devices
CAN3 Z.305.4-M85	Qualifications for Medical Gas Testing Agencies
CAN/CSA Z.305.5-M86	Medical Gas Terminal Units (Outlets)
CAN/CSA C22.1	Canadian Electrical Code, Part I, Hospital Patient Care Areas, Sections 24, 52
CAN/CSA C22.2	Medical Electrical Equipment

CAN/CSA Z7396.1-09	Medical Gas Pipeline Systems-Part 1: Pipelines for medical gases and vacuum

8.2.5 There shall be adequate valving to ensure shut-off in case of an emergency and for maintenance of the main pipeline.

8.2.6 There shall be local zone shut-off valves for isolation of specific areas.

8.2.7 There shall be pressure relief valves to safely vent excessive pressures in all pressurized medical gas systems at all pressure levels.

8.2.8 There shall be pressure gauges and an electrical alarm system to ensure continuous surveillance of pipeline pressures.

8.2.9 The anesthetic circuit shall have a functioning low-pressure alarm if a positive pressure ventilator is used.

8.2.10 An oxygen analyzer (with a low oxygen concentration alarm) shall be located in the patient circuit.

8.2.11 A pressure gauge shall be located in the patient circuit.

8.2.12 An effective anesthetic gas scavenging system shall be employed.

8.2.13 An adjustable pressure-limiting valve ("pop-off" valve) shall be included in the circuit.

8.2.14 A reservoir bag and mount shall be included in the circuit.

8.2.15 All medical gas equipment including anesthetic machine, vaporizers, ECG and other monitors, and defibrillators shall be serviced and calibrated at least annually by a qualified person. There shall be documented evidence of this review.

8.2.16 Connections in medical gas systems shall be non-interchangeable between gases. This includes large cylinder to wall installations, wall to hose, hose to anesthetic machine and small cylinder to machine (pin-indexed). Gas hoses, cylinders, flow meters and control valves shall be color coded and/or marked with name or chemical symbol at all junctions.

8.2.17 All anesthetic gas delivery systems shall contain fail safe systems ensuring a minimum of 25% oxygen. The failsafe shall be an **in-ratio** system: the failsafe allows the gas to fall off in the last proportion set by the operator (and this should activate at about 5-6 p.s.i.).

8.2.18 A second supply of oxygen (normally a spare cylinder) with pressure gauge, regulator and wrench shall be available.

8.2.19 Vaporizers shall be appropriate to the particular liquid agent in use. They shall be pin-indexed.

8.3 Drugs

8.3.1 There shall be a drug inventory record and a policy requiring periodic inspection of all drugs kept in the facility.

8.3.2 Drugs shall be stored in a manner suitable for their security, re-stocking, and renewal of out-dated supplies.

8.3.3 Drugs shall be stored according to the manufacturer's recommendations (e.g. refrigeration as necessary).

8.3.4 Refer to Appendix A for lists of required and recommended drugs.

8.4 Controlled Substances/Narcotics

8.4.1 One qualified individual (an RN, an LPN with medication skills, a physician or a dentist/OMFS) shall be designated to have overall responsibility for ensuring that all controlled substances are handled in a manner that permits full auditing of the substances from acquisition through to patient administration.

8.4.2 There shall be a log of controlled substances received by the facility that includes the name and quantity of the drug, and the date received.

8.4.3 All controlled substances shall be kept in a designated secure and locked storage cabinet.

8.4.4 The following information shall be recorded on the log for each use of a controlled substance administered:

- Patient name
- Drug name and amount removed from inventory
- Date
- Name of the person who administered the drug

8.4.5 On each day that controlled substances are used, there shall be an end-of-day balance of the inventory of controlled substances via physical count, verified by the signatures of two qualified staff members.

8.4.6 Investigations conducted as a result of any discrepancies shall be documented.

8.5 Laser Registration

To be assessed by the ADA&C.

8.6 Bone, Bone Product, Cells and Tissues

To be assessed by the ADA&C.

9.0 Documentation/Records

There shall be an appropriate administrative structure to provide for the documentation, storage, and retrieval of all necessary patient information.

9.1 Medical Records

9.1.1 The clinical record shall contain the following:

1. Anesthetic record - when a general anesthetic or IV sedation is administered, an appropriate record shall be kept which includes the following:

    a. Pre-operative anesthetic assessment.
    b. All drugs administered including dose, time, and route of administration.
    c. Fluids administered.
    d. Fluids lost (e.g. blood, urine) where it can be measured.
    e. Measurements made by the required monitors, including blood pressure, heart rate and oximetry at least every five minutes.
    f. Complications and incidents (where applicable).
    g. The name of the anesthesiologist and the surgeon.
    h. Anesthetic start and stop time.
    i. Throat pack insertion and removal (verified by a second worker and documented on the anesthetic or perioperative record) (where applicable).

2. An operative note shall be documented and signed by the dentist/OMFS or anesthetist, on the facility patient care record, on the same day of the procedure, and shall include:

    a. the type of procedure performed.

