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# STANDARDS FOR STANDALONE DAY SURGERY CENTRES

## Version 3.1

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Health Policies and Standards Department

Health Regulation Sector (2021)

## INTRODUCTION

Health Regulation Sector (HRS) is an integral part of the Dubai Health Authority (DHA). It has been established to regulate, license and monitor health facilities and healthcare professionals in the Emirate of Dubai. The Standard was developed to improve the quality and safety of Day Surgical Centre Services (DSCS) under DHA jurisdiction. The Standard for Day Surgical Centre aims to fulfil the following overarching DHA Strategic objectives set out in the Dubai Health Strategy (2016–2021).

**Objective #1:** Position Dubai as a global medical destination by introducing a value-based, comprehensive, integrated and high-quality service delivery system.

**Objective #2:** Direct resources to ensure a happy, healthy and safe environment for the Dubai population.

**Objective #3:** Promote public and private collaboration in healthcare.

**Objective #4:** Foster innovation across the continuum of care.

## ACKNOWLEDGMENT

The Health Policy and Standards Department (HPSD) developed this document in collaboration with Subject Matter Experts. HPSD would like to acknowledge and thank the subject matter experts for their contribution and dedication to improving healthcare services' quality and safety.

**Health Regulation Sector**

**Dubai Health Authority**

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## EXECUTIVE SUMMARY

The purpose of this document is to assure the provision of the highest levels of safety and quality *Standalone Day Surgical Centre Services (DSCS)* at all times. The standards have been developed to align with the evolving healthcare needs and international best practice. The standards include several aspects required to provide effective, efficient, safe and high-quality Day Surgical Services.

The standards include the health facility and healthcare professional requirements, staffing requirements, permitted sedation levels, permitted patient acuity, emergency management and transfer of patients, sedation and procedure requirements. The standards address patient care and safety requirements, including set up, pre-assessment, diagnostics, informed consent, equipment use and maintenance, medication management, records management, infection control, quality control, reporting key performance data and patient rights and responsibilities are also included.

A Day Surgical Standalone Centre is a freestanding surgical centre that provides low complexity surgical and diagnostic procedures and services for healthy patients or patients with mild diseases only without substantive functional limitations who do not require hospitalization or overnight stay beyond midnight. A Day Surgical Standalone Centre may include several surgical units to accommodate different procedures by the respective surgical team. Day Surgical Centres are Consultant or Specialist Led services supported by a surgical team who are trained, competent, experienced and privileged by the Medical Director to perform specified surgical procedures within the confinements of permitted licensure, specialisation (and procedure), patient acuity and sedation levels.

The key updates on Version 3 are set out below:

1. Version 3 changed to 3.1
2. Clarified Clinical Audit in the definitions (page 7).
3. The term dissociative anesthetics is used instead of drugs (page 8).
4. Informed consent – for elective cases two consent is needed and for higher level sedation if it is needed (pages 8 and 32).
5. Permitted hours to administer anesthesia for CM and C have been included (Page 21).
6. Where there is misalignment between patient safety, facility classification, sedation level then the patient needs to be transferred to a higher facility level (page 21).
7. Minimum experience for consultants and specialists leading DSC (page 22).
8. Visiting surgeons shall be available forty-eight (48) hours after the procedure (page 37).
9. CLASS B – permits endoscopy procedures with the provision that there is at least a part time anesthetist present (pages 27), equipment and a recovery room (45).
10. Anesthetist should be supported by a technician or privileged nurse (page 27).
11. CLASS A and B – the surgeon is responsible for managing medications (page 29).
12. DSC Class B, CM and C shall ensure the anaesthetist is responsible for managing anaesthesia, narcotic and controlled medications, emergency medicine, any other medication and record-keeping (page 29)
13. Ambulatory care pharmacy services require a full-time pharmacist (page 29).
14. Clarification of pre-op assessment tests for all DSC CLASS (page 31-32).
15. CLASS B, CM and C equipment (pages 23-25, 45, and 47).
16. Medical waste should all be labelled in yellow bags as per Dubai Municipality and radioactive waste should be placed in a lead box (page 59).
17. Appendix 1 has been updated (pages 75-76)
18. Medication list has been updated for CLASS B and CM (Appendix 2 pages 77-79)
19. Surgical list has been updated (Appendix 3 pages 80-87).
20. Updated emergency medications (Appendix 11 and 12, pages 103-106).

## DEFINITIONS

**Adverse Event:** is an unanticipated, unintended, undesirable or potentially dangerous occurrence/injury in a Healthcare organization.

**Analgesia:** means the reduction or elimination of pain. It is usually induced by drugs that act locally (by interfering with nerve conduction) or generally (by depressing pain perception in the central nervous system).

**Clinical Audit:** is a systematic examination to review and determine whether actual activities and results comply with standards of care.

**Consultant/Specialist Led Service:** is a service where a consultant or specialist physician or dentist retains overall clinical responsibility for the service, care professional team or treatment. The consultant or specialist takes clinical responsibility for the overall patient care and is the lead for the surgical procedure.

**Day Surgery Centre (standalone):** A Standalone Day Surgical Centre (herein referred to as Day Surgical Centre or DSC) is an independent Health Facility, which provides Day Surgical Services and is not located within or adjoining a hospital. It has an operating theatre and provides low complexity surgical and diagnostic procedures and services for healthy patients or patients with mild diseases only without substantive functional limitations who do not require hospitalization or overnight stay beyond midnight. A Day Surgical Centre may include several surgical units to accommodate different procedures by the respective surgical teams. Day Surgical Centres are Consultant or Specialist led services supported by a surgical team who are trained, competent, experienced and privileged by the

Medical Director to perform specified surgical procedures within the confinements of the permitted licensure, specialisation, patient acuity and sedation levels.

**Dissociative Anaesthetics:** Are different type of anaesthetics characterized by Catalepsy, amnesia and marked analgesia and elicit feelings of detachment/dissociation from the environment and self e.g. Ketamine. The clinical effect on CNS and CVS is different from the conventional anaesthesia produced by Barbiturates and propofol.

**Healthcare professional:** shall mean a natural person who is authorized and licensed by the Dubai Health Authority (DHA) to practice any healthcare professions as per the unified prequalification's requirements for the United Arab Emirates.

**Informed Consent:** refers to an agreement and permission accompanied by full information on the nature, risks and alternatives of a surgical or interventional procedure. Informed consent for elective surgical procedures under general anaesthesia should be done in two-steps, i.e. consent at the point of pre-op assessment and consent on the day of the procedure. At both points, consent is taken in a written form. Consent should also be taken for cases that undergo moderate sedation and may require deep sedation in the same or higher facility. Similarly consent should be taken for cases that undergo deep sedation and may require general anesthesia in the same or higher facility.

**Never Events:** are defined as Serious Incidents/Preventable Adverse Events that are wholly preventable because guidance or safety recommendations that provide systemic protective barriers are available at Dubai or Federal level have not been implemented by the healthcare provider.

**Operating Room:** is defined as a room in the surgical suite that meets the requirements of a restricted area and is designated and equipped for performing surgical operations or other invasive procedures



that require an aseptic field. A different form of anaesthesia may be administered in an OR as long as appropriate anaesthesia gas administration devices and exhaust systems are provided. A hybrid operating room is an operating room that has permanently installed equipment to enable diagnostic imaging before, during, and after surgical procedures (use of mobile imaging technology does not make an OR a hybrid operating room).

**Patient:** Any individual who receives medical attention, care, treatment or therapy by a DHA licensed healthcare professional in a DHA licensed health facility.

**Procedures:** are surgical interventions, which require Informed Consent from the patients or next of kin/ legal guardian, as per UAE Federal Laws.

**Procedure Room:** is a room for the performance of medical procedures that do not require an aseptic field but may require the use of sterile instruments or supplies. Procedure rooms are considered open areas. Local anaesthesia and minimal and moderate sedation may be administered in a procedure room, but anaesthetic agents used in procedure rooms do not require special ventilation or scavenging equipment.

| ASA PS Classification | Definition                                                                                                                                                                                            | Examples including but not limited to                                                                                                                                                                                                                                                                                                                                  |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ASA I</b>          | A normal healthy patient                                                                                                                                                                              | Healthy, non-smoking, no or minimal alcohol use                                                                                                                                                                                                                                                                                                                        |
| <b>ASA II</b>         | A patient with mild systemic disease                                                                                                                                                                  | Mild diseases only without substantive functional limitations. Current smoker, social alcohol drinker, pregnancy, obesity ( $30 < \text{BMI} < 40$ ), well-controlled DM/HTN, mild lung disease                                                                                                                                                                        |
| <b>ASA III</b>        | A patient with severe systemic disease                                                                                                                                                                | Substantive functional limitations; One or more moderate to severe diseases. Poorly controlled DM or HTN, COPD, morbid obesity ( $\text{BMI} \geq 40$ ), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, history (>3 months) of MI, CVA, TIA, or CAD/stents |
| <b>ASA IV</b>         | A patient with severe systemic disease that is a constant threat to life                                                                                                                              | Recent (<3 months) MI, CVA, TIA or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, shock, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis                                                                                                                                                |
| <b>ASA V</b>          | A moribund patient who is not expected to survive without the operation                                                                                                                               | Ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction                                                                                                                                                                            |
| <b>ASA VI</b>         | A declared brain-dead patient whose organs are being removed for donor purposes                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Emergency</b>      | **The addition of "E" denotes Emergency surgery: (An emergency is defined as existing when delay in treatment of the patient would lead to a significant increase in the threat to life or body part) |                                                                                                                                                                                                                                                                                                                                                                        |

**Note 1:** The American Society of Anaesthetists' Physical Class System was designed to describe the patient's current health status. As such, it is one of the most important factors used to assess the overall perioperative risk.

**Note 2:** Level III-VI patients are not permitted in a DSC setting

**Recovery Area:** means a room/area dedicated to providing medical services to patients recovering from Surgery or Sedation/Anesthesia.

**Restricted Area:** A surgical suite is a designated space that can only be accessed through a semi-restricted area to achieve a high level of asepsis control. Traffic in the restricted area is limited to authorized personnel and patients. All surgical personnel are required to wear surgical attire and cover head and facial hair. Masks are needed where open sterile supplies or scrubbed persons may be located.

**Risk Management:** is defined as 'a logical and systematic method of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risks associated with any activity, function or process in a way that enables the organization to minimize losses and maximize opportunities.

**Safety:** means the condition of being protected against physical, psychological, or other types or consequences of failure, error, or harm, which could be considered non-desirable. This can take the form of being protected from the event or exposure to something that causes health losses, such as using a drug, a procedure, or risk in the care environment.

**Sedation:** The administration of a sedative agent or drug to induce a state of calm, restfulness, or drowsiness. The sedative agent or drug depresses the central nervous system's activity, reduces anxiety, and induces sleep. There are four levels of sedation; however, given that sedation is a continuum, it is not always possible to predict how an individual patient will respond, and the patient may progress to a level of sedation that is beyond the scope of practice of staff without specific anaesthesia training:

a. **Minimal Sedation (Anxiolysis)** is a drug-induced state to reduce patient anxiety during which the patient normally responds to verbal commands (technically awake). In this stage, the following shall be present:

- Normal respirations
- Normal eye movements
- Intact protective reflexes
- Amnesia may or may not be present

Refer to CLASS A CENTRE (**Appendix 1 and 2**).

b. **Moderate Sedation/Analgesia (Conscious Sedation)** is a drug-induced depression of consciousness. The patient tolerates unpleasant therapeutic or diagnostic procedures and responds purposefully to verbal commands, either alone or accompanied by light tactile stimulation, while maintaining cardiorespiratory function. This commonly involves the intravenous administration of drugs with anxiolytic, hypnotic, analgesic, and amnesic properties either alone or as a supplement to a local or regional anaesthetic. Moderate sedation is a medically controlled state of drug-induced depressed consciousness that:

- Allows protective reflexes to be maintained
- Retains the patient's ability to maintain a patent airway independently and continuously;
- Permits appropriate response by the patient to physical stimulation or verbal command, for example, "open your eyes."
- The drugs, doses, and techniques used are not intended to produce a loss of consciousness.

Refer to CLASS B CENTRE (**Appendix 1 and 2**).

c. **Deep Sedation/Analgesia** is a drug-induced depression of consciousness or unconsciousness during which patients cannot be easily aroused and respond purposefully following repeated or painful stimulation or verbal command. The ability to independently maintain ventilatory function may be impaired; thus, patients may require assistance in maintaining a patent airway and spontaneous ventilation. Cardiovascular function is usually maintained.

Refer to CLASS CM CENTRE (**Appendix 1 and 2**).

d. **General Anesthesia** is a controlled state of drug-induced unconsciousness state accompanied by a loss of protective reflexes, including losing the ability to maintain a patent airway independently or respond purposefully to physical stimulation or verbal command. Cardiovascular function may be impaired, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function.

Refer to CLASS C CENTRE (**Appendix 1 and 2**).

**Semi-restricted Area:** comprises the peripheral support areas surrounding the restricted area of a surgical suite. These support areas include storage areas for clean and sterile supplies, sterile processing rooms, work areas for storage and processing of instruments, scrub sink areas, corridors leading to the restricted area, and pump rooms.

**Sentinel Event:** is defined as an unanticipated occurrence involving death or significant permanent loss of function unrelated to the natural course of the patient illness or underlying condition.

**Spinal Anesthesia:** is a single injection with a thin needle that puts the local anaesthetic close to the nerves within the Cerebrospinal Fluid (CSF) surrounding the spinal cord.

**Topical Anesthesia:** means the application of an anaesthetic agent (spray, gel, cream or eye drops) or directly to the skin or mucous membranes, intended to produce a transient and reversible loss of sensation to a circumscribed area.

## ABBREVIATIONS

|             |                                           |
|-------------|-------------------------------------------|
| <b>ACLS</b> | Advanced Cardiac Life Support             |
| <b>ALS</b>  | Advanced Life Support                     |
| <b>ASA</b>  | American Society of Anaesthesiologists    |
| <b>ATLS</b> | Advanced Trauma Life Support              |
| <b>BLS</b>  | Basic Life Support                        |
| <b>BMI</b>  | Body Mass Index                           |
| <b>CAD</b>  | Coronary Artery Disease                   |
| <b>CDC</b>  | Centre for Disease Control and Prevention |
| <b>CHF</b>  | Congestive Heart Failure                  |
| <b>COPD</b> | Chronic Obstructive Pulmonary Disease     |
| <b>DAMA</b> | Discharge Against Medical Advice          |
| <b>DHA</b>  | Dubai Health Authority                    |
| <b>DIC</b>  | Disseminated Intravascular Coagulation    |
| <b>DM</b>   | Diabetes Mellitus                         |
| <b>DSC</b>  | Day Surgical Centre                       |
| <b>DSS</b>  | Day Surgical Services                     |
| <b>DVT</b>  | Deep Vein Thromboembolism                 |
| <b>ESRD</b> | End-Stage Renal Disease                   |

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|              |                                    |
|--------------|------------------------------------|
| <b>GIFT</b>  | Gamete Intra-fallopian Transfer    |
| <b>HFG</b>   | Health Facility Design Guidelines  |
| <b>HRS</b>   | Health Regulation Sector           |
| <b>HTN</b>   | Hypertension                       |
| <b>ICSI</b>  | Intracytoplasmic Sperm Injection   |
| <b>IPU</b>   | Inpatient Unit                     |
| <b>IUCD</b>  | Intrauterine Contraceptive Device  |
| <b>IUI</b>   | Intra Uterine Insemination         |
| <b>IV</b>    | Intravenous                        |
| <b>IVF</b>   | In vitro Fertilization             |
| <b>MI</b>    | Myocardial Infarction              |
| <b>MoHAP</b> | Ministry of Health and Prevention  |
| <b>MSDS</b>  | Material Safety Data Sheets (MSDS) |
| <b>PALS</b>  | Pediatrics Advanced Life Support   |
| <b>PSA</b>   | Procedural Sedation and Analgesia  |
| <b>PPE</b>   | Personal Protective Equipment      |
| <b>RN</b>    | Registered Nurse                   |
| <b>TIA</b>   | Transient Ischemic Attack          |
| <b>UPS</b>   | Uninterrupted Power Supply         |
| <b>VTE</b>   | Venous Thromboembolism             |
| <b>ZIFT</b>  | Zygote Intra-fallopian Transfer    |

## 1. BACKGROUND

Developments in medical technology have resulted in a rise in the use of ambulatory surgery. The use of fast- and short-acting anaesthetics, analgesics, muscle relaxants, and improved monitoring techniques reduces anaesthetic complications during recovery. Additionally, surgical techniques have enabled physicians to provide more invasive and complex medical procedures in an ambulatory care setting, specifically Day Surgical Centres (DSC). A DSC is where admission, preparation and simple to moderate operative or endoscopic procedures are performed; within the same day and recovery/discharge is completed with patients who do not require hospitalization or overnight stay beyond midnight. DSC is a Unit with one or more Operating Rooms (or Procedure Rooms) with the provision to deliver anaesthesia and accommodation for the immediate post-operative recovery of patients. The international expansion of day surgery units over the past decade has led to several publications highlighting the benefits of day surgery regarding cost, safety, organisation, and easy access to a range of surgical procedures. The benefits also extend to shortened hospital stays, and earlier mobilisation also reduces the risk of hospital-acquired infections and Venous Thromboembolism (VTE). It is estimated that each surgical case performed in a Day Surgery setting saves between 1 and 3 bed-days as Inpatient Unit (IPU) beds will not be occupied by the patient. These savings preserve valuable IPU beds for significant inpatient surgery. There are various care models for Day Surgical Centres, which depend on service planning and patient flow.

