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Standards for Standalone Day Surgery Ceners Version 4

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Health Policies and Standards Department

Health Regulation Sector (2023)

INTRODUCTION

Health Regulation Sector (HRS) forms an integral part of Dubai Health Authority (DHA) and is mandated by DHA Law No. (14) of the year (2021) amending some clauses of law No. (6) of 2018 pertaining to the Dubai Health Authority (DHA), to undertake several functions including but not limited to:

- Developing regulation, policy, standards, guidelines to improve quality and patient safety and promote the growth and development of the health sector;
- Licensure and inspection of health facilities as well as healthcare professionals and ensuring compliance to best practice;
- Managing patient complaints and assuring patient and physician rights are upheld;
- Governing the use of narcotics, controlled and semi-controlled medications;
- Strengthening health tourism and assuring ongoing growth; and
- Assuring management of health informatics, e-health and promoting innovation.

The Standards for Standalone Day Surgery Centres aims to fulfil the following overarching DHA Strategic Priorities (2022-2026):

- Pioneering Human-centered health system to promote trust, safety, quality and care for patients and their families.
- Make Dubai a lighthouse for healthcare governance, integration and regulation.
- Strengthening the economic contribution of the health sector, including health tourism to support Dubai economy.

ACKNOWLEDGMENT

The Health Policy and Standards Department (HPSD) developed this Standard in collaboration with Subject Matter Experts and would like to acknowledge and thank these health professionals for their dedication toward improving quality and safety of healthcare services in the Emirate of Dubai.

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 for Standalone Day Surgical Centre Services at all times. The standards have been developed to align with the evolving healthcare needs and international best practice. A Standalone Day Surgical Centre (hereon referred to as Day Surgical Centre or DSC) is a free standing ambulatory surgery centre mainly providing surgical procedures and services for patients who do not require hospitalization or overnight stay. It shall be classified according to the American Association for Accreditation of Ambulatory Surgery Center as Class A, Class B, Class CM or Class C Day Surgery Centres.

This document shall be read alongside the following [List of permitted procedures by Day Surgical Centre Classification](#).

The key updates on Version 4 are set out below:

1. Summary of Day Surgical Centre (DSC) Classification and minimum requirements in Appendix 1.
2. Informed consent for elective surgical procedures under general anaesthesia should be done at the point of pre-op assessment, prior to the day of the procedure. The consent should be available in both English and Arabic.
3. Surgeries in DSC Class CM and Class C, requiring general anaesthesia shall not start after 5:00pm.
4. Surgeries in DSC CM under deep sedation shall not exceed two (2) hours.

5. Surgeries in DSC C under deep sedation and or general anaesthesia shall not exceed three (3) hours.
6. Multiple surgeries in different sites that exceed three (3) hours are not permitted. This includes procedures that requires to change the position of the patient during the surgery.
7. Day Surgical Centre Shall Only provide Surgical and Diagnostic procedures for ASA-PS Classification I, II and III Patients in both adults and paediatrics
8. ASA-PS classification III patients must have a medical consultation, assessment and clearance as per their medical morbidities prior to any day surgical procedures under deep sedation and/or general anaesthesia.
- 9.
10. All DSC facilities are required to have an Operating Theatre (OT) equipped to manage permitted surgeries.
11. Operating Theatre (OT) specification matrix, Appendix 2
12. Class B (with endoscopy), CM and C Day Surgical Centres will have the required medical equipment to manage permitted surgeries:
 - a. Operating Theatre (OT) with Anaesthesia machine with built in ventilator, 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 (1) one to (4) four OTs (backup); and
 - e. One ventilator is required for two beds in the recovery bay.

13. Class A and Class B without endoscopy do not require to have a ventilator.
14. Emergency Medications must be available as per DHA Emergency Medications Policy.
15. Keratoplasty (corneal transplant) subject to DHA approval.
16. DSC class CM and C providing solely Ophthalmology services shall have a Point of Care Testing for glucose, Dipstick urinalysis and Pregnancy test. Any lab or radiology services may be contracted with an external provider.
17. Inhouse radiology services is optional for DSC class CM and C providing solely Vascular services.
18. EtCo2, ventilators and defibrillator are not required in DSC level A and level B (without endoscopy).
19. Updated list of permitted procedures by Day Surgical Centre Classification.
20. Update of the Day surgical centre care pathway Appendix 3.
21. Selection criteria for dentistry under general anaesthesia in DSC, Appendix 10.

DEFINITIONS

Adverse Event: is an unanticipated, unintended, undesirable or potentially dangerous occurrence 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 (heron referred to as Day Surgical Centre or DSC) is a free standing ambulatory surgery centre mainly providing surgical procedures and services for patients who do not require hospitalization or overnight stay. An outpatient surgical centre may provide outpatient services for other medical specialties including diagnostics. It shall be classified according to the American Association for Accreditation of Ambulatory Surgery Center as Class A, Class B, Class CM or Class C Day Surgery Centres.