3. The facility clinical record(s) consisting of:

    a. pre-operative care,
    b. anesthetic care,
    c. peri-operative care,
    d. post-anesthetic care;
    are the property of the facility and the responsibility of the Medical Director.

9.2 Incident Reports

NOTE: **Incident** defined as untoward, undesirable and usually unanticipated events or outcomes that caused harm or risk of harm to a patient, employee or visitor in the facility. An incident may or may not be a result of a deviation from the normal process of care.

9.2.1 All incident reports shall be reviewed at least annually by the Medical Director.

9.3 Reportable Incidents

(Reportable incidents, as defined below, are also known as "significant mishaps" in the Health Care Protection Regulations of Alberta.)

9.3.1 Medical Examiner

1. In the event of a death within the facility, the Medical Examiner shall be notified prior to moving the body or removal of any lines or tubes from the body.

9.3.2 Registrar - College of Physicians & Surgeons of Alberta

1. The Medical Director shall notify the College of Physicians & Surgeons of Alberta (Accreditation Department) within one working day after the discovery of any reportable incident, including:

    a. Deaths within the facility or within 10 days of the procedure.
    b. Transfers from the facility to a hospital regardless of whether or not the patient was admitted.
    c. Unexpected admission to hospital within 10 days of a procedure or anesthetic performed in the facility (See also discharge instructions to patients).

    NOTE: When notified of an unexpected admission of a patient to hospital within 10 days of the procedure in the NHSF, the Registrar may determine that written notification is not required when the reason given for admission to hospital is not related to the services provided in the facility.

    d. Clusters of infections among patients treated in the facility.
    e. Any procedure performed on the wrong patient, site or side.

2. Within **two weeks** of notification, the following shall be submitted to the CPSA:

    1. Completed reportable incident form signed by the Medical Director
    2. Copy of the facility clinical record
    3. Narrative summary describing the incident by the most involved physician

3. The Registrar will review the circumstances with the Medical Director and may consult with other practitioners to determine the risk of harm to patients. If necessary, the Registrar may suspend the accreditation of any facility on a suspicion of continuing risk. An investigation of the facility will then be initiated as soon as is reasonably possible.

9.4 Annual Report to the CPSA

The facility will submit annually to the CPSA on the subscribed form the following information regarding services provided in the facility during the previous calendar year.

9.4.1 The number of anesthetic procedures performed in the facility.

9.4.2 The name of any physicians whose privileges in the facility were not renewed or were reduced and the reason for it.

(The Medical Director has an ethical obligation, as does any physician, to notify the CPSA immediately if he or she is aware of a colleague who may be practicing in a manner that could be harmful to patients.)

10.0 Safety Standards

10.1 General Facility and Patient Safety

10.1.1 Mock drills to prepare employees for emergency situations such as cardiac arrest, shall be conducted at least every six months. The type of drill and employee attendance shall be documented.

10.1.2 The facility shall have plans for emergencies such as:

1. Fire
2. Power Loss
3. Equipment Failure
4. Cardiopulmonary Arrest
5. Anaphylaxis
6. Malignant Hyperthermia
7. Unauthorized Intruder
8. Emergency Transfer to Hospital

10.1.3 There should be documented evidence that all personnel, including medical and dental/OMFS personnel, are familiar with emergency plans.

10.1.4 Smoking shall be prohibited in the patient care, sterile, and preparation areas of the facility.

10.1.5 There shall be a documented policy and procedure in place for handling patient concerns/complaints.

10.1.6 The Medical Director shall ensure that the process for lodging concerns is readily available and apparent to patients and the public.

10.2 Medical Compressed Gases

10.2.1 All new or modified non-flammable medical gas piping systems shall be designed, installed, and tested in accordance with the Alberta Building Code.

10.2.2 All non-flammable medical gas piping systems shall be verified by a Safety Code Officer with Building Group 5-C Certification **prior** to being put into service. A letter of verification shall be kept on file.

10.2.3 All non-flammable medical gas piping systems shall be tested at least every six months for verification of pressure at every outlet with a flow, and verification of vacuum pressure for vacuum outlets. Documentation of the semi-annual checks shall be recorded by a qualified anesthesiologist or certified technologist and a letter of verification shall be kept on file.

*The following list shall be posted for personnel information:

10.2.4 Never permit oil or grease to come in contact with cylinders, valves, regulators, gauges, or fittings.

10.2.5 Store cylinders in designated places away from the operating field where they will not be knocked over or damaged by passing or falling objects.

10.2.6 Cylinders shall be protected from direct sunlight.

10.2.7 Cylinders in use shall be securely chained to a solid object, or in a secure base, to prevent their tipping.

10.2.8 Full cylinders shall be used in rotation in the order that they are received from the supplier.

10.2.9 Never use cylinders for rollers, supports or for any purpose other than to carry gas.

10.2.10 Where caps are provided for valve protection such caps shall be kept on cylinders except when cylinders are in use.

10.2.11 Never tamper with the safety devices in valves or cylinders.

10.2.12 Never attempt to repair or alter cylinders or refill cylinders.

10.2.13 Never attempt to use gases in cylinders not bearing a contents label or cylinder having a label all of which is not completely legible.