For successful and safe ambulatory surgery and anaesthesia, the surgeon and anaesthetist should consider various factors such as appropriate patient selection, pre-operative assessment (including



the patient's history and family history), surgical and anaesthetic methods and postoperative management to reduce postoperative complications, postoperative pain. A multi-modal and prophylactic approach to prevent postoperative complications should be considered to allow early and safe discharge and return to activities of daily living. Finally, it is essential to maintain ongoing communication and cooperation between the patient and their carer, allied health professionals, physician and anaesthetist.

## 2. PURPOSE

2.1. To ensure the highest safety and quality levels within DHA Licensed Standalone Day Surgical Centres.

## 3. SCOPE

3.1. Standalone Day Surgical Centres licensed by DHA.

## 4. APPLICABILITY

4.1. DHA licensed Healthcare Professionals and Health Facilities operating as Standalone Day Surgical Centre.

## 5. STANDARD ONE: REGISTRATION AND LICENSURE PROCEDURES

5.1. All health facilities providing Day Surgical Services (DSS) shall adhere to Federal and Local Laws and Regulations.

5.2. A health facility seeking to provide Day Surgical Services shall comply with the DHA registration, licensure and administrative procedures available on the DHA website: <https://www.dha.gov.ae>

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- 5.3. A licensed DSC opting to provide DSS shall apply to the Health Regulation Sector (HRS) to obtain permission to provide the required service(s).
- 5.4. All Day Surgical Centres (DSC) are mandated to be accredited in accordance with the required timeframe set out by DHA Circular (18 months).
- 5.4.1. Accreditation shall include the following International Society for Quality in Healthcare (ISQua) entities such as:
- a. Accreditation Canada International (ACI).
  - b. American Association for Accreditation of Ambulatory Surgery Facilities (AAAASF).
  - c. Australian Council of Healthcare Standards International (ACHSI).
  - d. Joint Commission International (JCI) Ambulatory Care.
- 5.5. The DSC shall have in place internal policies and procedures including but not limited to:
- 5.5.1. Service Description and Scope of Services.
  - 5.5.2. Patient acceptance/referral criteria.
  - 5.5.3. Lab and diagnostic services and turn-around timeframes for reporting non-critical and critical results.
  - 5.5.4. Patient assessment and admission criteria.
  - 5.5.5. Patient education, communication and informed consent.
    - i. Consent should include the need for higher sedation within the same facility or following transfer to a higher level facility.
  - 5.5.6. Staffing plan, staff management and clinical and privileging.

- 5.5.7. Clinical Audit.
- 5.5.8. Pharmacy Services.
- 5.5.9. Patient health record, confidentiality and privacy.
- 5.5.10. Infection control
- 5.5.11. Incident reporting.
- 5.5.12. Medication management and pharmacy services.
- 5.5.13. Reprocessing of reusable equipment, safe use of chemicals used for cleaning and disinfecting.
- 5.5.14. Medical and hazardous waste management as per the Dubai Municipality (DM) requirements.
  - a. There should be an allocated medical waste storage and collection area that is well ventilated and secured from public and patient access.
  - b. The medical waste storage and collection area shall be adequately labelled with a hazard sign to prevent unexpected entry from patients or the public.
- 5.5.15. Monitoring Medical, Electrical and Mechanical equipment, visual inspections for apparent defects and maintenance by the competent entity with valid testing certificates.
- 5.5.16. Laundry and housekeeping services.
- 5.5.17. Patient belongings.
- 5.5.18. Quality, Performance Management and Learning System.
- 5.5.19. Violence against Staff/Zero Tolerance.

- 
- 5.5.20. Narcotic Handling Policy which covers all the steps from ordering until discard to ensure that narcotics are not misused.
- 5.5.21. Procedural Sedation Policy to guide practitioners and ensure patients' safety and high quality of care.
- 5.6. The health facility should ensure it has in place adequate lighting and utilities, including temperature controls, water taps, medical gases, sinks and drains, lighting, electrical outlets and communications.
- 5.7. The health facility shall maintain documented evidence of treatment protocols and care pathway for surgical procedures to include, but not be limited to the following:
- 5.7.1. Referral criteria.
  - 5.7.2. Consultation.
  - 5.7.3. Clinical laboratory services and diagnostics.
  - 5.7.4. Pre-op assessment and patient acuity classification.
  - 5.7.5. Staffing requirements.
  - 5.7.6. Informed Consent.
  - 5.7.7. Surgical Safety Checklist for Surgical Procedures.
  - 5.7.8. Patient Monitoring, Recovery and Discharge.
  - 5.7.9. Emergency procedures and transfer of critical/complicated cases when required.
  - 5.7.10. Patient discharge and follow up.
  - 5.7.11. Patient complaints.

## 6. STANDARD TWO: HEALTH FACILITY REQUIREMENTS

- 6.1. Day Surgical Centres shall be granted a license based on the Health Facility Classification and their permitted levels (**Appendix 1-2**).
- 6.1.1. Day surgical centers shall not operate or open between 12:00am and 6:00am.
- 6.1.2. Surgeries in DSC CM and C shall not start after 3:00pm.
- 6.1.3. Surgeries in DSC CM and C shall not exceed three (3) hours.
- 6.1.4. Multiple surgeries that exceed three (3) hours are not permitted.
- 6.2. Day Surgical Centre Shall Only provide Surgical and Diagnostic procedures for ASA-PS Classification I and II Patients (**Appendix 1-3**).
- 6.3. *If the surgical procedure requires higher-level sedation, which does not align with the existing day surgical category, then the provider is required to refer the patient to a higher facility category.*
- 6.3.1. Surgical procedures are limited to those where there is only a small risk of surgical and anaesthetic complications and hospitalization.
- 6.3.2. The surgical setup shall be capable of providing the required level of sedation/anaesthesia and emergency response.
- 6.3.3. The following exclusions must be considered during patient consultations and pre-op assessments:
- Emergency/unprepared patients.
  - Inpatients.
  - Uncooperative patients.

- d. Patients with a history of sleep apnoea.
  - e. Patients with a history of drug or alcohol abuse.
  - f. Patients with airway difficulties.
  - g. Patients with severe allergies.
  - h. Patients with at risk of blood loss, excessive bleeding and may require a blood transfusion.
  - i. Patients that require cardiac catheterization or Interventional Cardiology
  - j. Patients with metabolic disorders (ASA 3 and above).
  - k. High-risk patients (ASA III-VI) in accordance with the American Society of Anaesthesiologist (ASA) Classifications.
- 6.4. Day Surgical Services shall be Consultant or Specialist Led services.
- 6.4.1. The consultant or specialist shall have a minimum of ten (10) years experience in surgery.
  - 6.4.2. The consultant or specialist shall have a valid ACLS or ATLS training.
- 6.5. The Health Facility shall comply with the DHA Health Facility Design Guidelines (HFG) and DSC staffing requirements.
- 6.6. The Health Facility shall ensure access to non-treatment and treatment areas are safe for all patient groups.
- 6.6.1. A comfortable treatment environment should be provided in the health facility and assure patient privacy and confidentiality.
- 6.7. HRS must be informed and approve changes to existing or new services or staffing levels.

- 6.8. The health facility shall install and operate equipment required for the provision of proposed services in accordance with the manufacturer's specifications.
- 6.9. The health facility shall always have the appropriate equipment and trained healthcare professionals to perform necessary diagnostics, patient assessments, surgery, resuscitation, stabilisation and transfer of critical and emergency cases to a nearby Hospital.
- 6.9.1. *Class B Day Surgical Centers will have sufficient medical equipment to manage permitted endoscopic procedures.*
- a. Procedural sedation shall be performed in designated areas where the patient can be resuscitated if sedation is deeper than intended.
  - b. Practitioners should possess the skills necessary to resuscitate or rescue a patient whose level of sedation is deeper than initially intended.
- 6.9.2. Class B, CM and C Day Surgical Centres will have the required medical equipment to manage permitted surgeries:
- a. Operating Theatre (OT) with Anaesthesia machine with vital sign monitor (ECG);
  - b. Emergency Medical Service (EMS) call system;
  - c. Pulse oximeter, and hemodynamic monitoring equipment;
  - d. One portable ventilator is required for two OT (backup); and
  - e. One ventilator is required for two beds in the recovery bay.
- 6.9.3. DSC shall assure the safe and appropriate practice system for sample collection, storage, blood transportation and other samples.

- 6.9.4. Assure medical equipment and devices are in place for emergency scenarios.
- 6.9.5. All DSC shall have access to laboratory and diagnostic services as per patient needs determined by the services provided and the medical team. As a minimum:
- a. Class A DSC categories must provide:
    - i. Point of Care Testing for glucose, Dipstick urinalysis and Pregnancy test.
    - ii. Any other lab services as per patient need may be contracted with an external laboratory provider.
  - b. Class B DSC categories must provide:
    - i. Point of Care Testing for glucose, Prothrombin time/international normalized ratio (PT/INR), Dipstick urinalysis and Pregnancy test.
    - ii. Any other lab services as per patient need may be contracted with an external laboratory provider.
  - c. Class C-M and C DSC categories must provide:
    - i. Point of Care Testing (glucose, Prothrombin time/international normalized ratio (PT/INR), Dipstick urinalysis and Pregnancy test.
    - ii. Arterial Blood Gas (ABG)
    - iii. Any other lab services as per patient need may be contracted with an external laboratory provider.
  - d. CM and C DSC categories must provide essential onsite radiology services.
    - i. Radiology (or mobile x-ray) should include plain x-rays and chest x-rays as per FANR requirements.



- Physicians and nurses shall be trained to provide plain x-ray and chest x-rays.
  - ii. The remaining radiology services as per patient need may be contracted with an external radiology provider.
- 6.9.6. All laboratory equipment shall be calibrated and maintained as per DHA Policy for Clinical Laboratory.
- 6.9.7. All DSC must have a written agreement for patient referral and emergency transfer to a nearby hospital setting. The transfer agreement shall detail the transfer plan/protocol of patients and meet Dubai transfer timeframes for emergency patients.
- a. The Health Facility shall put in place annual simulation scenarios with all surgical teams to manage patient recovery and transfer.
  - b. Simulation outcome and improvement plans shall be documented.
- 6.9.8. All DSC shall have a Business Continuity Plan to ensure the core functions of the centre are met.

## 7. STANDARD THREE: STAFFING AND HUMAN RESOURCE REQUIREMENTS

Staffing requirements to provide day surgical and diagnostic services shall be provided to optimize healthcare quality and patient safety. To provide DSC procedures and diagnostic services, all healthcare professionals in the health facility shall:

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- 7.1. Hold an active DHA professional license and work within their scope of practice and granted privileges.
- 7.1.1. The Privileging Committee and/or Medical Director of the DSC shall take responsibility to privilege staff as per the DHA Policy for Clinical Privileging Policy.
- 7.2. Ensure all physicians have an up to date medical malpractice insurance.
- 7.3. Ensure an appropriate and sufficient number of healthcare professionals are always present on duty to diagnose, plan, supervise and evaluate patient care. The number of licensed healthcare professionals assigned to each health service in a DSC standalone setting. The DSC shall have a sufficient number of staff as per the health facility licensure requirements set out in the DHA Health Facility Licensing Policy. Additional staff must be in place as per specialisation, service descriptions, scope and patient volume. The standalone DSC shall comply with the minimum requirements :
- 7.3.1. There must be at least one full time licensed physician with the role of the Medical Director.
- 7.3.2. At least one full time licensed specialist or consultant surgeon present in the Day Surgical Centre.
- a. The specialist or consultant surgeon is responsible to ensure the availability of the surgical team before, during and after the procedure.
- 7.3.3. The specialist or consultant surgeon and anaesthesiologist must always be present until the patient is discharged or transferred to a higher level healthcare setting.

- 7.3.4. *At least one part time anaesthetist is required in Class B where permitted narcotics, and dissociative anaesthetics are being administered for endoscopic procedures (Appendix 2).*
- 7.3.5. *At least one full-time Anaesthetist must be present in DSC Class CM and C.*
- 7.3.6. *An Anesthetist must be present for each surgical procedure where deep sedation or general anesthesia is administered.*
- 7.3.7. The Anaesthetist may be supported by a licensed technician/anaesthetist privileged nurse.
- a. For Endoscopic Standards, refer to the DHA Standards for Endoscopy Services and **Appendix 3**.
  - b. Providers of GI Endoscopy should be trained specifically to provide procedural sedation across the sedation continuum, from minimal through moderate sedation. This training should include skills in recognizing when the level of sedation is deeper than intended as well as the ability to rescue patients when this occurs.
  - c. All patients undergoing endoscopic procedures be evaluated to assess their risk of sedation related to pre-existing medical conditions.
  - d. Professionals engaged in endoscopic procedures should undergo specific training in the administration of endoscopic sedation and possess the skills necessary for the diagnosis and management of sedation-related adverse events, including rescue from a level of sedation deeper than intended.

- e. Patients should be routinely monitored during the endoscopic procedure and supplemental oxygen should be readily available for use.
- 7.3.8. The nursing ratio and responsibilities should ensure that there is a nurse available for the following (considerations should be given to annual and sick leave, public holidays):
- Pre-assessment and recovery.
  - Surgical nurse/ endoscopic nurse
  - Circulating nurse.
  - The reception area(s).
  - The number of operating theatres and recovery rooms.
  - Nature of surgery and number of surgical or endoscopic procedures performed per day and shifts.
- 7.3.9. For DSC that provide full Laboratory Services, one full time or part-time DHA licensed pathologist shall be available to supervise and manage the clinical laboratory services in the DSC and laboratory technicians.
- At least one laboratory technician shall be available in each shift and shall only be responsible for essential laboratory services.
- 7.3.10. For DSC that provide Radiology Services, one full time or part-time specialist/consultant radiologist shall be available to supervise and manage the radiology services in the DSC.
- At least one radiography technician shall be available in each shift and shall only be responsible for essential radiography services.

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- a. The health facility shall employ a biomedical engineer or maintain a service contract with a certified maintenance company to ensure safety, reliability, validity and efficiency of medical devices and mechanical equipment.
- 7.3.11. DSC Class A and B shall ensure the full time surgeon is responsible for managing medications and record keeping in the DSC (**Appendix 2**).
- 7.3.12. DSC Class B, CM and C shall ensure the anaesthetist is responsible for managing anaesthesia, narcotic and controlled medications, emergency medicine, any other medication and record-keeping in the DSC (**Appendix 2**).
- 7.3.13. DSC that provide ambulatory care pharmacy services must employ a full time pharmacist.
- a. The pharmacy service should include storage of medication, medication preparation, dispensing and safe disposal.
- b. In the absence of a pharmacist (sick leave, emergency leave or annual leave), the anaesthetists shall be responsible for managing anaesthesia, narcotic and controlled medications, emergency medicine, any other medication and record-keeping.
- 7.3.14. In charge, approvals for pharmacy must be obtained from DHA Drug Control Section.
- 7.3.15. The DHA licensing department must be informed where staffing levels fall below or exceed the licensure or services provision requirements.

- 7.4. Staffing levels, required competencies, medical equipment, sedation and surgical environment should never be compromised. If either of these factors come into play:
- 7.4.1. Patients should be offered an alternative surgical date or referred to another health facility.
- 7.5. Human resources management shall ensure patient safety, healthcare quality, competent workforce and satisfy the working environment for employees. Human resources management includes:
- 7.5.1. Planning and Recruitment.
- 7.5.2. Continuing performance development.
- 7.5.3. Employee support systems.
- 7.5.4. Effective workplace relations.
- 7.6. Human resource practices should be supported by policies and procedures with supporting systems to influence employee's behaviours, attitudes and performance for efficient, safe and high-quality care.
- 7.7. The recruitment selection and appointment system shall ensure the staff's skill mix and competence meet the DSC needs.
- 7.7.1. The DSC is responsible for putting in place a written staffing plan to address high patient volumes, staff sickness or staff resignations.
- 7.8. The DSC shall maintain accurate and complete personnel records for all employees, including training records; such records shall be maintained and kept confidential.

- 7.9. A written policy on staff training along with the type and frequency of core competency assessment should be documented and monitored on an annual basis.
- 7.10. A development system shall be in place to ensure staff's core skills and competencies are always met.
- 7.10.1. Continuing Professional Development (CPD) activities and evidence of hands-on learning shall be documented.
- 7.11. A structured and uniform system shall be maintained to assure adequate staffing levels, staff orientation, staff training needs, professional retention and staff performance evaluation.

#### **8. STANDARD FOUR: PRE-OP ASSESSMENT, PATIENT CARE AND ANESTHESIA**

- 8.1. All Day Surgical Centres must have in place a written Surgical Care Pathway (**Appendix 4**).
- 8.2. All patients referred for surgery must have had a physician consultation with appropriate lab and diagnostics testing and a follow-up appointment with the physician to discuss surgical and non-surgical options.
- 8.3. A comprehensive pre-op patient assessment process and testing shall be achieved with the support of a multi-disciplinary team (as applicable) and based on each patient's clinical and priority needs.
- 8.3.1. For DSC Class A and B: Blood Pressure, Blood Glucose, BMI and exclusions noted in 6.3.3 should form part of the pre-op assessment.

- 8.3.2. For CM and C: pre-op assessment should include CBC, Blood Pressure, Blood Glucose, Coagulation Profile, BMI and exclusions noted in 6.3.3, and general anaesthesia consult.
- 8.3.3. Pre-op assessments shall be conducted in the same health facility where the surgery will be provided.
- 8.3.4. Patients undergoing elective surgery shall provide their consent at pre-op assessment and on the day of surgery.
- The timeframe from pre-op assessment to surgery shall be conducted within 4-weeks. Patients exceeding the 4-week window should be re-assessed.
  - Patients or their next of kin/legal guardian shall be given written information/instructions on the surgery and surgical preparation.
  - Patients shall be given sufficient time to make an informed decision before surgery.
  - On the day of surgery, the patient must sign the second informed consent form that elaborates risks, benefits and alternatives before the procedure begins. The physician shall be available to answer any further questions in a non-technical way.
- The minimum requirements for informed consent are set out in **Appendix 5**.
- 8.4. Before commencing the procedure, the patient, staff physician performing the procedure should verify the correct patient and procedure to be performed and identify any potential risks following the pre-op assessment. A Physician, Anaesthetists (if applicable) and RN must document, complete and verify the Surgical Safety Checklist (**Appendix 6**).