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 Professional Qualification 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.

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).

Paediatric: Every human being born alive and who is under eighteen years old.

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.

Procedural Sedation and Analgesia (PSA) 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.

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

Recovery Plan: Is a set of procedures and actions that follows postoperative procedure. The plan will typically include procedures for documentation, highlighting functional and nutritional and psychological status of patient postoperative. It may also include steps for pain management and discharge.

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.

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 (Refer to **Appendix 1 and 2**):

- a. Minimal Sedation (Anxiolysis)
- b. Moderate Sedation/Analgesia (Conscious Sedation)
- c. Deep Sedation/Analgesia
- d. General Anaesthesia

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 Anaesthesia: 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 Anaesthesia: 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.

Venous Thromboembolism (VTE) risk assessment: is the process of evaluating the risk of VTE, a condition where blood clots form in the veins. VTE assessment should be done for all patients admitted to the health facility and prior to surgical procedures in the DSC.

ABBREVIATIONS

AMA	:	Against Medical Advice
ASA	:	American Society of Anaesthesiologists
BLS	:	Basic Life Support
BMI	:	Body Mass Index
CAD	:	Coronary Artery Disease
COPD	:	Chronic Obstructive Pulmonary Disease
DHA	:	Dubai Health Authority
DIC	:	Disseminated Intravascular Coagulation
DM	:	Diabetes Mellitus
DSC	:	Day Surgical Centre
DSS	:	Day Surgical Services
ESRD	:	End-Stage Renal Disease
Etco2	:	End-tidal carbon dioxide
HRS	:	Health Regulation Sector
HTN	:	Hypertension
IPU	:	Inpatient Unit
IPPV	:	Invasive Positive Pressure Ventilation
IV	:	Intravenous
MI	:	Myocardial Infraction
MOHAP	:	Ministry of Health and Prevention

MSDS	:	Material Safety Data Sheets
NIPPV	:	Non-invasive Positive Pressure Ventilation
PALS	:	Paediatric Advanced Life Support
PSA	:	Procedural Sedation and Analgesia
PPE	:	Personal Protective Equipment
RN	:	Registered Nurse
SIMV	:	Synchronized Intermittent Mandatory Ventilation
TIA	:	Transient Ischemic Attack
VTE	:	Venous Thromboembolism

1. BACKGROUND

Developments in medical technology have resulted in a rise in ambulatory surgery. The use of fast- and short-acting anaesthetics, analgesics, muscle relaxants, and improved monitoring techniques reduces anaesthetic complications during recovery. Additionally, advancements in surgical techniques have enabled physicians to provide more medical procedures in an ambulatory care setting, specifically Day Surgical Centres (DSC). A DSC is a health facility where admission, preparation and simple to moderate operative or endoscopic procedures are performed; within the same day and the patient does not require overnight stay. 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).

2. SCOPE

2.1. DHA licensed Standalone Day Surgery Centres.

3. PURPOSE

3.1. To assure provision of the highest levels of safety and quality services in DHA licensed Standalone Day Surgery Centres.

4. APPLICABILITY

4.1. DHA licensed healthcare professionals and health facilities operating as Standalone Day Surgery Centres.

5. STANDARD ONE: REGISTRATION AND LICENSURE PROCEDURES

- 5.1. All health facilities providing Day surgical Services (DSS) shall adhere to the United Arab Emirates (UAE) Laws and Dubai regulations.
- 5.2. Health facilities aiming to provide DSS shall comply with the DHA licensure and administrative procedures available on the DHA website <https://www.dha.gov.ae>.
- 5.3. Licensed health facilities opting to add DSS shall inform Health Regulation Sector (HRS) and submit an application to HRS to obtain permission to provide the required service.
- 5.4. Summary of Day Surgical Centre (DSC) classification and minimum requirements are found in **appendix 1**.
- 5.5. Day Surgical Centres shall be granted a license based on the Health Facility Classification and their permitted levels (**Appendix 2-4**).
- 5.6. All Day Surgical Centres (DSC) are mandated to be accredited within two (2) years of licensure and to upload their accreditation certificate to the facility's Sheryan account.
 - 5.6.1. Accreditation shall include International Society for Quality in Healthcare (ISQua) approved entities such as and not limited to:
 - 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.