10.2.14 Never use oxygen from a cylinder without reducing the pressure through a suitable regulator intended for that purpose only.

10.2.15 Never permit oxygen to enter the regulator suddenly. Open the cylinder valve slowly.

10.2.16 Fully open the valve when the cylinder is in use.

10.2.17 Never interchange oxygen regulators, hose, or other appliances with similar equipment intended for use with other gases.

10.2.18 Never hold a gloved hand over the outlet to test the pressure. A serious burn may result.

10.2.19 Never heat cylinders above room temperature or allow a flame to play on them.

10.2.20 Never use oxygen in place of compressed air as a pressure medium to blow out obstructed pipelines, to operate pneumatic tools or to build up pressure in tank containing oils or other flammable materials. Nitrogen is the preferred gas for blowing out pipelines. Clean compressed air free of water or oil may also be used.

10.2.21 Oxygen shall never be used to blow dust out of clothing or to freshen air in a closed place. Serious burns may result from such practices.

10.2.22 CLOSE ALL OXYGEN CYLINDER VALVES WHEN THE CYLINDERS ARE EMPTY.

10.2.23 At the start of each operating day turn on oxygen regulator only, then turn oxygen on at the machine.

10.2.24 Before any maintenance or repair work is done in any building where general anesthetics are being administered and which would involve interrupting oxygen flow, the anesthesiologist shall be informed immediately and an oxygen analyzer shall be used to check that lines have not been switched. This does not apply to the periodic exchange of tanks.

10.3 Electrical

To be assessed by the ADA&C.

10.4 Fire

To be assessed by the ADA&C.

11.0 Quality Assurance and Improvement

Accreditation by the College of Physicians & Surgeons requires that quality assurance and improvement programs are in place so that high standards of patient care can be demonstrated. These programs should identify potential problems, determine the cause of problems, and implement actions to eliminate or improve them. Many of the components of these programs can be conducted by other staff but results should be reviewed at least annually by the Medical Director.

The following outline provides recommendations for a quality improvement program in non-hospital surgical facilities:

11.1 Process

Examples:

11.1.1 Anesthetic Care

1. Review of procedures in light of new technology or practice guidelines.
2. Case reviews/audits with description of problems and recommendations to prevent future occurrences.

11.1.2 Mock Trials

1. Review of safety procedures and results of mock drills.

11.1.3 Anesthetic Records

1. Audits of completeness, legibility, etc.

11.2 Outcome

Examples:

11.2.1 Incidents/Complications

11.2.2 Case Review Audits

11.2.3 Patient Satisfaction

12.0 Manuals

12.1 Equipment Manual

12.1.1 Equipment (Anesthetic)

This manual should include, as a minimum, for each piece of equipment:

1. A list of contact personnel and phone numbers
2. Manufacturer operating and troubleshooting instructions
3. Preventative maintenance schedule and log
4. Record of repairs

12.2 Safety Manual

This manual should include, as a minimum, the following sections:

1. Medical Compressed Gases
2. Medical Emergencies

Appendix A - Non-Hospital Surgical Facility Drug Supply

1.0 Facilities Providing General Anesthesia

These drugs may be stored in the facility or be brought in by the anesthesiologist.

1.1 Required drugs:

1.1.1 Basic list for emergency treatment:

1. Oral
   a. Acetylsalicylic acid (ASA) and
   b. Nitroglycerin spray.

2. Inhaled
   a. Salbutamol (with spacer device)

3. Intravenous
   a. Atropine;
   b. Benzodiazepine, either midazolam or diazepam;
   c. Beta-blocker;
   d. Dantrolene Sodium, enough for the first dose, when depolarizing muscle relaxants and/or volatile anesthetic gases are used;
   e. Diphenhydramine;
   f. Epinephrine;
   g. Ephedrine, subcutaneous and intravenous;
   h. Furosemide;
   i. Glucose 50%;
   j. Hydralazine or nifedipine;
   k. Hydrocortisone;
   l. Lidocaine, bolus doses & one infusion bag;
   m. Naloxone, when parenteral narcotics are used;
   n. Neostigmine or equivalent, when non-depolarizing muscle relaxants (except mivacurium) are used;
   o. Phenylephrine;
   p. Procainamide;
   q. Short-acting muscle relaxant;
   r. Sodium bicarbonate;
   s. Sterile water or saline for dilution;
   t. Verapamil or adenosine.

1.2 Recommended drugs:

1.2.1 Intravenous

1. Amiodarone
2. Flumazenil
3. Vasopressin

2.0 Facilities Providing IV Sedation.

2.1 Required Drugs:

2.1.1 Basic list for emergency treatment:

1. Oral
   a. Acetylsalicylic acid;
   b. Nitroglycerin spray.

2. Inhaled
   a. Salbutamol (with spacer device)

3. Intravenous
   a. Atropine;
   b. Benzodiazepine, either midazolam or diazepam;
   c. Diphenhydramine;
   d. Epinephrine, subcutaneous and intravenous;
   e. Naloxone, when parenteral narcotics are used.