- 8.4.1. All surgeries under Day Surgical Centre category B must always be overseen by a DHA licensed surgeon and nurse.
- a. An anaesthetist (part-time or full-time) must be present if narcotic drugs are being used for permitted endoscopic procedures (**Appendix 2 and 3**).
- 8.4.2. All surgeries under Day Surgical Centre category CM and C must always be overseen by a DHA licensed surgeon, anaesthetist and nurse.
- a. The surgical team shall be competent to stabilize critically ill patients and transfer them to a higher level of care if the health facility cannot manage the patient onsite.
- 8.5. Minimally invasive procedures shall follow Procedural Sedation and Analgesia (PSA), which is a continuum of depressed level of state of consciousness ranging from minimal sedation to general anaesthesia as per the permitted levels of sedation per DSC facility type. The DHA Licensed anaesthetist shall hold valid certification in conscious sedation and be trained and competent in:
- 8.5.1. Understanding the continuum of sedation and apply methods and levels of sedation, conscious sedation and associated risks of moderate/deeper sedation training and required competencies (**Appendix 7-8**).
- 8.5.2. Being able to conduct a physical assessment to assess the fitness and appropriateness of the patient for PSA.
- 8.5.3. Reviewing the patient's condition and vital signs prior, during and after a procedure and during recovery to assess any change in the patient's condition may affect the administration or management of PSA until discharge from the recovery area.

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- a. Vital signs include the level of consciousness, ventilatory and oxygenation status, hemodynamic variables, temperature, pain and anxiety levels.
- 8.5.4. Recognising the vital principle of minimum intervention, where the simplest and safest technique is likely to be effective, is used to achieve the clinical goal.
- 8.5.5. Maintaining an effective communication and clear explanation at every stage of patient management to reassure the patient.
- 8.5.6. Understanding that loss of verbal responsiveness/deep sedation requires the same level of skills and care as general anaesthesia.
- 8.5.7. Understanding the fundamentals, actions and interactions of the sedative and analgesic and multiple drugs being administered, their synergistic effects; how to use reversal agents; and necessary adjustments to accommodate different patient needs.
- 8.5.8. Putting in place a pain signalling and stimulus system before the initiation of sedation and understand the timeframe for the sedation effect to take place.
- 8.5.9. Titrating to patient needs in small, incremental doses and identifying the sum of the incremental doses has reached the maximum dose.
- 8.5.10. Providing simple and advanced sedation and be competent to manage failed sedation.
- 8.5.11. Determine stock levels and reversible agents required for managing sedation-related side effects in a timely manner.
- 8.5.12. Ensuring patient safety is always paramount considering the number of procedures conducted in a single sitting, surgery duration, patient manipulation and anticipated complications.

- 8.5.13. Safely delivering pharmacological sedation to appropriate patients and recognise the limits of their competency and experience.
- 8.5.14. Discharging the patient, including but is not limited to the following checks:
- The patient returned to their baseline level of consciousness.
  - Vital signs are stable and within acceptable limits.
  - Sufficient time has elapsed following administration of reversal agents (if applicable) to ensure that patient is not re-sedated.
  - All recovery assessments, discharge and home release, have been met and completed (**Appendix 9-10**).
  - There is a responsible adult to accompany the patient home.
- 8.5.15. Being able to discuss where and when deeper levels of sedation or anaesthesia may be indicated.
- 8.5.16. Detecting and rescuing patients from sedation-related adverse responses, including anaphylaxis and cardiorespiratory failure.
- 8.5.17. Declaring an emergency and directing the surgical team on emergency procedures and protocol and where necessary lead on the emergency patient transfer.

## 9. STANDARD FIVE: PATIENT SAFETY

9.1. There are several Patient Safety considerations that should be considered and documented in the patient record.

9.1.1. Patient identity (including history and family history).

- 9.1.2. Evidence of consultation, physical examinations and confirmatory lab or diagnostics (patient selection).
- 9.1.3. Procedure to be undertaken and location with clear markings.
- 9.1.4. No emerging issues since the last pre-op assessment.
- 9.1.5. Informed Consent for the procedure.
- 9.1.6. Verification of Nothing by Mouth Status.
- 9.1.7. Mitigating circumstances/exclusions not to perform the surgery (6.3.3. and **Appendix 3**).
- 9.1.8. Adequate staff levels for the procedure.
- 9.1.9. Emergency training and preparedness of staff.
- 9.1.10. Up to date medical records.
- 9.1.11. Pre-anesthesia assessment and patient acuity (Class I or II).
- 9.1.12. Sedation/anaesthesia and recovery plan.
- 9.1.13. Confirmation of functioning equipment and a back-up plan.
- 9.1.14. Document adherence to the Surgical Safety Checklist (**Appendix 6**) for all surgeries.
- 9.1.15. A list of look-alike, sound-alike medication.
- 9.1.16. Medical devices are fully functional.
- 9.1.17. Control of concentrated electrolyte solutions.
- 9.1.18. Assuring medication accuracy and safe dosing.
- 9.1.19. Avoiding catheter and tubing misconnections.
- 9.1.20. Prophylaxis.

- 9.1.21. Infection control.
  - 9.1.22. Single-use of injection devices and insert of the IV line.
  - 9.1.23. Fully stocked crash cart and emergency medications and per DSC Classification  
**(Appendix 11-12)**
    - a. A crash cart must always be available in the operating theatre, recovery, and critical care area.
  - 9.1.24. Stopping the procedure in the event, the patient condition deteriorates.
  - 9.1.25. Patient recovery plan.
  - 9.1.26. Falls management.
  - 9.1.27. International Patient Safety Goals.
  - 9.1.28. Communication of staff and during patient hand-over.
  - 9.1.29. Patient post-op instructions, discharge and follow up.
  - 9.1.30. Patient transfer to referral or alternative health facility.
- 9.2. The treating surgeon shall be available at the DSC facility until the patient is discharged safely.
- 9.3. Visiting surgeons shall be available forty-eight (48) hours after the procedure.
- 9.3.1. Visiting surgeons must always ensure their patients are handed over to a competent physician(s) to oversee patient follow up and patient care during their absence.

## **10. STANDARD SIX: PATIENT MONITORING AND DISCHARGE**

- 10.1. All patient diagnostic or surgical procedures shall be continuously monitored in accordance with the surgical procedure, patient safety and risk factors. Monitoring should be performed and

- evidenced before the procedure, after administration of sedatives, at regular intervals during the procedure, during initial recovery and just before discharge.
- 10.2. Minor procedures performed under topical or local anaesthesia, not involving drug-induced alteration of consciousness other than minimal preoperative anti-anxiety medications (e.g. mole removals or incision and drainage of superficial abscesses) may be performed by a DHA licensed physician or dentist within their scope of practice and privileges.
- 10.3. Procedures that require administration of light or moderate sedation/analgesia necessitate intraoperative and post-operative monitoring, commonly involving intravenous (IV) administration of drugs with anxiolytic, hypnotic, analgesic and amnesic properties either alone or as a supplement to a local or regional anaesthetic.
- 10.4. The surgical procedures in DSC are limited to those in which there is only a small risk of surgical and anaesthetic complications, and hospitalization resulting from these complications is unlikely (**Appendix 1-3**).
- 10.5. When moderate sedation is targeted, the healthcare professional is assigned responsibility for patient monitoring and may perform brief interruptible tasks. Monitoring includes an electronic assessment of blood pressure, respiratory rate, heart rate and pulse oximetry combined with visual monitoring of the patient's level of consciousness and discomfort.
- 10.6. Procedures that require the use of deep sedation/analgesia, general anaesthesia, or major conduction blockade (e.g. liposuction) may be serious or life-threatening (**Appendix 1-3**).
- 10.6.1. Major regional blocks include but are not limited to the spinal, epidural or caudal injection of any drug, which has analgesic, anaesthetic or sedative effects.

- 10.6.2. When deep sedation or general anaesthesia is targeted, the anaesthetist is responsible for patient monitoring must be dedicated solely to that task and be readily available to take the necessary action to ensure patient safety during the procedure.
- 10.7. The DSC shall put in place procedures to rescue patients who are sedated deeper than intended.
- 10.8. Documentation of the clinical assessments and monitoring data during sedation and recovery and discharge is required to include:
- 10.8.1. Time, date, physician name, patient condition and action taken.
- 10.8.2. Food consumption appropriate for the patient and consistent with the patient's condition, and clinical care shall be provided.
- 10.8.3. Ability to pass urine following surgery.
- 10.8.4. Patient-level on consciousness and ability to put on clothing without assistance.
- 10.9. The incidence of falls and fall injectionuries shall be minimized through a fall management program and prevention strategies according to patient risk factors. A written policy shall be in place for falls management. Patients shall be assessed for risk of falls:
- 10.9.1. Upon admission.
- 10.9.2. Once a change of health status has been identified.
- 10.9.3. After a fall.
- 10.9.4. Upon Discharge.
- 10.10. A discharge plan shall start from patient admission and include various personnel, information and resources. Considerations for discharge preparation shall include but not be limited to:

- 10.10.1. Risk assessment and process for discharge.
- 10.10.2. Medication needed from the pharmacy.
- 10.10.3. Physician written authorisation for discharge.
- 10.10.4. Documentation of the procedure for the patient and treating physician.
- 10.10.5. The pickup person and aftercare support within the first 24-hours.
- 10.10.6. No driving policy and travel distance to home.
- 10.10.7. Environmental conditions, such as stairs, access to toilet or bedroom.
- 10.10.8. The carer's/authorized persons contact details and their awareness of possible issues and requirements following discharge.
- 10.10.9. Contact numbers after discharge, such as the doctor or emergency contact.
  - a. Follow up phone call and follow up appointments.
- 10.10.10. The treating physician shall respect patients' choices if they decide to Discharge Against Medical Advice (DAMA). DAMA patients must sign a form before leaving the facility and be witnessed by the treating physician and a nurse.

## **11. STANDARD SEVEN: MEDICATION MANAGEMENT AND PHARMACY**

- 11.1. Medications shall be managed to ensure safe and effective practice. The DSC shall maintain a policy and procedures on medication management, medication storage and monitoring of medication inventory and expiration dates consistent with applicable federal and local legislation and regulations. Considerations for DSC include:



- 11.1.1. After admission to the DSC, only medication ordered or approved by the surgeon/anaesthetist should be taken by the patient.
  - 11.1.2. A written record for the dosages of drugs and their administration's timing shall be entered into a health record.
  - 11.1.3. Special arrangements shall be in place for post-discharge medications with clear written instructions; for example, suitable analgesia should be provided for the minimum required period after discharge.
- 11.2. DSC shall facilitate access to discharge medication where the facility does not provide it.
- 11.3. DSC shall have a policy for the storage and handling of anaesthesia agents and shall ensure they abide by the Ministry of Health And Prevention (MoHAP) regulation for storage, handling and records management of narcotic and controlled medications. The standalone DSC must ensure the following:
- 11.3.1. An up to date daily medication log.
  - 11.3.2. All narcotics and controlled medication must be stored and kept in a safe and secure place with a double-locked or a lock with the provision of a code locking mechanism as per Federal and local regulations.
  - 11.3.3. Disposal of controlled drugs are locked in a cabinet, restricted to specified staff and compliant with federal laws and local regulations.
    - a. Up to date and accurate records must be kept on the receipt and disposition of all controlled substances.

- 11.3.4. Discarded amounts of narcotics and controlled medication and vials are written in the log book and/or on the prescription pad for narcotic medication.
- 11.4. Medication shall be securely stored under environmental conditions consistent with the manufacturer's specifications.
- 11.5. DSC shall put in place a policy to promote safe and secure storage and use high concentrated electrolytes and high alert medications.
- 11.5.1. Use pre-prepared bags for high concentrated electrolytes if available, or the competent anaesthetist shall be responsible for preparing and diluting the required medications.
- 11.5.2. The use of single-dose vials for all sedative and analgesic medications is strongly recommended.
- 11.5.3. Healthcare professionals should have access to published guidelines for medication management.
- 11.6. Medication should only be given only under the order of the supervising physician.
- 11.7. A written policy shall be in place for the identification, documentation and review of adverse drug reactions.
- 11.7.1. Reversal agents for opioids and benzodiazepines shall be readily available as per the DSC facility classification.
- 11.8. Pharmacy services shall be provided in the DSC to meet the patient's needs directly or through a written agreement with an external pharmacy provider licensed by DHA. The experienced Pharmacist shall:

- 11.8.1. Assure proper storage, control, handling, compounding and dispensing of drugs, devices, and biological materials shall be according to the applicable MoHAP Laws and regulations.
- 11.8.2. Ensure provisions are made for the storage and preparation of medications administered to patients.
- 11.8.3. Ensure drugs, devices, and biologicals must be stored in locked areas according to the manufacturer's instructions for temperature, light, humidity or other storage instructions.
  - a. A specific refrigerator for pharmaceuticals storage and control shall be available.
- 11.8.4. Emergency drugs, devices, and biologicals determined by the healthcare professional staff must be available for use at designated locations when an emergency occurs.
- 11.8.5. The supply of drugs, devices and biologicals and controlled substances must be protected and restricted for use for legally authorized purposes only.
- 11.8.6. The supply of drugs and devices must be checked regularly to ensure expired, mislabelled, unlabelled or unusable products are not available for patient use and are disposed of accordingly.

## **12. STANDARD EIGHT: CRITICAL CARE SERVICES AND EMERGENCY MANAGEMENT**

Provision of critical care services and emergency management is paramount to ensuring early detection and prevention of patient deterioration. DSC shall ensure:

- 12.1. Written policies and procedures must be established and implemented. They should define, describe the scope of critical care services and ensure safe and competent delivery of the patients' services.
- 12.2. There is one competent Registered Nurse (RN) during surgery with suitable training and experience in critical care on duty to provide the critical care services if required, and evidence of the competency and training shall include the following:
  - 12.2.1. Recognizing arrhythmias.
  - 12.2.2. Assisting the physician in placing central lines or arterial lines.
  - 12.2.3. Obtaining blood gases ABG's.
  - 12.2.4. Central Venous Pressure (CVP) line.
  - 12.2.5. Infection control principles.
  - 12.2.6. Glasgow Coma Scale (GSC).
  - 12.2.7. Point of Care Testing Assessment.
  - 12.2.8. Training in using defibrillator and care of patients on ventilators.
- 12.3. The DSC shall ensure periodic training and education for staff in the use of equipment for emergency management. Training and assessment of competency shall be documented as per the requirements of the training provider.
- 12.4. DSC Class B that make use of anaesthetics only for permitted endoscopic procedures shall have a room for post-operative recovery.
- 12.5. DSC Class B (with endoscopy), CM and C must have a room for post-operative recovery or for patients that require extended recovery or for critical patients awaiting emergency transfer.

- 12.5.1. The ratio of recovery rooms should consider the number of surgical theatres, hours of operation, procedures being performed and patient scheduling.
- 12.5.2. Critical care services equipment and supplies must be immediately available in the DSC for the immediate and safe provision of care and treatment required.
- 12.5.3. The recovery room will include medical gas outlets (O<sub>2</sub>, Air, Suction), enough electrical outlets, and examination lights. Supply of medical gases shall be available, and a centralized medical gas system shall be according to HTM 2022 or its equivalent internationally accepted Standard.
- 12.5.4. Pharmaceutical agents, oxygen, oral suction, laryngoscope, Ambu-bag shall be readily available in the health facility.
- 12.5.5. Emergency equipment shall include portable ventilators (with different ventilation mode (IPPV, SIMV, spontaneous, PS), tracheostomy set, defibrillator machine, pulse oximetry and vital signs monitor (ECG), Infusion pumps, blood gas analyser with capability for electrolytes measuring and emergency crash cart that includes all emergency supplies and medications.
- 12.6. At a minimum, DSC shall have a clear protocol and provision for essential emergency management for illness and/or injectionuries that occurred for the patient, healthcare professionals, employees or visitors, which needs immediate emergency care and assistance before transport to another health facility.

- 12.7. Emergency services must be provided by qualified and licensed physician(s) who are authorized by their scope of practice to provide emergency services and received privileges from the facility to perform specific emergency procedures.
- 12.8. All Physicians, Anaesthetists, Technicians and Nurses engaged in surgery shall maintain up to date hands-on/practical Basic Life Support (BLS) or Advanced Cardiac Life Support (ACLS) or Paediatrics Advanced Life Support (PALS) Certification as per the scope of services provided.
- 12.9. If the DSC manages paediatric cases, DSC must ensure Paediatricians and anaesthetists are trained in managing paediatric cases and PALS certified.
- 12.9.1. All RN who provide patient care are required to maintain a valid Basic Life Support (BLS) certification.
- 12.10. RN providing emergency services in the DSC shall be trained and competent to provide the emergency care, as needed:
- 12.10.1. Patient Triage.
- 12.10.2. Operating a Cardiac Monitor.
- 12.10.3. ECG Recording and Interpretation.
- 12.10.4. Pulse Oximetry.
- 12.10.5. Oxygen Administration.
- 12.10.6. Suctioning.
- 12.10.7. Intravenous cannulation.
- 12.10.8. Medication administration.
- 12.10.9. Emergency services will be available during the operational hours of the DSC.