- e. Emirates International Accreditation Center (EIAC).
 - f. American Accreditation Commission International (AACI).
- 5.7. The DSC shall adhere to the DHA Sentinel Events Notification and Management Policy.
- 5.8. DSC do not require to have a mortuary in-house, but will require to have a policy for mortuary management.
- 5.9. 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.
- 5.9.1. Adhere to the requirements in the DHA Policy for Emergency Medication as well as the DHA Guidelines for Pharmacy.
- 5.10. The DSC shall have in place internal policies and procedures including but not limited to:
- 5.10.1. Service Description and Scope of Services.
 - 5.10.2. Patient acceptance/referral criteria.
 - 5.10.3. Lab and diagnostic services and turn-around timeframes for reporting non-critical and critical results.
 - 5.10.4. Patient assessment and admission criteria.
 - 5.10.5. Patient education, communication and informed consent.
 - a. Consent should include the need for higher sedation within the same facility or following transfer to a higher level facility.

5.10.6. Staffing plan, staff management and clinical and privileging.

5.10.7. Clinical Audit.

5.10.8. Patient health record, confidentiality and privacy as per DHA Policy for Health Information Assets Management.

5.10.9. Infection control

5.10.10. Incident reporting.

5.10.11. Medication management and pharmacy services as per DHA Guidelines for Pharmacy.

5.10.12. Reprocessing of reusable equipment, safe use of chemicals used for cleaning and disinfecting.

5.10.13. 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.

5.10.14. Monitoring medical, electrical and mechanical equipment, visual inspections for apparent defects and maintenance by the competent entity with valid testing certificates.

5.10.15. Laundry and housekeeping services.

5.10.16. Patient belongings.

5.10.17. Quality, Performance Management and Learning System.

5.10.18. Violence against Staff/Zero Tolerance.

5.10.19. Narcotic Handling Policy which covers all the steps from ordering until discard to ensure that narcotics are not misused.

5.10.20. Procedural Sedation Policy to guide practitioners and ensure patients' safety and high quality of care.

5.11. 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.

5.12. 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:

5.12.1. Referral criteria.

5.12.2. Consultation.

5.12.3. Clinical laboratory services and diagnostics.

5.12.4. Pre-op assessment and patient acuity classification.

5.12.5. Staffing requirements.

5.12.6. Informed Consent.

5.12.7. Surgical Safety Checklist for Surgical Procedures.

5.12.8. Patient Monitoring, Recovery and Discharge.

5.12.9. Patient discharge and follow up.

5.12.10. Patient complaints.

5.13. 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 as per DHA Policy for Patient Referral and Inter-facility Transfer.

5.14. The DSC may provide necessary allied health services to meet patient needs and based on the facility's type of services.

5.14.1. Such services may be available on the premises or through a written agreement with an external provider.

6. STANDARD TWO: HEALTH FACILITY REQUIREMENTS

6.1. Summary of Day Surgical Centre (DSC) classification and minimum requirements are found in **appendix 1**.

6.2. DSC operational requirements include the following:

6.2.1. Day surgical centres shall not operate or open between 12:00am and 6:00am.

6.2.2. Surgeries in DSC Class CM and Class C, requiring general anaesthesia shall not start after 5:00pm.

6.2.3. Surgeries in DSC CM under deep sedation shall not exceed two (2) hours.

6.2.4. Surgeries in DSC C under deep sedation and or general anaesthesia shall not exceed three (3) hours.

6.2.5. Multiple surgeries in different sites that exceed three (3) hours are not permitted.

- 6.3. Day Surgical Services shall be Consultant or Specialist Led services with a minimum of ten (10) years' experience in one of the main surgical specialties within the scope of the DSC.
- 6.4. The DSC can be specialised in one or more surgical speciality such as but not limited to the following:
- 6.4.1. General Surgery (paediatric and/or adult)
 - 6.4.2. Dentistry
 - 6.4.3. Ophthalmology
 - 6.4.4. Vascular
 - 6.4.5. Orthopaedic
 - 6.4.6. Obstetrics and Gynaecology
 - 6.4.7. Gastroenterology
 - 6.4.8. Plastic Surgery
- 6.5. The health facility should meet the health facility requirement as per the DHA Health Facility Guidelines (HFG).
- 6.6. HRS must be informed and approve changes to existing or new services or staffing levels.
- 6.7. The Health Facility shall ensure that access to non-treatment and treatment areas are safe for all patient groups.
- 6.8. DSC should have a contract with the following types of healthcare facilities:

- 6.8.1. A nearby hospital for: referral of urgent and emergency cases, ward and ICU Admissions (if required), Assessment and follow up with professionals, specialties and services not available or not within the scope of the DSC.
- 6.8.2. External Laboratory service (Applicable to DSC class A, B and any DSC that provides solely vascular or ophthalmology services only).
- 6.8.3. External Diagnostic imaging services (Applicable to DSC class A, B and any DSC that provides solely vascular or ophthalmology services only).
- 6.8.4. Pharmacy service (if required).
- 6.8.5. Rehabilitation service (if required).
- 6.8.6. Home healthcare services (if required).
- 6.8.7. Telehealth services (if required).
- 6.9. The health facility design shall provide assurance of patients and staff safety.
- 6.10. DSC healthcare professionals (physicians, nurses, and allied health) shall be trained to operate the medical equipment assigned to them.
 - 6.10.1. Training shall be documented and kept up to date.
- 6.11. The surgical setup shall be capable of providing the required level of sedation/anaesthesia and emergency response.
- 6.12. The Health Facility shall put in place annual simulation scenarios with all surgical teams to manage patient recovery and transfer.
 - 6.12.1. Simulation outcome and improvement plans shall be documented.