- 12.11. Emergency devices, equipment and supplies must be available for immediate use for treating life-threatening conditions, in addition to drugs listed Appendix 11-12.
- 12.11.1. Defibrillator.
  - 12.11.2. Emergency Cart with Emergency medicines.
  - 12.11.3. Resuscitation Kit, Cardiac board and Oral Airways.
  - 12.11.4. Laryngoscope with blades.
  - 12.11.5. Diagnostic set.
  - 12.11.6. Patient trolley with an IV stand.
  - 12.11.7. Nebulizer.
  - 12.11.8. Refrigerator for medication.
  - 12.11.9. Floor Lamp (Operating light mobile).
  - 12.11.10. Sets of instruments shall include suturing set, dressing set, foreign body removal set or minor set and cut down set.
  - 12.11.11. Disposable supplies shall include suction tubes (all sizes), tracheostomy tube (all sizes), intravenous cannula (different sizes), IV sets, syringes (various sizes), dressings (gauze, sofratulle), crepe bandages (all sizes), splints (Thomas splints, cervical collars, finger splints).
  - 12.11.12. All fluids (e.g. D5W, D10W, Lactated Ringers, Normosol R, Normosol M, Haemaccel) and Glucometer.
  - 12.11.13. Sufficient electrical outlets to satisfy monitoring equipment requirements, including clearly labelled outlets connected to an emergency power supply.

- 12.11.14. A reliable source of oxygen.
- 12.11.15. Portable vital signs monitor (ECG, Pulse-Oximetry, Temperature, NIBP, EtCO2).
- 12.11.16. Suction apparatus.
- 12.11.17. Portable transport ventilator with different ventilation mode (IPPV, SIMV, spontaneous, PS)
- 12.11.18. Portable ventilator.
- 12.12. Storage areas for general medical/surgical emergency supplies, medications and equipment shall be under staff control and out of the path of normal traffic.
- 12.13. Policy for maintaining personal items and food in the emergency area shall be established and maintained by the health facility.
- 12.14. A record must be kept for each patient receiving emergency services and integrated into the patient's health records. The record shall include patient name, date, time and method of arrival, physical findings, care, and treatment. Name of treating physician and discharging/transferring time.
- 12.15. Well-equipped ambulance services shall be ready and nearby with licensed, trained and qualified Emergency Medical Technicians (EMT) for patient transportation if required. The service can be outsourced with a written contract with an emergency services provider licensed in Dubai.
- 12.15.1. Ambulance services shall meet Dubai emergency transfer timeframes.
- 12.16. Uninterrupted Power Supply (UPS) or Power Generator.



### 13. STANDARD NINE: SUPPORT SERVICES

#### 13.1. Allied Health Services

13.1.1. The DSC may provide necessary allied health services to meet patient needs and based on the facility's type of services. Such services may be available on the premises or through a written agreement with an external provider.

13.1.2. Allied health services shall be provided by competent and licensed healthcare professionals. The management shall support the Allied healthcare professional's education and training. Such training shall ensure competency in the specific area, e.g. lifting and manual handling, infection control, fire and Cardiopulmonary Resuscitation training.

#### 13.2. Nutrition Services

13.2.1. Nutrition services shall be provided as necessary by the DSC either on the premises or through a written agreement with an external provider. If provided internally, proper hygienic conditions shall be maintained in the DSC kitchen during preparing, storing and serving food.

#### 13.3. Laundry

13.3.1. DSC shall provide laundry services either inside the facility or as an outsource service. The laundry shall be fully equipped with machines used for cleaning and washing clothes, sheets and covers.

#### 13.4. Sanitary Services

- 13.4.1. Clean and hygienic water supply shall be provided in the DSC. Water tanks shall be maintained, clean and well closed.
- 13.4.2. Clean bathrooms for outpatients shall be provided (separate for male and female). Each bathroom shall have at least one washbasin and commode with soap and a hand towel. All staff and patients' toilets shall be kept clean.
- 13.4.3. All DSC drainage and sewage shall be connected to general sewerage and comply with the Dubai Municipality regulations' drainage and sanitation requirements.

#### 13.5. External Services

- 13.5.1. Many healthcare facilities use external contractor and/or services to provide specific services essential to the ongoing operation of the DSC, e.g. Nutrition, laundry, cleaning, maintenance, transport, and security. Some clinical services provided by an external contractor such as radiology, Lab and pathology and allied health. External service providers shall be managed effectively to provide safe, high-quality care and services.
- 13.5.2. While a contracted service agreement is essential for both the health facility and service provider to ensure quality maintenance, the fundamental responsibility for quality still rests with the contracting health facility. The health facility shall precisely outline its service agreement/contract, the type and Standard of the services expected, and evidence compliance with relevant regulatory bodies such as Dubai Municipality (DM).

### 13.6. Care for Deceased Patients

- 13.6.1. A policy for mortuary management shall be available in the health facility and assure respect and dignity.
- 13.6.2. In the circumstance of patient death, the DSC shall be responsible for overseeing the transportation of deceased patients from the DSC to the mortuary.
- 13.6.3. All deceased patients shall be considered infectious.
  - a. Strict infection control measures shall be adopted.
  - b. The body shall be cleaned and wrapped according to the requirements of the mortuary service.
- 13.6.4. The patient's family rights shall be respected and considered;
- 13.6.5. Requests for relatives/friends to view the deceased shall be arranged by the DSC staff or the mortuary.
- 13.6.6. Deceased registration and notification shall be reported to DHA and MoHAP and maintained by the DSC.

## 14. STANDARD TEN: MEDICAL RECORD AND HEALTH INFORMATION MANAGEMENT

- 14.1. DSC shall ensure all patients have a medical file that is protected, secured, accurate and up to date. As a minimum, the file shall entail the following:
  - 14.1.1. Patients full contact details.
  - 14.1.2. Emergency contact person (next of kin).
  - 14.1.3. Patient health status.

- 14.1.4. Treating physician.
  - 14.1.5. Any allergies or contract indications.
  - 14.1.6. Prescriptions.
  - 14.1.7. Lab and diagnostic information.
  - 14.1.8. Date of last assessment.
  - 14.1.9. Information on consent.
  - 14.1.10. Date, time and observations for all consultations.
- 14.2. Up to date operating theatre records shall be maintained, including but not be limited to:
- 14.2.1. Name, date of birth and identification number of the patient.
  - 14.2.2. Date, inclusive of time of the surgical procedure.
  - 14.2.3. Surgical procedure(s) performed, time in and time out.
  - 14.2.4. Name(s) of Physicians, Nurses and Technicians.
  - 14.2.5. Name of nursing personnel (scrub and circulating).
  - 14.2.6. Type of anaesthesia administered, dose, time, date and professional.
  - 14.2.7. Name and title of the person managing anaesthesia.
  - 14.2.8. Requirements for testing and disposal of surgical specimens.
  - 14.2.9. Circumstances that require the presence of an assistant during surgery.
  - 14.2.10. Procedures for handling infectious cases.
- 14.3. Maintain post-op quality data to inform quality management and patient safety, including but not be limited to:
- 14.3.1. Recovery timeframe.

- 14.3.2. Wound healing time.
- 14.3.3. Complication rate.
- 14.3.4. Incidence of pain, nausea and vomiting.
- 14.3.5. Incidence of treatment-related side effects.
- 14.3.6. Incidence of changes to patient mobility arising directly from the procedure.
- 14.3.7. Patient satisfaction rate.

## 15. STANDARD ELEVEN: ADMINISTRATIVE REPORTING

The unanticipated, undesirable or potentially dangerous occurrence of events such as never events, adverse events and sentinel events in a healthcare organization might occur. DSC shall develop a written policy for incident reporting to DHA when such events occur. This includes but is not limited to the following:

### 15.1. 0-48 hours

- 15.1.1. Any incident before or following surgery or administration of anaesthesia that results in patient death, loss of function or limb.
- 15.1.2. A patient fall that results in death or major permanent loss of function as a direct result of the fall.
- 15.1.3. Serious criminal acts such as assault, homicide, or other crime resulting in patient death or major permanent loss of function occurred inside the DSC premises.
- 15.1.4. Surgical and non-surgical invasive procedures on the wrong patient, wrong site, or wrong procedure.

- 15.1.5. Unintended retention of a foreign object in a patient after surgery or other procedure.
  - 15.1.6. Loss of patient data or patient files.
  - 15.1.7. Full or partial evacuation of the DSC for any reason.
  - 15.1.8. Major incident in the DSC premises (fire, flood, electrical outage, an outbreak of disease)
- 15.2. Means for reporting adverse events, never events and sentinel events, and major incidences shall include a written official letter to HRS Clinical Audit and Control Department at DHA either by courier or in person and verified by email follow up phone call unless specified by DHA otherwise. DSC management team shall prepare a written evaluation of its response following an investigation, root cause analysis and action plan.
- 15.3. The response shall be submitted to HRS Clinical Audit and Control Department at DHA by courier, in person and verified email and follow up phone call within 45 calendar days from the event's date.
- 15.4. Key Performance Indicators (KPIs) shall be captured by DSC management by the 2nd week of each quarter and reported to HRS. Submission reflects the outcomes achieved in the previous quarter. Data submission includes but is not limited to the following:
- 15.4.1. Access
  - 15.4.2. Quality

## 16. STANDARD TWELVE: FACILITY MANAGEMENT

### 16.1. Medical Equipment and Supplies

Accurate and safe clinical equipment is an essential requirement in the provision of health services. Medical equipment shall be installed and operated in accordance with manufacturer specifications. The DSC shall maintain effective Preventive Maintenance (PM) as per the manufacturer recommendations (at least 95% of medical equipment shall receive PM). The PM shall include the following:

- 16.1.1. Electrical safety testing for patient-related equipment.
- 16.1.2. Each piece of equipment has a checklist for its maintenance schedule, failure incidence and repairs date.
- 16.1.3. Make use and maintain Statistical data of Preventative Maintenance (PM) for upgrading/replacing equipment.
- 16.1.4. The DSC shall maintain a copy of operator and safety manuals of all medical equipment and inventory list with equipment location.
  - a. DSC healthcare professionals (physicians, nurses, and allied health) shall be trained to operate the medical equipment assigned to them.
  - b. Training shall be documented and kept up to date.
- 16.1.5. Maintain written policy for medical tagging equipment which should include:
  - a. PM with the testing and due date.
  - b. Inventory number.
  - c. Safety checks.

- d. Installation.
- e. Removal.
- f. Reporting incidents, hazards and corrective actions.

## 16.2. Safety and Quality Management System

- 16.2.1. DSC shall ensure that the healthcare environment is safe, functional, supportive and effective for patients, family and staff members.
- 16.2.2. The DSC leadership shall plan and budget for all necessary support and resources for safety.
- 16.2.3. The DSC shall designate a safety officer person(s) with skills and experience responsible for the safety program's operation and implementation.
- 16.2.4. The safety management system is supported by a policy and shall comply with the related federal and local regulation in UAE. The safety officer shall undertake appropriate training relevant to jurisdictional requirements.
- 16.2.5. The safety management system shall include fire safety, hazardous waste, emergencies, security.
- 16.2.6. External service providers shall be supplied with relevant information and comply with the DSC health and safety requirements.
- 16.2.7. Orientation on the safety measures shall be included in the induction program of new staff.
  - a. Staff shall be educated and provided with information on waste management, fire safety, hazardous substances and their responsibilities.



16.2.8. DSC shall abide by the prevention and safety measures required by the Dubai Civil Defence.

16.2.9. DSC management shall ensure compliance with Federal Authority Nuclear Regulation-FANR rules and regulations regarding the use of ionizing radiation and radioactive materials in DSC.

### 16.3. Fire Safety

16.3.1. Fire is a potential risk for all healthcare organizations and is critical where immobile patients are in locations that are difficult to evacuate. To respond to fire risk, the DSC shall:

- a. Establish a fire safety plan for early detection, confining, extinguishment, Rescue and alerting the Dubai Civil Defence.
- b. Establish a No Smoking policy.
- c. Assess the fire risks to the facility.
- d. Understand and manage risks associated with the facility's location and physical structures.
- e. Maintain and test fire protection and emergency communication systems
- f. Train staff to respond to a fire event in the building.
- g. Monitor whether adequate numbers of suitably trained staff are posted across all shifts to respond appropriately to a fire event.
- h. Rehearse emergency scenarios to assess preparedness.

### 16.4. Hazardous Substances and Dangerous materials.

- 16.4.1. The DSC shall have policies and procedures on the procurement, management and disposal of dangerous materials and hazardous substances and shall comply with local regulations.
- 16.4.2. There should be adequate space and ventilation for the safe handling of dangerous materials and hazardous substances.
- 16.4.3. Each DSC shall have a current list of hazardous substances and dangerous materials used in their area, the list covers:
  - a. Purpose of use.
  - b. The responsible person.
  - c. Permitted Quantity.
- 16.4.4. All substances shall be clearly labelled; this includes corrosives, acids, toxic material, hazardous gases and anaesthetic gases.
- 16.4.5. Hazardous substances shall be appropriately labelled and maintained on a register of all hazardous substances in the workplace. Labels should never be altered, and substances shall be stored in their original containers.
- 16.4.6. Employees dealing with hazardous substances shall have protective clothing or equipment as required.
- 16.4.7. Material Safety Data Sheets (MSDS) shall be available for employees at the point of use in case of an emergency.

## 16.5. Waste and Environmental Management

16.5.1. Waste and environmental management shall support safe practice and a safe environment. The DSC shall develop and implement a waste and environmental management policy. The policy shall include the segregation and disposal of DSC clinical waste responsibly in accordance with federal and local regulations in the UAE.

16.5.2. The waste management policy shall cover handling, storing, transporting, and disposing of all kinds of waste. All waste shall be labelled as:

- a. Anatomical, e.g. blood and organs (yellow).
- b. Clinical/infectious waste (yellow).
- c. Clinical/highly infectious, pathological waste and sharps (yellow).
- d. Medicine unused drugs (yellow).
- e. Cytotoxic, Cytostatic, Chemotherapeutic, Chemotherapy medicines waste (yellow).
- f. Dental (yellow).
- g. Offensive but not hazardous (yellow).
- h. Radioactive waste (lead box).
- i. Chemical or pharmaceutical (yellow).
- j. Domestic waste (black).

16.5.3. Proper storage and containers for disposing of waste material shall be maintained.

16.5.4. Contracting with a specialized company to transport and destroy medical waste materials shall be according to the conditions issued by Dubai Municipality.

16.5.5. Disposing medical liquids, drugs, solutions and dangerous chemical materials into usual sewage disposal are prohibited.

16.5.6. Cleanliness throughout the DSC shall be maintained by trained staff.

## 16.6. Emergency and Disaster Management

16.6.1. The DSC shall develop a plan and policies for dealing with and managing emergencies and disasters, which shall include:

- a. Duties and responsibilities of healthcare professionals and employees in the DSC.
- b. Identifying the responsible person who announces the emergency state and calls local authority.
- c. The triage areas, their locations, and triage action cards.
- d. Names of all staff called, including their contact.

16.6.2. The DSC shall conduct Emergency practice/drill exercises, including fire and evacuation, to test the following:

- a. The timely response of staff to the emergency call.
- b. The efficiency of the communication system, e.g. bleeps, mobile phone and overhead paging system.
- c. If all staff can perform their expected roles.
- d. The time taken to evacuate patients and beds.

16.6.3. There are evacuation maps posted in the DSC indicating locations of:

- a. You are here.
- b. Fire extinguishers.

- c. Fire hose reel/cabinets.
- d. Escape routes.
- e. Assembly points.
- f. Fire exits.
- g. Call points break glass/pull station.

16.6.4. External service providers shall comply with the DSC requirements for the prevention of emergencies.

16.6.5. Staff is educated and trained at orientation and annually in fire and evacuation.

#### 16.7. Security Management

16.7.1. Security management shall support safe practice and a safe environment.

16.7.2. The facility management may assign specific personnel to take care of security in the DSC or ensure security by installing a CCTV camera or other surveillance means.

16.7.3. Security personnel (if available) shall be educated and provided with information in relation to security risks and responsibilities and oriented on their scope of work, fire safety and emergency codes.

16.7.4. There is a security policy, which includes identification of all the following by badge:

- a. The DSC staff.
- b. Temporary employees.
- c. Trainees.
- d. Contractor staff.

16.7.5. There are written policies on the following that includes but not limited to:

- a. Lost and found items.
  - b. Safekeeping of patient belongings.
  - c. How to contact the local police, in case of need.
- 16.7.6. Major security risks shall be identified in the DSC.
- 16.7.7. Restricting access to sensitive areas by Security Personnel/Security System such as operating area, no filming in operating theatre as per DHA Circular.
- 16.7.8. External service providers are supplied with relevant information and comply with the DSC security controls.

## 17. STANDARD THIRTEEN: INFECTION PREVENTION AND CONTROL

- 17.1. There shall be written policies and procedures regarding infection control program to include the management, prevention and surveillance shall be in place and documented as part of the DSC policies and procedures.
- 17.1.1. The Policy shall include how to prevent the transmission of pathogens across the DSC.
- 17.1.2. The infection control program shall support safe practice and ensures a safe environment for patients, healthcare workers and DSC visitors. The infection control system shall address factors related to the spread of infections among professional/patient and prevention which includes but is not limited to:
- a. The essential measures for infection control/hand hygiene/hand washing.
  - b. The procedures for minimizing risk/cleaning/disinfection/sterilization.

- c. Use of standard precautions and additional precautions in certain cases.
- d. Restriction of jewellery, nail polish, false nails and clothing in surgical theatre.
- e. Healthcare professional vaccination and immunisations (Appendix 13).
- f. Monitoring/investigation of demonstrated or suspected spread of infection within the DSC.
- g. Environmental cleaning, single-use items and reprocessing of sterile instruments.
- h. Recommended cleaning, disinfectants and sterilisation in the healthcare setting for surgical and non-surgical areas as per Centre for Disease Prevention and Control recommendations  
<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html>
- i. Sterilisation may be outsourced and is subject to DHA approval.
- j. There should be a sterilizing area, which can be located near the Operating Theatre area with an adequate high-speed autoclave machine. Operation instruments and trolleys may be arranged in this area.
- k. Post-exposure prophylaxis protocols.
- l. External service providers and visitors shall be advised of the DSC infection Control requirements. Surveillance to ensure the maintenance of a clean and safe environment of resources such as air conditioning units and water-cooling towers should be conducted by DSC management.
- m. An active infection prevention surveillance program and ongoing educational

and competency evaluation of staff regarding activities within the pre-procedure, intra-procedure and post-procedure phases are necessary for staff and patient safety.

- n. To prevent pathogens transmission resulting from improper use or reuse of syringes, multiple-dose drug vials and IV equipment, the following shall be adhered to:
- Preparing medications for multiple patients shall be done in an area away from direct patient care or procedure rooms.
  - All medications shall be appropriately labelled by the nurse, including those used for sedation, unless the medication is for immediate use (prepared and administered immediately without leaving the provider's hand).
  - Medications either marked on the container or noted in the package insert as "single patient use" shall be used for a single patient only, and any remaining drug should be discarded.
  - New fluid administration sets (e.g., IV tubing) units shall be used for each patient.
  - A single-dose vial is preferred over multiple-dose vials, particularly when medications are administered to multiple patients.
  - If a multiple-dose vial is used for more than one patient, they should remain in a centralized medication area and not enter the patient procedure room. According to protocols, they should be dated when opened and



discarded in compliance with nationally MoHAP accepted guidelines and those published by the Centers for Disease Control and Prevention (CDC).

- Reusing a syringe to enter a medication vial or solution, even with a new needle, shall not be permitted.
- The same syringe shall not be used to administer medications to multiple patients regardless of whether the needle is changed or an intervening length of IV tubing is used.
- Used syringes and needles shall be disposed of at the point of use in a sharps container that is closable, puncture-resistant, and leak-proof.
- If lubricant tubes are used for more than one examination, appropriate infection control habits should be observed, and any tube that has potentially been contaminated should be discarded.
- The aseptic technique (i.e., cleansing the access diaphragms of medication vials with 70% alcohol before inserting a device in the vial) should be used to prepare and administer injections. Single-dose vials, ampules, bags, or IV solution bottles should be used for a single patient only.

17.2. A policy for the management of sharps and sharps-related injection injuries, including the reporting of blood and body fluid exposures, shall be developed.

17.3. Hand hygiene shall be performed before patient contact (even if gloves are to be worn), after patient contact and before exiting the patient care area, after contact with blood, body fluids or contaminated surfaces, before performing invasive procedures and after glove removal.

- 17.4. Convenient access to hand-washing stations shall be available in all consultation, treatment, patient care, sterilisation, dirty utility and housing keeping areas.
- 17.5. Use of soap and water is required when hands are visibly soiled.
- 17.6. Environmental cleaning of surfaces with a disinfectant is mandatory. It shall follow manufacturer recommendations, especially for surfaces that are most likely to become contaminated with pathogens, such as those near the patient (e.g. side rails) and other frequently touched surfaces.
- 17.6.1. The DSC shall maintain material safety data sheets (MSDS) for all chemicals used for cleaning and disinfection.
- These sheets shall detail the safe and proper use and emergency protocol for a chemical.
  - Material safety data sheets should be used for training staff on each chemical's safe use.
- 17.7. There must be appropriate measures for cleaning and decontamination of spills of blood or other potentially infectious material. The health facility should:
- 17.7.1. Follow the CDC directions for surface disinfection of patient care items.
- Appropriate contact time of disinfectant to achieve germicidal kill shall be followed.
  - Alcohol should not be used to clean environmental surfaces.
  - Properly clean and disinfect surfaces that are frequently touched like endoscopy keyboards, video monitors, consoles or dirty equipment in the endoscopic

procedure are at the beginning of the day, between cases and during terminal cleaning.

d. Endoscopy equipment shall be dried and stored in an endoscopy storage cabinet.

17.8. Patient traffic patterns dictate the use of Personal Protective Equipment, location of care and the potential of direct contact with patients and their bodily fluids during specific activities.

17.9. Healthcare professionals shall remove and appropriately discard used PPE before leaving the procedure room.

17.10. Contaminated clothing shall be placed in a bag and identified as potential biohazardous. The bag with the contaminated clothing should be sent to a laundry capable of cleaning and disinfection.

17.11. Healthcare professionals engaged in endoscopic procedures with potential splash/contamination shall wear gloves, face/eye shields, /impervious gowns.

17.12. Final rinse water of the endoscope washer-disinfector and rinse sample cultures for endoscopic channels and water bottle shall be tested every month.

17.13. Single-use devices, as determined by the manufacturer label or packaging insert, should not be reprocessed.

17.14. The reprocessing protocol of reusable medical equipment, such as endoscopes and endoscopic accessories, must be strictly followed.

## 18. STANDARD FOURTEEN: PATIENT RIGHTS AND RESPONSIBILITIES

18.1. DSC must put in place a written policy that adheres to DHA requirements for patient rights and responsibilities. Information on patients' rights and responsibilities shall be communicated and displayed in at least two languages (Arabic and English) at the entrance, reception, and waiting for the area(s) of the premises and website. Requirements for patient rights and responsibilities include but are not limited to, the following:

- 18.1.1. Patients have the right to full disclosure of healthcare service costs. Cost information can be displayed in a price leaflet/brochure/online or any other feasible manner.
- 18.1.2. Patients have the right to request information about a physician's scope of practice, credentials and license.
- 18.1.3. Patients have the right to be provided with information concerning their diagnosis, evaluation, treatment options, and prognosis.
- 18.1.4. Patients have a right to obtain their medical report along with copies of all investigation reports.
- 18.1.5. Patients have the right to participate in decisions involving their care.
- 18.1.6. Patients have the right to refuse any diagnostic procedure or treatment and shall be advised of the medical consequences of refusal.
- 18.1.7. Patients have the right to seek a second opinion.
- 18.1.8. Patients have the right to make a complaint as per DHA process and to receive a written response.
  - a. Timescales for managing complaints shall be provided in writing to the patient.

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- b. Complaints made by a patient or by their legal guardian and shall be investigated and documented, including the complaint's resolution
- 18.1.9. The DSC shall ensure patients are made aware and understand their rights as well as their responsibilities regarding the procedures/surgery, including but not limited to the provision of the patient or next of kin/legal guardian identification, fasting times, medications, financing, notification where a change in their medical condition has taken place and adherence to physician and staff instructions.

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## APPENDICES

### APPENDIX 1: DSC CLASSIFICATION (ANESTHESIA, SEDATION AND PATIENT SAFETY I AND II)

| Health Facility CLASS A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Health Facility CLASS B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Health Facility CLASS CM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Health Facility CLASS C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Minimal Sedation (Anxiolysis)</b></p> <p>is a drug-induced state to reduce patient anxiety during which the patient usually responds to verbal commands (technically awake). In this stage, the following should be present:</p> <ul style="list-style-type: none"> <li>• Normal respirations.</li> <li>• Normal eye movements.</li> <li>• Intact protective reflexes.</li> <li>• Amnesia may or may not be present.</li> </ul> <p>i. Topical anaesthesia, oral sedative and Local Anesthesia</p> | <p><b>Moderate Sedation/Analgesia (Conscious Sedation)</b> is a drug-induced depression of consciousness. The patient tolerates unpleasant therapeutic or diagnostic procedures and responds purposefully to verbal commands, either alone or accompanied by light tactile stimulation, while maintaining cardiorespiratory function. Commonly involves the intravenous administration of drugs with anxiolytic, hypnotic, analgesic, and amnesic properties either alone or as a supplement to a local or regional anaesthetic. Moderate sedation is a medically controlled state of drug-induced depressed consciousness that:</p> <ol style="list-style-type: none"> <li>i. Allows protective reflexes to be maintained</li> <li>ii. Retains the patient's ability to maintain a patent airway independently and continuously;</li> <li>iii. Permits appropriate response by the patient to physical stimulation or verbal command, for example, "open your eyes."</li> <li>iv. The drugs, doses, and techniques used are not intended to produce a loss of consciousness.</li> <li>v. Topical anaesthesia, Local Anesthesia and sedatives (oral or injection).</li> <li>vi. Regional Anesthesia.</li> <li>vii. Narcotic Analgesics.</li> <li>viii. Dissociative Anesthetics.</li> </ol> <p><b>Note 1:</b> Regional Anesthesia involves the injection of the local anaesthetic in the vicinity of major nerve bundles supplying body areas, such as the thigh, ankle, forearm, hand or shoulder, so the patient cannot feel pain in that area</p> <p><b>Note 2:</b> Propofol, Spinal Anesthesia, Epidural Anesthesia, Endotracheal Intubation Anesthesia, Laryngeal Mask Airway Anesthesia, is prohibited in a Class B Centre.</p> <p><b>Note 3:</b> Exceptions for permitted endoscopic (see <b>Appendix 2</b>)</p> | <p><b>Deep Sedation/Analgesia</b> is a drug-induced depression of consciousness or unconsciousness during which patients cannot be easily aroused and respond purposefully following repeated or painful stimulation or verbal command. The ability to independently maintain ventilatory function may be impaired; thus, patients may require assistance in maintaining a patent airway and spontaneous ventilation. Cardiovascular function is usually maintained.</p> <ol style="list-style-type: none"> <li>i. Topical anaesthesia, Local Anesthesia and Sedatives (oral or injection).</li> <li>ii. Regional Anesthesia.</li> <li>iii. Narcotic Analgesics.</li> <li>iv. Dissociative Anesthetics.</li> <li>v. Spinal Anesthesia.</li> <li>vi. Epidural Anesthesia.</li> </ol> <p><b>Note 1:</b> The use of Endotracheal Intubation Anesthesia, Laryngeal Mask Airway Anesthesia, and/or Inhalation General Anesthesia (including Nitrous Oxide) is prohibited in a Class CM Centre.</p> <p><b>Note 2:</b> Epidural Catheter is a fine plastic tube (an epidural catheter) threaded through a needle, and the tube is left in the epidural space in the back. A local anaesthetic is injected down the tube to cause numbness, which varies according to the amount of local anaesthetic injected.</p> | <p><b>General Anesthesia</b> is a controlled state of drug-induced unconsciousness state accompanied by a loss of protective reflexes, including losing the ability to maintain a patent airway independently or to respond purposefully to physical stimulation or verbal command. Cardiovascular function may be impaired, and Positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function.</p> <ol style="list-style-type: none"> <li>i. Topical anaesthesia, oral sedative and Local Anesthesia.</li> <li>ii. Regional Anesthesia.</li> <li>iii. Dissociative Anesthetics</li> <li>iv. Epidural Anesthesia.</li> <li>v. Spinal Anesthesia.</li> <li>vi. General Anesthesia (with or without Endotracheal Intubation or Laryngeal Mask Airway Anesthesia).</li> </ol> <p><b>Note 1:</b> Major regional blocks including, but not limited to, spinal, epidural or caudal injection of any drug, which has analgesic, anaesthetic or sedative effects are in the same category as general anaesthesia.</p> |

| Criteria                         | Health Facility CLASS A<br>Minimal Sedation (Anxiolysis)                                                                                                                                                                                                                                                                                                       | Health Facility CLASS B<br>Moderate Sedation/<br>Analgesia (Conscious Sedation)                                                                                                                                                                                                                                                                                | Health Facility CLASS CM<br>Deep Sedation/ Analgesia                                                                                                                                                                                                                                                                                                           | Health Facility CLASS C<br>General Anesthesia                                                                                                                                                                                                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Responsiveness</b>            | Normal response to Verbal Stimulation                                                                                                                                                                                                                                                                                                                          | Purposeful response to verbal and tactile stimulation (Reflex withdrawal from a painful stimulus is NOT considered a purposeful response)                                                                                                                                                                                                                      | Purposeful response following repeated or painful simulation (Reflex withdrawal from a painful stimulus is NOT considered a purposeful response)                                                                                                                                                                                                               | Unarousable even with painful stimulus                                                                                                                                                                                                                                                                                                                         |
| <b>Airway</b>                    | Unaffected                                                                                                                                                                                                                                                                                                                                                     | No intervention required                                                                                                                                                                                                                                                                                                                                       | Intervention may be required                                                                                                                                                                                                                                                                                                                                   | Intervention often required                                                                                                                                                                                                                                                                                                                                    |
| <b>Spontaneous Ventilation</b>   | Unaffected                                                                                                                                                                                                                                                                                                                                                     | Adequate                                                                                                                                                                                                                                                                                                                                                       | May be adequate                                                                                                                                                                                                                                                                                                                                                | Frequency inadequate                                                                                                                                                                                                                                                                                                                                           |
| <b>Cardiovascular Function</b>   | Unaffected                                                                                                                                                                                                                                                                                                                                                     | Usually maintained                                                                                                                                                                                                                                                                                                                                             | Usually maintained                                                                                                                                                                                                                                                                                                                                             | Maybe impaired                                                                                                                                                                                                                                                                                                                                                 |
| <b>ASA<br/>PS Classification</b> | <p><b>ASA I</b> (A normal healthy patient, i.e. Healthy, non-smoking, no or minimal alcohol use)</p> <p><b>ASA II</b> (Mild diseases only without substantive functional limitations. Examples include but not limited to the current smoker, social alcohol drinker, pregnancy, obesity (30 &lt; BMI &lt; 40), well-controlled DM/HTN, mild lung disease)</p> | <p><b>ASA I</b> (A normal healthy patient, i.e. Healthy, non-smoking, no or minimal alcohol use)</p> <p><b>ASA II</b> (Mild diseases only without substantive functional limitations. Examples include but not limited to the current smoker, social alcohol drinker, pregnancy, obesity (30 &lt; BMI &lt; 40), well-controlled DM/HTN, mild lung disease)</p> | <p><b>ASA I</b> (A normal healthy patient, i.e. Healthy, non-smoking, no or minimal alcohol use)</p> <p><b>ASA II</b> (Mild diseases only without substantive functional limitations. Examples include but not limited to the current smoker, social alcohol drinker, pregnancy, obesity (30 &lt; BMI &lt; 40), well-controlled DM/HTN, mild lung disease)</p> | <p><b>ASA I</b> (A normal healthy patient, i.e. Healthy, non-smoking, no or minimal alcohol use)</p> <p><b>ASA II</b> (Mild diseases only without substantive functional limitations. Examples include but not limited to the current smoker, social alcohol drinker, pregnancy, obesity (30 &lt; BMI &lt; 40), well-controlled DM/HTN, mild lung disease)</p> |

**APPENDIX 2: DSC CLASSIFICATION AND PERMITTED MEDICATIONS**

| No. | Day Surgical Classification<br>(A, B, CM or C) | Method of Delivery     | Medications                                                                                                                  |
|-----|------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 1.  | A                                              | Topical Anesthesia     | Benzocaine, lidocaine, lignocaine, prilocaine                                                                                |
|     | A                                              | Oral sedative          | Alprazolam<br>Clonazepam<br>Diazepam<br>Midazolam needs reversible agent<br>Lorazepam<br>Chlordiazepoxide<br>Chloral Hydrate |
|     | A                                              | Local Anesthesia       | Lidocaine<br>Prilocaine<br>benzocaine<br>Mepivacaine<br>Bupivacaine<br>Ropivacaine Levobupivacaine                           |
| 2.  | B                                              | Topical Anesthesia     | See Health Facility Class A                                                                                                  |
|     | B                                              | Oral Sedative          | See Health Facility Class A                                                                                                  |
|     | B                                              | Local Anesthesia       | See Health Facility Class A                                                                                                  |
|     | B                                              | Intravenous Sedative   | Midazolam with reversible agents                                                                                             |
|     | B                                              | Intravenous Analgesics | Pethidine Hydrochloride<br>Fentanyl (only for permitted endoscopic procedures)                                               |

|           |           |                           |                                                                           |
|-----------|-----------|---------------------------|---------------------------------------------------------------------------|
|           | <b>B</b>  | Regional Anesthesia       | Lidocaine<br>Mepivacaine<br>Levobupivacaine<br>Bupivacaine<br>Ropivacaine |
|           | <b>B</b>  | Dissociative Anaesthetics | Ketamine (only for permitted endoscopic procedures)                       |
| <b>3.</b> | <b>CM</b> | Topical Anesthesia        | See Health Facility Class A and B                                         |
|           | <b>CM</b> | Oral Sedatives            | See Health Facility Class A and B                                         |
|           | <b>CM</b> | Local Anesthesia          | See Health Facility Class A and B                                         |
|           | <b>CM</b> | Intravenous Sedatives     | See Health Facility Class B (plus propofol)                               |
|           | <b>CM</b> | Intravenous Analgesics    | See Health Facility Class B<br>Fentanyl                                   |
|           | <b>CM</b> | Regional Anesthesia       | See Health Facility Class B                                               |
|           | <b>CM</b> | Dissociative Anaesthetics | Ketamine                                                                  |
|           | <b>CM</b> | Spinal Anesthesia         | Bupivacaine<br>Ropivacaine<br>Lidocaine<br>Levobupivacaine                |
|           | <b>CM</b> | Epidural Anesthesia       | Bupivacaine<br>Ropivacaine<br>Levobupivacaine<br>Lidocaine                |
| <b>4.</b> | <b>C</b>  | Topical Anesthesia        | See Health Facility Class A , B and CM                                    |
|           | <b>C</b>  | Oral Sedatives            | See Health Facility Class A , B and CM                                    |

|   |                          |                                                                                                                                                                                                                                                     |
|---|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C | Local Anaesthetics       | See Health Facility Class A , B and CM                                                                                                                                                                                                              |
| C | Intravenous Sedatives    | See Health Facility Class A , B and CM                                                                                                                                                                                                              |
| C | Intravenous Analgesics   | See Health Facility Class A , B and CM                                                                                                                                                                                                              |
| C | Regional Anesthesia      | See Health Facility Class A , B and CM                                                                                                                                                                                                              |
| C | Dissociative Anesthetics | See Health Facility Class B and CM                                                                                                                                                                                                                  |
| C | Spinal Anesthesia        | See Health Facility Class CM                                                                                                                                                                                                                        |
| C | Epidural Anesthesia      | See Health Facility Class CM                                                                                                                                                                                                                        |
| C | General Anesthesia       | Propofol<br>Thiopental<br>Injection Midazolam<br>Injection Diazepam<br>Sevoflurane,<br>Isoflurane<br>Halothane<br>Nitrous Oxide<br>Ketamine<br>Dexmedetomidine<br>Morphine Sulfate Injection<br>Pethidine Hydrochloride<br>Fentanyl<br>Remifentanil |