6.13. All DSC facilities are required to have an Operating Theatre (OT) equipped to manage permitted surgeries.

6.13.1. For OT specifications and equipment requirements, see **appendix 2**.

6.14. Class B Day Surgical Centres will have sufficient medical equipment to manage permitted endoscopic procedures:

6.14.1. Procedural sedation shall be performed in designated areas where the patient can be resuscitated if sedation is deeper than intended.

6.14.2. Practitioners should be ACLS certified and possess the skills necessary to resuscitate or rescue a patient whose level of sedation is deeper than initially intended.

6.15. Class A and B (without endoscopy) do not require a ventilator and will have the required medical equipment to manage permitted surgeries:

6.15.1. Emergency Medical Service (EMS) call system;

6.15.2. Pulse oximeter

6.15.3. Automated External Defibrillator (AED)

6.15.4. A surgical sterilizing area available in the clinic or outsourced.

6.15.5. Emergency crash cart that includes all emergency supplies and medications.

6.16. Class B (with endoscopy), CM and C Day Surgical Centres will have the required medical equipment to manage permitted surgeries:

6.16.1. Emergency Medical Service (EMS) call system;

6.16.2. Pulse oximeter, and hemodynamic monitoring equipment shall include but not limited to the following:

- a. ECG
- b. Heart rate
- c. Blood pressure
- d. Central venous pressure
- e. Temperature, peripheral venous oxygen saturation
- f. ABG

6.16.3. One portable ventilator is required for (1) one to (4) four OTs (backup); and

6.16.4. One ventilator is required for two beds in the recovery bay.

6.17. DSC Class A and B shall ensure the full time surgeon is responsible for managing medications and record keeping in the DSC (**Appendix 4**).

6.18. DSC Class B (with endoscopy), 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 4**).

6.19. DSC with pharmacy services , shall ensure the pharmacist is responsible for managing anaesthesia, narcotic and controlled medications, emergency medicine, any other medication and record-keeping in the DSC (**Appendix 4**).

6.20. DSC that provide ambulatory care pharmacy services must employ a full time pharmacist.

- 6.20.1. The pharmacy service should include storage of medication, medication preparation, dispensing and safe disposal.
- 6.20.2. 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.
- 6.20.3. Refer to DHA Guidelines for Pharmacy
- 6.21. All DSC shall have access to laboratory and diagnostic services as per patient needs determined by the services provided and the medical team.
- 6.21.1. Refer to DHA Standards for Clinical Laboratory Services and DHA Standards for Diagnostic Services.
- 6.22. DSC shall assure the safe and appropriate practice system for sample collection, storage, blood transportation and other samples.
- 6.23. As a minimum the DSC must ensure the provision of the following:
- 6.23.1. Class A DSC categories must provide:
- a. Point of Care Testing for glucose, Dipstick urinalysis and Pregnancy test.
 - b. Any other lab services as per patient need may be contracted with an external laboratory provider.
 - c. Radiology services as per patient need may be contracted with an external radiology provider.
- 6.23.2. Class B DSC categories must provide:

- a. Point of Care Testing for glucose, Prothrombin time/international normalized ratio (PT/INR), Dipstick urinalysis and Pregnancy test.
- b. Any other lab services as per patient need may be contracted with an external laboratory provider.
- c. Radiology services as per patient need may be contracted with an external radiology provider.

6.23.3. Class C-M and C DSC categories must provide:

- a. Point of Care Testing (glucose, Prothrombin time/international normalized ratio (PT/INR), Dipstick urinalysis and Pregnancy test.
- b. Arterial Blood Gas (ABG)
- c. Any other lab services as per patient need may be contracted with an external laboratory provider.

6.23.4. CM and C DSC categories must provide essential onsite radiology services.

- a. Radiology (or mobile x-ray) should include plain x-rays and chest x-rays.
- b. The remaining radiology services as per patient need may be contracted with an external radiology provider.

6.24. DSC class CM and C providing solely Ophthalmology services shall have a Point of Care Testing (POCT) for glucose, Dipstick urinalysis and Pregnancy test. Any lab or radiology services may be contracted with an external provider.