**APPENDIX 3: LIST OF PERMITTED PROCEDURES BY DAY SURGICAL CENTRE CLASSIFICATION**

| No.                                           | Speciality/Procedure Names              | Minimum Health Facility Classification/Type (A, B, CM or C) |
|-----------------------------------------------|-----------------------------------------|-------------------------------------------------------------|
| <b>Assisted Reproductive Techniques (ART)</b> |                                         |                                                             |
| 1.                                            | Intra Uterine Insemination (IUI)        | C                                                           |
| 2.                                            | In-vitro Fertilization (IVF)            | C                                                           |
| 3.                                            | Intracytoplasmic Sperm Injection (ICSI) | C                                                           |
| 4.                                            | Gamete Intra-fallopian Transfer (GIFT)  | C                                                           |
| 5.                                            | Zygote Intra-fallopian Transfer (ZIFT)  | C                                                           |

**Note:** The above procedures can only be performed in a DHA licensed fertility centre.

| No.                                               | Speciality/Procedure Names | Minimum Health Facility Classification/Type (A, B, CM or C) |
|---------------------------------------------------|----------------------------|-------------------------------------------------------------|
| <b>Endoscopic Procedures (Upper and Lower GI)</b> |                            |                                                             |
| 1.                                                | Colonoscopy                | B*                                                          |
| 2.                                                | Gastroscopy                | B*                                                          |
| 3.                                                | Esophagoscopy (Flexible)   | B*                                                          |
| 4.                                                | Sigmoidoscopy              | B*                                                          |
| <b>Endoscopic Procedures (Respiratory)</b>        |                            |                                                             |
| 5.                                                | Laryngoscopy (indirect)    | CM                                                          |
| 6.                                                | Bronchoscopy (flexible)    | CM                                                          |

**Note:** Thoracoscopy and laparoscopy can only be performed in a DHA licensed hospital setting.

\*Patients that require GA should be escalated to C.



| No.                    | Speciality/Procedure Names                                                                                              | Minimum Health Facility Classification/Type (A, B, CM or C) |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>General Surgery</b> |                                                                                                                         |                                                             |
| 1.                     | Ganglions                                                                                                               | A                                                           |
| 2.                     | In-grown toe-nail                                                                                                       | A                                                           |
| 3.                     | Excision of skin and subcutaneous benign mass                                                                           | A                                                           |
| 4.                     | Drainage of Superficial Abscesses                                                                                       | A                                                           |
| 5.                     | Temporal artery biopsy                                                                                                  | B                                                           |
| 6.                     | Hyperhidrosis                                                                                                           | B                                                           |
| 7.                     | Anal procedures - dilatation/fissure/banding/<br>low anal fistula                                                       | CM                                                          |
| 8.                     | Breast lump excision (benign)                                                                                           | CM                                                          |
| 9.                     | Excision varicocele                                                                                                     | CM                                                          |
| 10.                    | Testicular fixation and Orchidopexy                                                                                     | CM                                                          |
| 11.                    | Varicose vein surgery                                                                                                   | CM                                                          |
| 12.                    | Hernia repair – inguinal/epigastric/femoral/<br>incisional/umbilical                                                    | C                                                           |
| 13.                    | Haemorrhoids (2 <sup>nd</sup> 3 <sup>rd</sup> Degree) and Incision and Excision<br>of superficial Thrombosed Hemorrhoid | C                                                           |
| 14.                    | Pilonidal Sinus                                                                                                         | C                                                           |

**Note:** Appendectomy, Abdominoplasty, Bariatric and Laparoscopic surgery can only be performed in a DHA licensed hospital setting.

| No.                                             | Speciality/Procedure Names        | Minimum Health Facility Classification/Type (A, B, CM or C) |
|-------------------------------------------------|-----------------------------------|-------------------------------------------------------------|
| <b>Neurosurgery/anaesthesia/pain management</b> |                                   |                                                             |
| 1.                                              | Epidural Steroid Injections/Block | B                                                           |
| 2.                                              | Selective Nerve Root injections   | B                                                           |

| No.                          | Speciality/Procedure Names                                                                 | Minimum Health Facility Classification/Type (A, B, CM or C) |
|------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>Obstetrics/Gynecology</b> |                                                                                            |                                                             |
| 1.                           | Bladder distension                                                                         | A                                                           |
| 2.                           | Colposcopic procedures                                                                     | A                                                           |
| 3.                           | Vaginal foreign bodies (e.g. retained medical device, pessaries, tampons, menstrual caps)  | A                                                           |
| 4.                           | Urethral dilatation                                                                        | B                                                           |
| 5.                           | Cervical biopsies                                                                          | B                                                           |
| 6.                           | Vaginoplasties, vulva repair and perineal repair                                           | CM                                                          |
| 7.                           | Endometrial Biopsy                                                                         | CM                                                          |
| 8.                           | Cautery to cervix                                                                          | C                                                           |
| 9.                           | Dilatation and curettage                                                                   | C                                                           |
| 10.                          | Endometrial ablation                                                                       | C                                                           |
| 11.                          | Tension-free vaginal tape                                                                  | C                                                           |
| 12.                          | Excision urethral caruncle                                                                 | C                                                           |
| 13.                          | Fenton's procedure                                                                         | C                                                           |
| 14.                          | Labial procedures/Bartholin's                                                              | C                                                           |
| 15.                          | Polypectomy                                                                                | C                                                           |
| 16.                          | Hysteroscopy                                                                               | C                                                           |
| 17.                          | Hysteroresectoscopy                                                                        | C                                                           |
| 18.                          | Laparoscopic- diathermy endometriosis/division adhesions/aspirations ovarian cyst/dye test | C                                                           |
| 19.                          | Labial Augmentation                                                                        | C                                                           |
| 20.                          | Clitoral hood reduction                                                                    | C                                                           |

**Note:** Hysterectomy, laparoscopic surgery and pelvic floor repair can only be performed in a DHA licensed hospital setting.

| No.                 | Speciality/Procedure Names                | Minimum Health Facility Classification/Type (A, B, CM or C) |
|---------------------|-------------------------------------------|-------------------------------------------------------------|
| <b>Oral Surgery</b> |                                           |                                                             |
| 1.                  | Apicoectomy                               | A                                                           |
| 2.                  | Biopsy of oral lesions/swellings          | A                                                           |
| 3.                  | Gum surgery                               | A                                                           |
| 4.                  | Excision of oral cysts                    | A                                                           |
| 5.                  | Exposure and bonding of impacted incisors | A                                                           |
| 6.                  | Exposure of impacted canines              | A                                                           |
| 7.                  | Removal of impacted canines               | A                                                           |

**Note:** Maxillofacial procedures can only be performed in a DHA licensed hospital setting.

| No.                        | Speciality/Procedure Names                  | Minimum Health Facility Classification/Type (A, B, CM or C) |
|----------------------------|---------------------------------------------|-------------------------------------------------------------|
| <b>Orthopaedic Surgery</b> |                                             |                                                             |
| 1.                         | Serial casting for limbs/spine deformities  | B                                                           |
| 2.                         | Implant Removal (Minor)                     | B                                                           |
| 3.                         | DeQuervains release                         | B                                                           |
| 4.                         | Trigger finger/thumb release                | B                                                           |
| 5.                         | Tenolysis of trigger Finger (One, Two)      | B                                                           |
| 6.                         | Dupuytren's Contracture                     | B                                                           |
| 7.                         | Claw Toe Reconstruction (One toe, Two Toes) | CM                                                          |
| 8.                         | Closed Reduction of Fracture/ Dislocation   | CM                                                          |
| 9.                         | Closed Reduction + Percutaneous Fixation    | CM                                                          |
| 10.                        | Amputation of digit                         | CM                                                          |
| 11.                        | Carpal Tunnel decompression                 | CM                                                          |
| 12.                        | Examination under anaesthesia               | CM                                                          |
| 13.                        | Correction of Hallux Valgus (Soft Tissue)   | CM                                                          |
| 14.                        | Bunionectomy                                | CM                                                          |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |    |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 15. | Open Reduction of Fracture/Fixation (Small Bone)                                                                                                                                                                                                                                                                                                                                                                                                           | CM |
| 16. | Tendon repair (Minor)                                                                                                                                                                                                                                                                                                                                                                                                                                      | C  |
| 17. | Anthrodesis of small joints                                                                                                                                                                                                                                                                                                                                                                                                                                | C  |
| 18. | Arthroscopic procedures (Meniscal of the knee, Menisectomy, Chondroplasty of the knee, Pilca excision, lateral release of the knee, patella MPFL reconstruction, medial plication, micro fracture of ankle or knee, anterior fat pad decompression, shoulder, subacromial decompression of the shoulder, decompression of calcified tendinitis, slap lesion debridement/repair, debridement/loose body removal of the knee/shoulder/elbow/wrist and ankle. | C  |

**Note:** Intramedullary nailing and plating of long bones can only be performed in a DHA licensed hospital setting

| No.                            | Speciality/Procedure Names                   | Minimum Health Facility Classification/Type (A, B, CM or C) |
|--------------------------------|----------------------------------------------|-------------------------------------------------------------|
| <b>Otolaryngology (E.N.T.)</b> |                                              |                                                             |
| 1.                             | Biopsy mouth/tongue/ear                      | A                                                           |
| 2.                             | Submucous diathermy                          | B                                                           |
| 3.                             | Laryngoscopy (indirect)                      | B                                                           |
| 4.                             | Pharyngoscopy/oesophagoscopy (Flexible)      | B                                                           |
| 5.                             | Cautery/out fracture inferior turbinate      | CM                                                          |
| 6.                             | Division tongue-tie                          | CM                                                          |
| 7.                             | Intranasal polypectomy                       | CM                                                          |
| 8.                             | Excision lymph nodes                         | C                                                           |
| 9.                             | Functional Endoscopic Sinus (FESS) Surgeries | C                                                           |
| 10.                            | Uvuloplasty                                  | C                                                           |
| 11.                            | Myringotomy                                  | C                                                           |

|     |                                                           |   |
|-----|-----------------------------------------------------------|---|
| 12. | Grommet insertion, tympanoplasty and simple mastoidectomy | C |
| 13. | Antrostomy                                                | C |
| 14. | Tympanoplasty                                             | C |
| 15. | Uvulectomy                                                | C |
| 16. | Removal submandibular calculus                            | C |

**Note:** Rhinoplasty and tonsillectomy can only be performed in a DHA licensed hospital setting.

| No.                  | Speciality/Procedure Names    | Minimum Health Facility Classification/Type (A, B, CM or C) |
|----------------------|-------------------------------|-------------------------------------------------------------|
| <b>Ophthalmology</b> |                               |                                                             |
| 1.                   | Cataract extraction           | A                                                           |
| 2.                   | BCC Excision and skin graft   | A                                                           |
| 3.                   | Sling Procedure               | A                                                           |
| 4.                   | Chalazion                     | A                                                           |
| 5.                   | Conjunctiva Biopsy            | A                                                           |
| 6.                   | Cryotherapy                   | A                                                           |
| 7.                   | Ectropion and Entropion       | A                                                           |
| 8.                   | Electrolysis                  | A                                                           |
| 9.                   | Epilation of lashes           | A                                                           |
| 10.                  | Gold Weight Insertion         | A                                                           |
| 11.                  | Hughes Flap and Release       | A                                                           |
| 12.                  | Intraocular lens implantation | A                                                           |
| 13.                  | LASIK and LASEK               | A                                                           |
| 14.                  | Peripheral Indectomy          | A                                                           |
| 15.                  | Pterygium                     | A                                                           |
| 16.                  | Ptosis                        | A                                                           |
| 17.                  | Punctal Plug Insertion        | A                                                           |
| 18.                  | Second Stage Reconstructions  | A                                                           |
| 19.                  | Syringe and Probe (adult)     | A                                                           |
| 20.                  | Tarsorrhaphy                  | A                                                           |

|     |                                |   |
|-----|--------------------------------|---|
| 21. | Temporal Artery Biopsy         | A |
| 22. | Three Snip Procedure           | A |
| 23. | Trabeculectomy (glaucoma)      | A |
| 24. | Keratoplasty                   | A |
| 25. | Vitrectomy                     | A |
| 26. | Syringe and Probe (paediatric) | A |

**Note 1:** Keratomileusis, Keratoprosthesis is subject to DHA written approval.

**Note 2:** Patients that require higher level sedations should be transferred to a higher level DSC facility.

| No.                    | Speciality/Procedure Names                                                                                             | Minimum Health Facility Classification/Type (A, B, CM or C) |
|------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>Plastic Surgery</b> |                                                                                                                        |                                                             |
| 1.                     | Excision of skin tag or local skin lesion                                                                              | A                                                           |
| 2.                     | Minor Scalp Surgery (lipoma, cyst, cut wounds)                                                                         | A                                                           |
| 3.                     | Face, neck and eyebrow lift                                                                                            | CM                                                          |
| 4.                     | Blepharoplasty                                                                                                         | CM                                                          |
| 5.                     | Belly button surgery (or umbilicoplasty/navel surgery)<br>(This procedure cannot be combined with mini abdominoplasty) | C                                                           |
| 6.                     | Breast implants and augmentation                                                                                       | C                                                           |
| 7.                     | Breast reduction (Total 800g for both breasts)                                                                         | C                                                           |
| 8.                     | Breast asymmetry                                                                                                       | C                                                           |
| 9.                     | Breast lift (small and medium)                                                                                         | C                                                           |
| 10.                    | Breast Tuberous                                                                                                        | C                                                           |
| 11.                    | Calf, Cheek and Chin Surgery/implants                                                                                  | C                                                           |
| 12.                    | Ear surgery (otoplasty/pinnaplasty)                                                                                    | C                                                           |
| 13.                    | Liposuction (or lipoplasty/liposculpture) and fat transfer                                                             | C                                                           |
| 14.                    | Mini Abdominoplasty with no umbilicus transposition<br>(mini tummy tuck)                                               | C                                                           |
| 15.                    | Arm lifting                                                                                                            | C                                                           |
| 16.                    | Mini Thigh lifting                                                                                                     | C                                                           |
| 17.                    | Male Gynecomastia                                                                                                      | C                                                           |

**Note:** Lip implants, breast reduction/reconstruction and abdominoplasty can only be performed in a DHA licensed

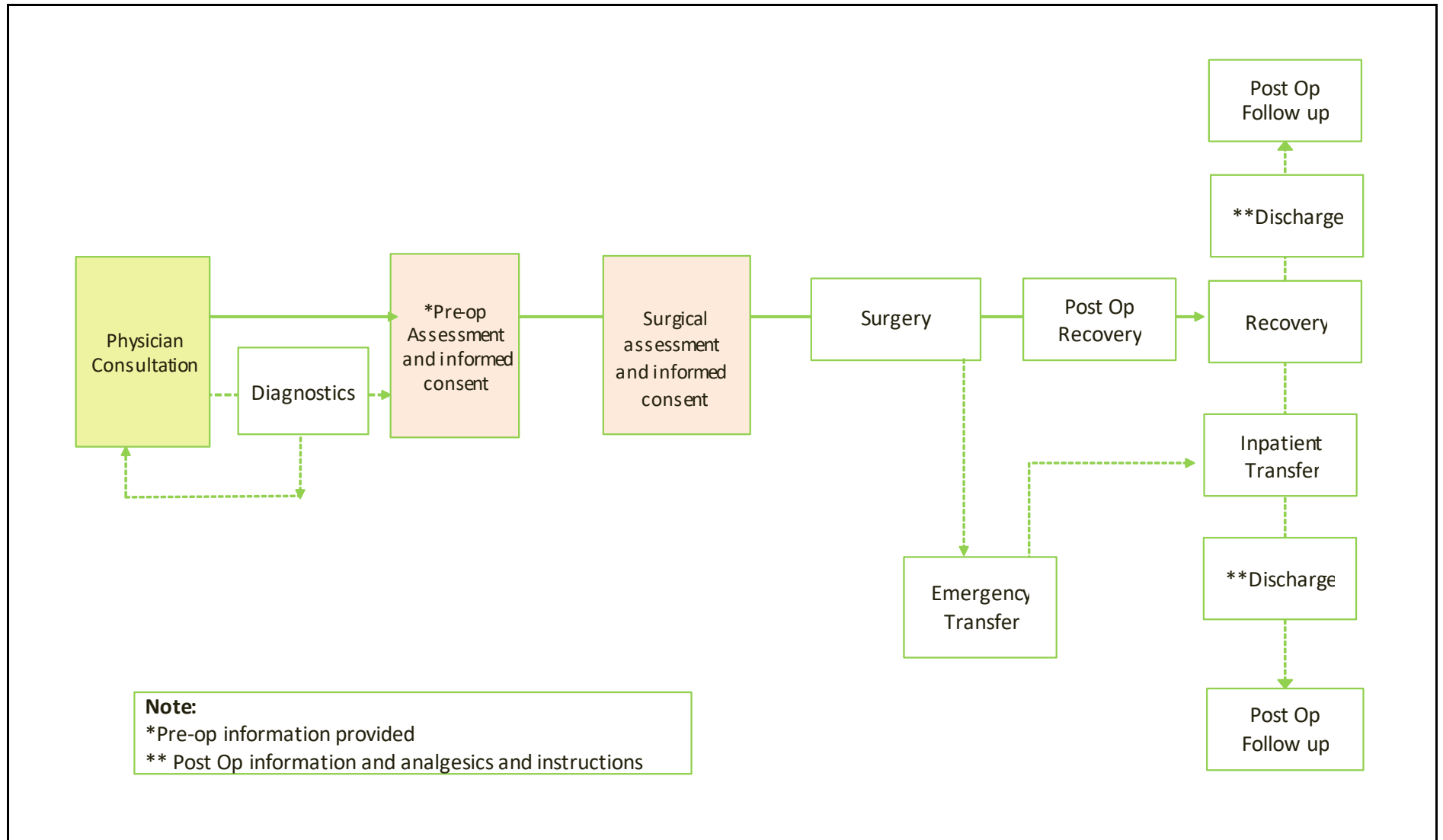
hospital setting.

**Note:** Multiple procedures in one setting should be avoided to minimize complications.

| No.            | Speciality/Procedure Names                    | Minimum Health Facility Classification/Type (A, B, CM or C) |
|----------------|-----------------------------------------------|-------------------------------------------------------------|
| <b>Urology</b> |                                               |                                                             |
| 1.             | Biopsies                                      | A                                                           |
| 2.             | Intravesical botox injection                  | A                                                           |
| 3.             | Circumcision < 3 months old                   | A                                                           |
| 4.             | Rezum                                         | B                                                           |
| 5.             | Urethral dilatation                           | B                                                           |
| 6.             | Circumcision > 3 months old                   | CM                                                          |
| 7.             | Locate/remove JJ stent                        | CM                                                          |
| 8.             | Epididymal cyst excision                      | C                                                           |
| 9.             | Cysto-diathermy bladder                       | C                                                           |
| 10.            | Excision Urethral caruncle                    | C                                                           |
| 11.            | Excision hydrocele                            | C                                                           |
| 12.            | Lithoclast                                    | C                                                           |
| 13.            | Urethral Stricture                            | C                                                           |
| 14.            | Ureteric stone laser lithotripsy              | C                                                           |
| 15.            | Bladder neck incision                         | C                                                           |
| 16.            | Prostate - Plasma kinetic vaporisation/biopsy | C                                                           |
| 17.            | Orchidopexy, Testicular and penile prosthesis | C                                                           |
| 18.            | Variocelectomy                                | C                                                           |
| 19.            | Orchiectomy                                   | C                                                           |
| 20.            | Cystoscopy                                    | C                                                           |
| 21.            | Vasectomy*                                    | C                                                           |

**Note:** \*Temporary vasectomy is permitted; under certain restrictions and conditions where a legitimate need for it, spouses' discretion, medical consultation and there is no aggression in the procedure which may prevent future pregnancies. Any surgery leading to permanent sterility is impermissible except in life-threatening or with proven medical necessity.

**APPENDIX 4: DAY SURGICAL CENTRE CARE PATHWAY**





**APPENDIX 5: MINIMUM REQUIREMENTS FOR INFORMED CONSENT FORM**

| Informed Consent Form for Patients                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Name of Healthcare Professional:</b> _____</p> <p><b>Name of Health Facility:</b> _____</p> <p><b>Name of Patient:</b> _____ <b>File No:</b> _____</p> <p><b>This Informed Consent Form has two parts:</b></p> <ul style="list-style-type: none"> <li>• <b>Information Sheet (to share information about the treatment with you)</b></li> <li>• <b>Certificate of Consent (for signatures if you agree to go ahead with the treatment)</b></li> </ul> <p><i>You will be given a copy of the full Informed Consent Form</i></p> <p><b>PART I: Information Sheet</b></p> <p>I, Dr. _____ with license No: _____ should be performing the _____ treatment/ procedure on Miss/Mrs./Mr. _____ aged _____ years, on date _____.</p> <p><b><u>Description of the Procedure and Process</u></b></p> <p>Describe to the patient or customer the procedure and what will happen on a step-by-step basis. The patient should be informed that the procedure is newly introduced and the amount of supporting research and study available.</p> <p><b>Side Effects</b></p> <p>Potential patients should be told if there are any known or anticipated side effects and what will happen if a side effect or an unexpected event happens.</p> <p><b>Risks</b></p> <p>Explain and describe any possible or anticipated risks. Describe the level of care available if harm does occur, who will provide it, and who will pay for it.</p> <p><b>Complications</b></p> <p>Inform and explain any possible complications that could be caused as a result of the treatment.</p> <p><b>Discomforts</b></p> <p>Explain and describe the type and source of any anticipated discomforts in addition to the side effects and risks discussed above.</p> <p><b>Benefits</b></p> <p>Mention only those activities that will be actual benefits of the treatment.</p> <p><b>Confidentiality</b></p> <p>Explain how the clinical team will maintain data confidentiality, especially with respect to the information about the patient, including photography and videography.</p> |

**Right to Refuse treatment/procedure**

This is a reconfirmation that the patient has the right to refuse the treatment.

**Alternatives to clinical procedure or treatment**

It is essential to explain and describe the established standard treatment or procedure for the patient’s condition.

**Financial Implications**

All procedures/treatments provided that are not covered by insurance may require the patient’s full payment or co-payment.

**PART II: Certificate of Consent**

This section can be written in the first person. It should include a few brief statements about the treatment and be followed by a statement similar to the one in bold below. The healthcare professional performing the treatment and the person going over the informed consent should sign the consent. Example:

Patient Consent statement

***I have read the previous information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to undergo this treatment and understand that I have the right to withdraw from the procedure or treatment at any time without in any way affecting my medical care.***

**Name of Patient:** \_\_\_\_\_

**Signature of Patient:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Witness statement**

*I have accurately read or witnessed the accurate reading of the consent form to the potential patient, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.*

**Name of witness:** \_\_\_\_\_

**Signature of witness:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Healthcare Professional Declaration:**

*I have adequately explained to the patient about the procedure and risks, adverse effects, and the standard alternatives available for the procedure. I have permitted time and opportunity for the patient to ask questions, and all questions have been answered to my knowledge*

**Name of healthcare professional:** \_\_\_\_\_

**Signature of healthcare professional:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## APPENDIX 6: SURGICAL SAFETY CHECKLIST

# Surgical Safety Checklist

World Health Organization | Patient Safety  
A World Alliance for Safer Health Care

| Before induction of anaesthesia                                                                                                                                             | Before skin incision                                                                                                                                                                                                                                              | Before patient leaves operating room                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| (with at least nurse and anaesthetist)                                                                                                                                      | (with nurse, anaesthetist and surgeon)                                                                                                                                                                                                                            | (with nurse, anaesthetist and surgeon)                                                                                                            |
| <p><b>Has the patient confirmed his/her identity, site, procedure, and consent?</b></p> <input type="checkbox"/> Yes                                                        | <input type="checkbox"/> <b>Confirm all team members have introduced themselves by name and role.</b>                                                                                                                                                             | <p><b>Nurse Verbally Confirms:</b></p> <input type="checkbox"/> The name of the procedure                                                         |
| <p><b>Is the site marked?</b></p> <input type="checkbox"/> Yes<br><input type="checkbox"/> Not applicable                                                                   | <input type="checkbox"/> <b>Confirm the patient's name, procedure, and where the incision will be made.</b>                                                                                                                                                       | <input type="checkbox"/> Completion of instrument, sponge and needle counts                                                                       |
| <p><b>Is the anaesthesia machine and medication check complete?</b></p> <input type="checkbox"/> Yes                                                                        | <p><b>Has antibiotic prophylaxis been given within the last 60 minutes?</b></p> <input type="checkbox"/> Yes<br><input type="checkbox"/> Not applicable                                                                                                           | <input type="checkbox"/> Specimen labelling (read specimen labels aloud, including patient name)                                                  |
| <p><b>Is the pulse oximeter on the patient and functioning?</b></p> <input type="checkbox"/> Yes                                                                            | <p><b>Anticipated Critical Events</b></p> <p><b>To Surgeon:</b></p> <input type="checkbox"/> What are the critical or non-routine steps?<br><input type="checkbox"/> How long will the case take?<br><input type="checkbox"/> What is the anticipated blood loss? | <input type="checkbox"/> Whether there are any equipment problems to be addressed                                                                 |
| <p><b>Does the patient have a:</b></p> <p><b>Known allergy?</b></p> <input type="checkbox"/> No<br><input type="checkbox"/> Yes                                             | <p><b>To Anaesthetist:</b></p> <input type="checkbox"/> Are there any patient-specific concerns?                                                                                                                                                                  | <p><b>To Surgeon, Anaesthetist and Nurse:</b></p> <input type="checkbox"/> What are the key concerns for recovery and management of this patient? |
| <p><b>Difficult airway or aspiration risk?</b></p> <input type="checkbox"/> No<br><input type="checkbox"/> Yes, and equipment/assistance available                          | <p><b>To Nursing Team:</b></p> <input type="checkbox"/> Has sterility (including indicator results) been confirmed?<br><input type="checkbox"/> Are there equipment issues or any concerns?                                                                       |                                                                                                                                                   |
| <p><b>Risk of &gt;500ml blood loss (7ml/kg in children)?</b></p> <input type="checkbox"/> No<br><input type="checkbox"/> Yes, and two IVs/central access and fluids planned | <p><b>Is essential imaging displayed?</b></p> <input type="checkbox"/> Yes<br><input type="checkbox"/> Not applicable                                                                                                                                             |                                                                                                                                                   |

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

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## APPENDIX 7: CONSCIOUS SEDATION COMPETENCY AND DUTIES TRAINING OF PERSONNEL AND GENERAL CONSIDERATIONS

### Physician:

1. Individuals responsible for patients receiving sedation/analgesia should understand the pharmacology of the agents administered and the role of pharmacological antagonists for opioids and benzodiazepines. In addition to receiving training and privileges for giving sedation.
2. Individuals monitoring patients receiving sedation/analgesia should be able to recognize the associated complications.
3. At least one individual capable of establishing a patent airway and positive pressure ventilation, as well as a means for summoning additional assistance, should be present whenever sedation/analgesia is administered.
4. It is recommended that an individual with advanced life-support skills be immediately available.
5. Hence, physician intending to produce a given level of sedation should be able to rescue patients whose sedation level becomes deeper than initially intended.
  - 5.1. Individuals administering Moderate Sedation/Analgesia ("Conscious Sedation") should be able to rescue patients who enter a state of Deep Sedation/Analgesia.
  - 5.2. While those administering Deep Sedation/Analgesia should be able to rescue patients who enter a state of general anaesthesia.

### Nursing Staff:

The following are the criteria for providing conscious sedation:

1. Qualified Nurses are responsible for monitoring and assisting treating physician for patients receiving sedation/analgesia.
2. Qualified Nurses caring for the patient receiving sedation/analgesia should have no other responsibilities that would leave the patient unattended or compromise continuous monitoring of the patient from medication administration through the recovery process.
3. Responsibility cannot be delegated to a Non-Staff Nurse.

4. Nurses should have experience in surgery, critical care, emergency, orthopaedic, and Pediatric Nursing.

5. Should be trained in:

5.1. BLS.

5.2. Insertion of IV lines.

5.3. Assessment and monitoring of patients under sedation.

5.4. Pain assessment and management.

5.5. Understand the pharmacology of the agents that are administered and the role of pharmacological antagonists for opioids and benzodiazepines.

General Considerations:

1. The provision of sedation/analgesia (conscious sedation) is an interdependent role, requiring a physician's order before implementation.
2. Appropriate pre-procedure evaluation of patients' histories, physical findings, and laboratory evaluation reduces the risk of adverse outcomes and leads to improved patient satisfaction.
3. The individuals providing such care should have proven competency before administering conscious sedation.
4. The individuals providing such care should also be knowledgeable about the use of reversal agents.
5. The provider should also have current BLS knowledge.
6. Sedation/analgesia can be administered only in designated areas meeting all criteria in the protocol.
7. The appropriate choice of agents and techniques for sedation /analgesia is dependent on the experience and preference of the individual physicians, requirements or constraints imposed by the patient or procedure, and the likelihood of producing unintended loss of consciousness.
8. Excessive sedation/analgesia may result in cardiac or respiratory depression that must be rapidly recognized and appropriately managed to avoid the risk of hypoxic brain damage, cardiac arrest, or death.
9. Conversely, inadequate sedation/analgesia may result in undue patient discomfort or patient injury because of lack of cooperation or adverse physiologic response to stress.

## APPENDIX 8: MODERATE SEDATION/ANALGESIA

### Locations Designated For Moderate Sedation/Analgesia

Moderate Sedation should be administered only in designated areas that are meeting all criteria in the protocol. This area must have specific structures, which include:

1. Pre-determined exclusion criteria for patients who are not candidates for Moderate sedation
2. A written protocol to ensure continuous monitoring of patients throughout the procedure and the recovery phase.
3. Instructions for medication administration to include drugs, drug routes, and amounts recommended for administration.
4. Written guidelines for managing potential complications or emergencies.
5. Availability of Oxygen:
  - 5.1. There should be a reliable source of oxygen adequate for the procedure's length and a backup supply.
    - 5.1.1. Before administering any anaesthetic, the physician should consider the capabilities, limitations and accessibility of both the primary and backup oxygen sources.
    - 5.1.2. Oxygen piped from a central source is strongly encouraged.
    - 5.1.3. The backup system should include the equivalent of at least a full E cylinder.
6. Availability of emergency equipment
  - 6.1. Appropriate emergency equipment for maintaining the patient's airway, Respiratory status and cardiac status will be readily available when sedation medications are given to the patient.
  - 6.2. Equipment should be suitable for the size and age of the patient.
  - 6.3. The following equipment is essential, but not limited to:
    - 6.3.1. Emergency cart with defibrillator (immediately accessible) Suction at the bedside
    - 6.3.2. Oxygen and oxygen delivery devices (cannula, mask)
    - 6.3.3. Appropriate oral and nasal airways (pediatric and adult as appropriate)
    - 6.3.4. Continuous noninvasive BP monitoring device
    - 6.3.5. Cardiac monitor
    - 6.3.6. Pulse oximeter

6.3.7. Ambu bag

6.3.8. Intubation tray

7. Availability of emergency medication:

7.1. Adequate anaesthesia drugs and supplies for the intended care.

7.2. Pharmacological antagonists (Naloxone and Flumazenil).

7.3. IV supplies

### **General Considerations for Moderate Sedation/Analgesia**

1. The provision of moderate sedation/analgesia is an interdependent role, requiring a physician's order before implementation.
2. Appropriate pre-procedure evaluation of patients' histories, physical findings, and laboratory evaluation reduces the risk of adverse outcomes and leads to improved patient satisfaction.
3. The individuals providing such care shall have proven competency before administering conscious sedation.
4. The individuals providing such care should also be knowledgeable about the use of reversal agents.
5. The provider must also have current BLS knowledge.
6. Sedation/analgesia can be administered only in designated areas meeting all criteria in the protocol.
7. The appropriate choice of agents and techniques for sedation /analgesia is dependent on the experience and preference of the individual physicians, requirements or constraints imposed by the patient or procedure, and the likelihood of producing unintended loss of consciousness.
8. Excessive sedation/analgesia may result in cardiac or respiratory depression and should be rapidly recognized and appropriately managed to avoid the risk of hypoxic brain damage, cardiac arrest, or death.
9. To avoid excessive sedation levels, drugs should be titrated in increments rather than administered in larger doses according to predetermined notions of efficacy.
10. Continuous infusions (propofol) are superior to intermittent bolus dosing because they produce less fluctuation in drug concentration, reducing the number of episodes of inadequate or excessive sedation and contributing to prompter recovery.
11. Conversely, inadequate sedation/analgesia may result in undue patient discomfort or patient injury because of lack of cooperation or adverse physiologic response to stress.

12. The ideal sedation technique involves administering individual drugs or combinations of analgesic, amnesic and hypnotic drugs.
13. The drug(s) selected should allow rapid and complete recovery with a minimal incidence of nausea and vomiting or residual cardio-respiratory depression.
14. Causes of Patient Agitation During Moderate Sedation/Analgesia:
  - 14.1. Increased patient agitation may be a result of pain or anxiety.
    - 14.1.1. Pain may be treated with systemic analgesics, regional techniques, or removal of the painful stimulus.
    - 14.1.2. Anxiety may be treated with reassurance and/or a Benzodiazepine.
  - 14.2. Life-threatening factors
    - 14.2.1. Hypoxemia
    - 14.2.2. Hypoventilation
    - 14.2.3. Impending local Anaesthetics toxicity
    - 14.2.4. Cerebral hypo-perfusion
  - 14.3. Less ominous but often overlooked factors
    - 14.3.1. Distended bladder
    - 14.3.2. Hypothermia or hyperthermia
    - 14.3.3. Pruritus, Nausea
    - 14.3.4. Positional discomfort
    - 14.3.5. Uncomfortable oxygen masks or nasal Cannula
    - 14.3.6. Intravenous cannulation site infiltration
    - 14.3.7. Member of surgical team leaning on patient
    - 14.3.8. Prolonged pneumatic tourniquet inflation
15. Patient's Outcome after Sedation/Analgesia:

Surgeries performed under Sedation/Analgesia may offer many advantages over procedures done under general or regional Anesthesia, such as:

  - 15.1. Preservation of protective reflex
  - 15.2. Decreased post-operative pain
  - 15.3. Decreased postoperative nausea and vomiting
  - 15.4. Reduced cardiovascular and respiratory side effect
  - 15.5. Invoke less physiological disturbances, the factor which is more advantageous in older



and critically ill patient

15.6. Prevention of endotracheal intubation risks such as dental damage, sore throat or vocal cords injury etc.

15.7. Allow faster recovery, shorter stay in PACU and faster discharge from hospital

16. Quality Assurance for Moderate Sedation/Analgesia:

16.1. The fundamental concept underlying modern Moderate Sedation is that the care delivered to the patient should be of high quality

16.2. All concerned staff should become involved in clinical audit activities as this yields benefits for all concerned. The audit activities include:

16.2.1. The satisfaction of the patient and the family.

16.2.2. Patient's complaints: Peri-, intra- and post-operatively:

- a. Pain.
- b. Nausea and vomiting.
- c. Amnesia.
- d. Headache, dizziness,
- e. Fainting attacks or tiredness.
- f. Loss of appetite, etc.