6.25. Inhouse radiology services is optional for DSC class CM and C providing solely Vascular services.

- 6.26. The health facility shall install and operate equipment required for the provision of proposed services in accordance with the manufacturer's specifications.
- 6.27. 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.
- 6.28. The DSC shall maintain a copy of operator and safety manuals of all medical equipment and inventory list with equipment location. All Medical Equipment should be registered and documented properly in the inventory which will be updated every time a new equipment arrives prior to use.
- 6.29. The inventory includes all in use medical equipment only and no medical equipment which is not in use, or not maintained should be stored in the facility.
- 6.29.1. The medical equipment Inventory include the following:
- a. Device name
 - b. Description of the device
 - c. The name of the factory
 - d. The supplying company (agent)
 - e. Year of purchase
 - f. Section (location)
 - g. Serial number
 - h. Duration of preventive maintenance work (PM)

- i. Last date maintenance & the next
 - j. Periodic maintenance reports (qualitative and quantitative tests)
- 6.30. 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.
- 6.31. Some clinical services may be provided by an external contractor such as radiology, lab and pathology and allied health.
- 6.32. External service providers shall be managed effectively to provide safe, high-quality care and services.
- 6.33. All DSC shall have a Business Continuity Plan to ensure the core functions of the centre are met.
- 6.34. DSC must put in place a written policy that adheres to DHA requirements for patient rights and responsibilities as per the Ministerial Decision No. (14) of 2021 concerning the Patient Rights and Duties Charter
- 6.34.1. 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.
- 6.35. Key Performance Indicators (KPIs) shall be captured by DSC management by the 2nd week of each quarter and reported to HRS as per the DHA Guidelines for Reporting Standalone Day Surgery Centre Key Performance Indicators.

6.35.1. Submission reflects the outcomes achieved in the previous quarter. Data submission includes but is not limited to the following:

- a. Access
- b. Quality

7. STANDARD THREE: HEALTHCARE PROFESSIONALS REQUIREMENTS

- 7.1. All healthcare professionals in the health facility shall hold an active DHA professional license and work within their scope of practice and granted privileges.
- 7.2. The privileging committee and/or medical director of the health facility shall privilege the physician aligned with his/her education, training, experience and competencies. The privilege shall be reviewed and revised on regular intervals as per the DHA Policy for Clinical Privileging Policy.
- 7.3. Additional multidisciplinary staff must be in place as per specialisation, continuity of care, service descriptions, scope and patient volume. The standalone DSC shall comply with the minimum requirements:
 - 7.3.1. There must be one full time licensed physician with the role of Medical Director.
 - 7.3.2. At least one full time licensed specialist or consultant surgeon present in the DSC.
 - 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 (with endoscopy) where permitted narcotics, and dissociative anaesthetics are being administered for endoscopic procedures (**Appendix 4**).
- 7.3.5. At least one full-time anaesthetist must be present in DSC Class CM and C.
- 7.3.6. An anaesthetist must be present for each surgical procedure where deep sedation or general anaesthesia is administered.
- 7.3.7. The anaesthetist may be supported by a licensed technician/anaesthetist privileged nurse.
- 7.3.8. For Endoscopic Standards, refer to the DHA Standards for Endoscopy Services and [list of Permitted Procedures by Day Surgical Centre Classification](#).
- 7.4. Paediatric cases should be managed and treated only by professionals within the paediatric specialty (e.g.: paediatric surgery) or by a health care professional who is privileged to conduct the procedure and must have evidence of training in managing paediatric cases and PALS certified.
- 7.5. The treating surgeon shall be available at the DSC facility until the patient is discharged safely.
- 7.6. Healthcare professionals engaged in surgery shall maintain up to date hands-on in :
- 7.6.1. Basic Life Support (BLS), applicable to all healthcare professionals.

- 7.6.2. Advanced Cardiac Life Support (ACLS) applicable to all healthcare professionals working within the scope of medicine.
- 7.6.3. Paediatrics Advanced Life Support (PALS) applicable to all healthcare professionals working within the scope of paediatrics.
- 7.6.4. Advanced Trauma Life Support (ATLS) applicable to all healthcare professionals working within the scope of surgery.
- 7.7. If the DSC manages paediatric cases, DSC must ensure all professionals managing paediatric cases (e.g.: Paediatricians, anaesthetists and nurses) are trained in managing paediatric cases and PALS certified.
- 7.8. Visiting surgeons shall be available twenty four (24) hours after the procedure.
 - 7.8.1. 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.
 - 7.8.2. The handover process should include a signed document on the patient care plan.
- 7.9. For DSC that provide full radiology/diagnostic services, one full time consultant/specialist radiologist shall be available to supervise and manage radiology services in the DSC.
 - 7.9.1. At least one radiography technician shall be available in each shift and shall only be responsible for essential radiography services.

7.9.2. 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.

7.10. For DSC that provide full laboratory services, one full time DHA licensed pathologist shall be available to supervise and manage the clinical laboratory services in the DSC.

7.10.1. At least one laboratory technician shall be available in each shift and shall only be responsible for essential laboratory services.

8. STANDARD FOUR: PRE-OPERATIVE EVALUATION AND INFORMED CONSENT

8.1. All Day Surgical Centres must have in place a written Surgical Care Pathway (**Appendix 5**).

8.2. Day Surgical Centre shall only provide surgical and diagnostic procedures for ASA-PS Classification I, II and III patients in both adults and paediatrics (**appendix 3-4**).

8.3. ASA-PS classification III patients must have a medical consultation, assessment and clearance as per their medical morbidities prior to any day surgical procedures under deep sedation and/or general anaesthesia.

8.4. For patient selection criteria in dentistry under general anaesthesia refer to **Appendix 12**.

8.5. For **list of permitted procedures by Day Surgical Centre Classification**, refer to the following link:

<https://www.dha.gov.ae/uploads/092023/List%20of%20Permitted%20Procedures%20by%20Day%20Surgical%20Centre%20Classification2023951570.pdf>

8.6. The following exclusions must be considered during patient consultations and pre-op assessments:

- 8.6.1. Emergency/unprepared patients.
- 8.6.2. Inpatients.
- 8.6.3. Uncooperative patients.
- 8.6.4. Patients with a history of sleep apnoea.
- 8.6.5. Patients with a history of drug or alcohol abuse.
- 8.6.6. Patients with airway difficulties.
- 8.6.7. Patients with severe allergies.
- 8.6.8. Patients with at risk of blood loss, excessive bleeding and may require a blood transfusion.
- 8.6.9. Patients that require cardiac catheterization or Interventional Cardiology
- 8.6.10. Patients with metabolic disorders (ASA IV and above).
- 8.6.11. High-risk patients (ASA IV-VI) in accordance with the American Society of Anaesthesiologists (ASA) Classifications.
- 8.6.12. Patients who require surgical procedure, intra or immediate post-operative care from a specialized healthcare professional or a specific service not within the scope and available services and professionals of the DSC.

8.7. Prior to patient referral for surgery, patients with ASA Classification III should:

- 8.7.1. Have a thorough consultation with appropriate laboratory tests with the treating physician within the DSC or other healthcare facility, prior to the surgery.
- 8.7.2. Have evidence of the assessment and feedback e.g.: referral letter, medical report or other communication evidence between the healthcare team and a follow-up appointment with the physician to discuss surgical and non-surgical options.
- 8.8. 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.
 - 8.8.1. Surgical procedures are limited to those where there is only a small risk of surgical and anaesthetic complications and hospitalization.
- 8.9. 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.
 - 8.9.1. For DSC Class A and B: blood pressure, blood glucose, BMI and exclusions noted in Standard 2 should form part of the pre-op assessment.
 - 8.9.2. For CM and C: pre-op assessment should include but not limited to:
 - a. CBC
 - b. Blood pressure
 - c. Blood glucose

- d. Coagulation profile
 - e. BMI
 - f. General anaesthesia consult
 - g. Venous Thromboembolism (VTE) risk assessment
 - h. And exclusions noted in Standard 2.
- 8.9.3. Pre-op assessments shall be conducted in the same health facility where the surgery will be provided.
- 8.9.4. Patients undergoing elective surgery shall provide their consent at pre-op assessment.
- a. The timeframe from pre-op assessment to surgery shall be conducted within 4-weeks. Patients exceeding the 4-week window should be re-assessed.
 - b. Patients or their next of kin/legal guardian shall be given written information/instructions on the surgery and surgical preparation.
 - c. Patients shall be given sufficient time to make an informed decision before surgery.
 - d. The consent form should elaborate risks, benefits and alternatives before the procedure begins.
 - e. The physician shall be available to answer any further questions in a non-technical way.

- f. Consent should be available in both English and Arabic languages. The minimum requirements for informed consent are set out in **Appendix 6**.
- 8.10. 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.
- 8.10.1. A Physician, Anaesthetists (if applicable) and RN must document, complete and verify the Surgical Safety Checklist (**Appendix 7**).
- 8.10.2. All surgeries under Day Surgical Centre category B must always be overseen by:
- a. A DHA licensed surgeon and nurse.
 - b. An anaesthetist (part-time) must be present if narcotic drugs are being used for permitted endoscopic procedures (**Appendix 4**) .
- 8.10.3. 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.
- 8.11. Minimally invasive procedures shall follow Procedural Sedation and Analgesia (PSA), as per the permitted levels of sedation per DSC facility type.
- 8.12. The DHA Licensed anaesthetist shall hold valid certification in conscious sedation and be trained and competent in:

- 8.12.1. 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 8-9**).
- 8.12.2. Being able to conduct a physical assessment to assess the fitness and appropriateness of the patient for PSA.
- 8.12.3. 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.
 - a. Vital signs include the level of consciousness, ventilatory and oxygenation status, hemodynamic variables, temperature, pain and anxiety levels.
- 8.12.4. Discharging the patient, including but is not limited to the following checks:
 - a. The patient returned to their baseline level of consciousness.
 - b. Vital signs are stable and within acceptable limits.
 - c. Sufficient time has elapsed following administration of reversal agents (if applicable) to ensure that patient is not re-sedated.
 - d. All recovery assessments, discharge and home release, have been met and completed (**Appendix 10-11**).
 - e. There is a responsible adult to accompany the patient home.