17. Monitoring During the Moderate Sedation/Analgesia

17.1. Level of Consciousness:

17.1.1. It is essential that a qualified staff continually evaluate the patient's response to verbal stimulation to titrate the level of sedation and allow the early detection of neurological or cardiopulmonary dysfunction.

17.1.2. Patients' response to commands during procedures performed with sedation/analgesia serves as a guide to their level of consciousness.

17.1.3. Spoken responses also indicate that the patient is breathing.

17.1.4. Patients whose only response is reflex withdrawal from painful stimuli are likely to be deeply sedated, approaching a state of general anaesthesia, and should be treated accordingly.

17.1.5. Monitoring patient response to verbal commands should be routine, except in patients who are unable to respond appropriately (e.g., young children, mentally impaired or

uncooperative patients) or during procedures in which facial movement could be detrimental.

17.1.6. During procedures in which a verbal response is not possible (e.g., oral surgery, upper endoscopies), the ability to give a "thumbs up" or other indication of consciousness in response to verbal or tactile (light tap) stimulation suggests that the patient will be able to control his airway and take deep breaths if necessary.

#### 17.2. Pulmonary Ventilation:

Monitoring of Respiratory function reduces the risk of adverse outcomes associated with sedation/analgesia. The ventilatory function should be continually monitored by:

##### 17.2.1. Visual, Tactile and Auditory Assessment

- a. Rate, depth and pattern of breathing.
- b. Pallor, Shivering, Cyanosis.
- c. In circumstances where patients are physically separated from the caregiver, automated apnea monitoring (by detecting exhaled carbon dioxide or other modality) may decrease risks.

##### 17.2.2. Auscultation: Heart and breath sounds (pre-cordial stethoscope)

#### 17.3. Oxygenation:

The early detection of hypoxemia using Oximetry during sedation/analgesia decreases the likelihood of adverse outcomes, such as cardiac arrest and death.

17.3.1. All patients undergoing sedation/analgesia should be monitored by pulse Oximetry with appropriate alarms. If available, the variable pitch "beep," which gives a continuous audible indication of the oxygen saturation reading, may be helpful.

17.3.2. The nurse will inform the physician of a change in patient condition or drop in SaO<sub>2</sub> below 92%, or the other parameter.

17.3.3. If hypoxemia is anticipated or develops during sedation/analgesia, supplemental oxygen should be administered and titrate the oxygen.

17.3.4. Capnography (most effective in intubated patients but can be adapted (side-stream) in non-intubated patients.

#### 17.4. Hemodynamic:

Sedative/analgesic agents may blunt the appropriate autonomic compensation for hypovolemia and procedure-related stresses. Early detection of changes in patients' heart rate and blood

pressure may enable physicians to detect problems and intervene in a timely fashion, reducing the risk of cardiovascular collapse.

17.4.1. Continuous Electrocardiograph monitoring should be used in patients with hypertension, significant cardiovascular disease, as well as during procedures where dysrhythmias are anticipated.

17.4.2. Blood pressure should be determined before sedation/analgesia is initiated.

17.4.3. Palpation of the arterial pulse,

17.4.4. Peripheral perfusion based on the temperature of extremities and capillary refill

17.4.5. Once sedation/analgesia is established, blood pressure should be measured at regular intervals during the procedure and the recovery period (at least every 5 minutes).

17.4.6. Routine blood pressure monitoring with the sedation of children often causes unnecessary stimulation of the patient resulting in awakening. For this reason, blood pressures are taken pre and post-procedure and at intervals based on patient needs and clinician judgment.

17.5. Temperature: especially in:

17.5.1. Elderly patients.

17.5.2. Lengthy procedures.

17.5.3. Cold operating rooms.

17.6. Availability of a Staff Person Dedicated Solely to Patient Monitoring and Safety

17.6.1. The presence of a vigilant anaesthetist is the single most important monitor in the operating room.

17.6.2. Monitoring techniques and devices enhance the effectiveness of this vigilance.

17.6.3. Other than the physician performing the procedure, a designated individual should be present to monitor the patient throughout procedures performed with sedation/analgesia. This individual should not leave the procedure room while the procedure is being performed.

## APPENDIX 9: ALDRETH'S SCORING SYSTEM FOR RECOVERY & DISCHARGE FROM THE RECOVERY ROOM

According to the evaluation and documentation, the criteria for **Activity, Breathing, Circulation, Consciousness, SaO2**

| Discharge Criteria                                        | Discharge Score |
|-----------------------------------------------------------|-----------------|
| <b>Activity</b>                                           |                 |
| <i>Moving all four limbs spontaneously or on command</i>  | 2               |
| Moving two limbs spontaneously or on command              | 1               |
| No movement of limbs neither spontaneously nor on command | 0               |
| <b>Breathing</b>                                          |                 |
| <i>Able to breathe deeply and coughing adequately</i>     | 2               |
| Dyspnea or shortness of breath                            | 1               |
| Apnea                                                     | 0               |
| <b>Circulation</b>                                        |                 |
| BP is $\pm 20\%$ of the pre-operative initial value       | 2               |
| BP is $\pm 20$ to 50% of the pre-operative initial value  | 1               |
| BP is $> \pm 50\%$ of the pre-operative initial value     | 0               |
| <b>Consciousness</b>                                      |                 |
| <i>Fully conscious</i>                                    | 2               |
| Responding to verbal commands                             | 1               |
| Not responding                                            | 0               |
| <b>SaO2</b>                                               |                 |
| <i>Able to maintain SaO2 &gt; 92% on room air</i>         | 2               |
| Needs oxygen therapy to maintain SaO2 > 90                | 1               |
| SaO2 < 90% despite oxygen therapy                         | 0               |
| <b>Total Score</b>                                        |                 |

- All patients should be assessed and scored on admission, in individual intervals and before discharge from the recovery area.
- Values should be documented in the anaesthesia chart.
- The scoring includes five features:
- Activity, Breathing, Circulation, Consciousness and SaO2
- Each feature will be scored with 0, 1 or 2 points so that the maximum numbers of points will be 10 and the least is 0 point.
- The patient should be discharged from the recovery area only if the total score  $\geq$  nine or at the pre-sedation baseline.

## APPENDIX 10: CRITERIA FOR HOME-READINESS

Evaluation and documentation of the criteria for Vital Signs, Ambulation, Nausea and Vomiting, Pain, Surgical Bleeding.

Post-Anaesthesia Recovery Score for Discharge Home (PARSDH)

| Discharge Criteria                                | Discharge Score |
|---------------------------------------------------|-----------------|
| <b>Vital Signs</b>                                |                 |
| Vital signs $\pm$ 20% of pre-operative value      | 2               |
| Vital signs $\pm$ 20 – 40% of pre-operative value | 1               |
| Vital signs $\pm$ 40% of pre-operative value      | 0               |
| <b>Ambulation</b>                                 |                 |
| Steady gait and no dizziness                      | 2               |
| With assistance                                   | 1               |
| None / dizziness                                  | 0               |
| <b>Nausea &amp; Vomiting</b>                      |                 |
| No or minimal                                     | 2               |
| Moderate                                          | 1               |
| Severe                                            | 0               |
| <b>Pain</b>                                       |                 |
| No or minimal                                     | 2               |
| Moderate                                          | 1               |
| Severe                                            | 0               |
| <b>Surgical Bleeding</b>                          |                 |
| No or minimal                                     | 2               |
| Moderate                                          | 1               |
| Severe                                            | 0               |
| <b>Total Score (Discharge Home)</b>               |                 |

1. All patients those going to be discharged home should be assessed and scored on the “criteria to go home” after fulfilling the Aldrete’s recovery & discharge criteria.
2. Values should be documented in the sedation chart.
3. The scoring includes five futures Vital Signs, Ambulation, Nausea and Vomiting, Pain and Surgical Bleeding
4. Each feature will be scored with 0, 1 or 2 point so that the maximum numbers of points will be 10 and the least is 0 point.
5. The patient is ready for discharge home only if the totals score  $\geq 9$ .
6. Make sure that the patient has a responsible escort for transport and at home.
7. Driving and operating machinery should not be attempted for 24 hours.

**APPENDIX 11: MINIMUM EMERGENCY MEDICATION (CLASS A, B and CM)**

| No.              | Description                                                                                                                                  | Strength                                  | Qty |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----|
| <b>Mandatory</b> |                                                                                                                                              |                                           |     |
| 1                | Adenosine Injection                                                                                                                          | 6mg/2ml                                   | 3   |
| 2                | Epinephrine (Adrenaline) 1:10,000 (0.1mg/ml) 10ml Prefilled Syringe <b>or</b> 1:1000 (1mg/ml) 1ml Ampoule if prefilled syringe not available | 0.1mg/ml<br><b>or</b><br>1mg/ml           | 5   |
| 3                | Amiodarone Injection                                                                                                                         | 150mg/3ml                                 | 2   |
| 4                | Atropine 0.2mg/ml 5ml Pre-filled Syringe <b>or</b> 0.6mg/ml 1ml Ampoule if prefilled syringe not available                                   | 0.2mg/ml 5ml<br><b>or</b><br>0.6mg/ml 1ml | 5   |
| 5                | Calcium Chloride 10% Injection                                                                                                               | 1gm/10ml                                  | 2   |
| 7                | Calcium gluconate 10%- 10ml Injection                                                                                                        | 1gm/10ml                                  | 2   |
| 8                | Diazepam Injection                                                                                                                           | 10mg/2ml                                  | 1   |
| 9                | Diazepam Rectal solution                                                                                                                     | 5 mg                                      | 1   |
| 10               | Dextrose 50% Vial                                                                                                                            | 50gm/100ml                                | 2   |
| 11               | Dopamine Injection                                                                                                                           | 200mg/5ml                                 | 1   |
| 12               | Flumazenil (Anexate) Injection                                                                                                               | 0.5mg/5ml                                 | 1   |
| 13               | Furosemide Injection                                                                                                                         | 20mg/2ml                                  | 2   |
| 14               | Glucagon Injection                                                                                                                           | 1mg                                       | 1   |
| 15               | Midazolam Injection                                                                                                                          | 15mg/3ml                                  | 1   |
| 16               | Hydrocortisone Injection                                                                                                                     | 100mg/2ml                                 | 2   |
| 17               | Magnesium Sulphate 50% Injection                                                                                                             | (0.5g/ml)                                 | 2   |
| 18               | Salbutamol Aerosol Inhalation Nebules                                                                                                        | 1mg/ml                                    | 10  |
| 19               | Salbutamol Inhaler                                                                                                                           | 100mcg/Dose                               | 1   |
| 20               | Glyceryl Trinitrate sublingual Spray                                                                                                         | 400mcg/Dose                               | 1   |
| 21               | Epinephrine (Autoinjector/prefilled Pen) Pediatric                                                                                           | 0.15mg (150mcg)                           | 1   |
| 22               | Epinephrine (Autoinjector/prefilled Pen) Adult                                                                                               | 0.3mg (300mcg)                            | 1   |
| 23               | Ringer Lactate                                                                                                                               | 500ml                                     | 2   |
| 24               | Dextrose 5% (D5W)                                                                                                                            | 500ml                                     | 2   |
| 25               | Sodium Chloride 0.9% (NS)                                                                                                                    | 500ml                                     | 2   |
| 26               | Sodium Chloride 0.9% (NS) Ampoules                                                                                                           | 10ml                                      | 10  |
| 27               | Water For Injection                                                                                                                          | 5 ml                                      | 5   |

**APPENDIX 12: MINIMUM EMERGENCY MEDICATION (CLASS C)**

| No.              | Description                                                                                                                              | Strength                           | Qty       |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------|
| <b>Mandatory</b> |                                                                                                                                          |                                    |           |
| 1                | Adenosine Injection                                                                                                                      | 6mg/2ml                            | 4         |
| 2                | Epinephrine (Adrenaline) 1:10,000 (0.1mg/ml) 10ml Prefilled Syringe<br>or 1:1000 (1mg/ml) 1ml Ampoule if prefilled syringe not available | 0.1mg/ml<br>or<br>1mg/ml           | 5         |
| 3                | Amiodarone Injection                                                                                                                     | 150mg/3ml                          | 2         |
| 4                | Atropine 0.2mg/ml 5ml Pre-filled Syringe or 0.6mg/ml 1ml Ampoule if prefilled syringe not available                                      | 0.2mg/ml 5ml<br>or<br>0.6mg/ml 1ml | 5         |
| 5                | Calcium Chloride 10% Injection                                                                                                           | 1gm/10ml                           | 2         |
| 6                | Calcium Gluconate 10% Injection                                                                                                          | 1gm/10ml                           | 2         |
| 7                | Cisatracurium Injection *                                                                                                                | 2mg/ml                             | 3         |
| 8                | Dextrose 50% Vial                                                                                                                        | 50gm/100ml                         | 1         |
| 9                | Diazepam Injection                                                                                                                       | 10mg/2ml                           | 2         |
| 10               | Diazepam Rectal solution                                                                                                                 | 5 mg                               | 2         |
| 11               | Dopamine Injection                                                                                                                       | 200mg/5ml                          | 2         |
| 12               | Dantrolene sodium for injection**                                                                                                        | 20mg                               | 12        |
| 13               | Epinephrine (Autoinjector/prefilled Pen) Pediatric                                                                                       | 0.15mg (150mcg)                    | 1         |
| 14               | Epinephrine (Autoinjector/prefilled Pen) Adult                                                                                           | 0.3mg (300mcg)                     | 1         |
| 15               | Flumazenil (Anexate) Injection                                                                                                           | 0.5mg/5ml                          | 1         |
| 16               | Furosemide Injection                                                                                                                     | 20mg/2ml                           | 2         |
| 17               | Glucagon Injection                                                                                                                       | 1mg                                | 1         |
| 18               | Glyceryl Trinitrate sublingual Spray                                                                                                     | 400mcg/Dose                        | 1<br>pack |
| 19               | Hydrocortisone Injection                                                                                                                 | 100mg/2ml                          | 3         |
| 20               | Lidocaine Hydrochloride 2% Injection                                                                                                     | 100mg/5ml                          | 2         |
| 21               | Labetalol HCL Injection                                                                                                                  | 100mg/20 ml                        | 2         |
| 22               | Vasopressin Injection *                                                                                                                  | 20 IU/ml                           | 2         |
| 23               | Magnesium Sulphate 50% Injection                                                                                                         | (0.5g/ml)                          | 2         |
| 24               | Midazolam Injection                                                                                                                      | 15mg/3ml                           | 1         |
| 25               | Naloxone Injection                                                                                                                       | 0.4mg /ml                          | 2         |
| 26               | Phenobarbitone Injection                                                                                                                 | 200mg/ml                           | 2         |



|                               |                                                |           |    |
|-------------------------------|------------------------------------------------|-----------|----|
| 27                            | Rocuronium bromide Injection*                  | 10mg/ml   | 3  |
| 28                            | Suxamethonium chloride Injection*              | 50mg/ml   | 3  |
| 29                            | Sodium Bicarbonate 8.4% 50ml Prefilled Syringe | 84mg/ml   | 2  |
| 30                            | Salbutamol Injection                           | 500mcg/ml | 1  |
| 31                            | Salbutamol Aerosol Inhalation Nebules          | 1mg/ml    | 10 |
| 32                            | Ringer Lactate                                 | 500ml     | 2  |
| 33                            | Dextrose 5% (D5W)                              | 500ml     | 2  |
| 34                            | Sodium Chloride 0.9% (NS)                      | 500ml     | 2  |
| 35                            | Sodium Chloride 0.9% (NS) Ampoules             | 10ml      | 10 |
| 36                            | Water For Injection                            | 5ml       | 5  |
| * Keep in fridge              |                                                |           |    |
| ** Only for Operation Theatre |                                                |           |    |

### APPENDIX 13: HEALTHCARE PROFESSIONAL VACCINATION AND IMMUNISATION REQUIREMENTS

|                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mandatory Vaccination:</b>                                                                                                                                                                              |
| <b>Hepatitis B:</b>                                                                                                                                                                                        |
| If previously unvaccinated, give 3 doses series of Hepatitis B vaccine to all non-immune employees upon hiring.                                                                                            |
| Hepatitis B Antibody will be checked after the vaccination is completed.                                                                                                                                   |
| If the level is < 10 international units, a second 3 doses series will be given. If the repeat Hepatitis B Antibody is still <10 international units; then the employee will be labelled as non-responder. |
| <b>Varicella Vaccine:</b>                                                                                                                                                                                  |
| Check evidence of immunity to varicella.                                                                                                                                                                   |
| Offer/provide Varicella vaccine to all non-immune employees.                                                                                                                                               |
| <b>Recommended vaccines:</b>                                                                                                                                                                               |
| Recommended Influenza vaccine annually to all clinical healthcare workers before the influenza season.                                                                                                     |
| Recommend Pneumonia vaccination at age 65 (one-time vaccine).                                                                                                                                              |
| Recommend Tetanus booster (once every 10 years).                                                                                                                                                           |