- 8.12.5. Being able to discuss where and when deeper levels of sedation or anaesthesia may be indicated.
- 8.12.6. Detecting and rescuing patients from sedation-related adverse responses, including anaphylaxis and cardiorespiratory failure.
- 8.12.7. 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, MONITORING AND DISCHARGE

- 9.1. There following 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
 - 9.1.8. Adequate staff levels for the procedure.
 - 9.1.9. Pre-anaesthesia assessment and patient acuity (Class I or II).
 - 9.1.10. Sedation/anaesthesia and recovery plan.

- 9.1.11. Document adherence to the Surgical Safety Checklist (**Appendix 7**) for all surgeries.
- 9.1.12. Control of concentrated electrolyte solutions.
- 9.1.13. Assuring medication accuracy and safe dosing.
- 9.1.14. Avoiding catheter and tubing misconnections.
- 9.1.15. Prophylaxis.
- 9.1.16. Infection control.
- 9.1.17. Single-use of injection devices and insert of the IV line.
- 9.2. There are several patient safety measures that should be considered and documented in facility logbook such as and not limited to:
 - 9.2.1. Confirmation of functioning equipment and a back-up plan.
 - 9.2.2. Medical devices are fully functional.
 - 9.2.3. A list of look-alike, sound-alike medication.
- 9.3. All patient diagnostic or surgical procedures shall be continuously monitored in accordance with the surgical procedure, patient safety and risk factors.
 - 9.3.1. 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.
- 9.4. 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.

9.4.1. 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.

9.5. When moderate sedation is targeted, the healthcare professional is assigned responsibility for patient monitoring and may perform brief interruptible tasks.

9.5.1. 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.

9.6. 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 3-4)**.

9.6.1. 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.

9.6.2. 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.

- 9.7. The DSC shall put in place procedures to rescue patients who are sedated deeper than intended.
- 9.8. Documentation of the clinical assessments and monitoring data during sedation and recovery and discharge is required to include:
 - 9.8.1. Time, date, physician name, patient condition and action taken.
 - 9.8.2. Food consumption appropriate for the patient and consistent with the patient's condition, and clinical care shall be provided.
 - 9.8.3. Ability to pass urine following surgery.
 - 9.8.4. Patient-level of consciousness and ability to put on clothing without assistance.
- 9.9. A discharge plan shall start from patient admission and include various personnel, information and resources.
- 9.10. Considerations for discharge preparation shall include but not be limited to:
 - 9.10.1. Risk assessment and process for discharge.
 - 9.10.2. Medication needed from the pharmacy.
 - 9.10.3. Physician written authorisation for discharge.
 - 9.10.4. Documentation of the procedure for the patient and treating physician.
 - 9.10.5. The pickup person and aftercare support within the first 24-hours.
 - 9.10.6. No driving policy and travel distance to home.

9.10.7. Environmental conditions, such as stairs, access to toilet or bedroom.

9.11. The carer's/authorized persons contact details and their awareness of possible issues and requirements following discharge.

9.11.1. Contact numbers after discharge, such as the doctor or emergency contact.

a. Follow up phone call and follow up appointments.

9.11.2. The treating physician shall respect patients' choices if they decide to Discharge Against Medical Advice (AMA).

9.11.3. AMA patients must sign a form before leaving the facility and be witnessed by the treating physician and a nurse.

10. STANDARD SIX: CRITICAL CARE AND EMERGENCY MANAGEMENT

10.1. DSC shall have written policies and procedures must be established and implemented.

They should define and describe the scope of critical care services that ensure safe and competent delivery of the patients' services.

10.2. The DSC shall ensure 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.

10.2.1. Evidence of the competency and training shall include the following:

- a. Recognizing arrhythmias.
- b. Assisting the physician in placing central lines or arterial lines.
- c. Obtaining blood gases ABG's.
- d. Central Venous Pressure (CVP) line.

- e. Infection control principles.
- f. Glasgow Coma Scale (GSC).
- g. Point of Care Testing Assessment.
- h. Training in using defibrillator and care of patients on ventilators.

10.3. The DSC shall ensure periodic training and education for staff in the use of equipment for emergency management.

10.3.1. Training and assessment of competency shall be documented as per the requirements of the training provider.

10.4. DSC Class B that uses anaesthetics only for permitted endoscopic procedures shall have a room for post-operative recovery.

10.5. 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.

10.5.1. The ratio of recovery rooms should consider the number of surgical theatres, hours of operation, procedures being performed and patient scheduling.

10.5.2. Critical care services equipment and supplies must be immediately available in the DSC for the immediate and safe provision of care and treatment required.

10.5.3. Pharmaceutical agents, oxygen, oral suction, laryngoscope, Ambu-bag shall be readily available in the health facility.

10.5.4. 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.

10.6. At a minimum, DSC shall have a clear protocol and provision for essential emergency management for illness and/or injection injuries that occurred for the patient, healthcare professionals, employees or visitors, which needs immediate emergency care and assistance before transport to another health facility.

10.7. 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.

10.8. RN providing emergency services in the DSC shall be trained and competent to provide the emergency care, as needed:

10.8.1. Patient Triage.

10.8.2. Operating a Cardiac Monitor.

10.8.3. ECG Recording and Interpretation.

10.8.4. Pulse Oximetry.

10.8.5. Oxygen Administration.

10.8.6. Suctioning.

10.8.7. Intravenous cannulation.

10.8.8. Medication administration.

10.8.9. Emergency services will be available during the operational hours of the DSC.

10.9. Emergency Medications must be available in all DSCs as per DHA Emergency Medications Policy.

10.10. Emergency devices, equipment and supplies must be available for immediate use for treating life-threatening conditions shall include but not limited to the following:

10.10.1. Defibrillator (except for DSC class A and class B without endoscopy)

10.10.2. Emergency cart with emergency medicines.

10.10.3. Resuscitation kit, cardiac board and oral airways.

10.10.4. Laryngoscope with blades.

10.10.5. Diagnostic set.

10.10.6. Patient trolley with an IV stand.

10.10.7. Nebulizer.

10.10.8. Refrigerator for medication.

10.10.9. Floor Lamp (Operating light mobile).

10.10.10. Sets of instruments shall include suturing set, dressing set, foreign body removal set or minor set and cut down set.

10.10.11. Disposable supplies shall include the following:

- a. Suction tubes (all sizes)
- b. Tracheostomy tube (all sizes)
- c. Intravenous cannula (different sizes)
- d. IV sets
- e. Syringes (various sizes)

- f. Dressings (gauze, sofratulle)
 - g. Crepe bandages (all sizes)
 - h. Splints (Thomas splints, cervical collars, finger splints).
- 10.10.12. Fluids (e.g. D5W, D10W, Lactated Ringers, Normosol R, Normosol M, Haemaccel) and Glucometer.
- 10.10.13. Sufficient electrical outlets to satisfy monitoring equipment requirements, including clearly labelled outlets connected to an emergency power supply.
- 10.10.14. A reliable source of oxygen.
- 10.10.15. Portable vital signs monitor (ECG, Pulse-Oximetry, Temperature, NIBP, EtCO₂).
- 10.10.16. Suction apparatus.
- 10.10.17. One portable ventilator is required for (1) one to (4) four OTs (backup)
- Note:** EtCo₂, ventilators and defibrillator are not required in DSC level A and level B (without endoscopy).
- 10.10.18. Storage areas for general medical/surgical emergency supplies, medications and equipment shall be under staff control and out of the path of normal traffic.
- 10.10.19. Policy for maintaining personal items and food in the emergency area shall be established and maintained by the health facility.
- 10.10.20. 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.

10.11. Well-equipped ambulance services shall be ready and nearby with licensed, trained and qualified Emergency Medical Technicians (EMT) for patient transportation if required.

10.11.1. The service can be outsourced with a written contract with an emergency services provider licensed in Dubai.

10.11.2. Ambulance services shall meet Dubai emergency transfer timeframes.

10.12. The facility shall have Uninterrupted Power Supply (UPS) or Power Generator.

REFERENCES

1. Administrative Decision No. (143) of 2016 Concerning the table of occupational diseases and schedule of permanent disability.

2. American Society of Anaesthesiologists (2023). Continuum of Depth of Sedation: Definition of General Anaesthesia and Levels of Sedation/Analgesia [Online]. Available at: <https://www.asahq.org/standards-and-guidelines/continuum-of-depth-of-sedation-definition-of-general-anesthesia-and-levels-of-sedationanalgesia> (Accessed 01 June, 2023).
3. Appui Sante & Medico Social And Haute Autorite De Sante (2012). Together for the development of day surgery [Online]. Available at: https://www.has-sante.fr/portail/upload/docs/application/pdf/2013-11/day_surgery_-_an_overview.pdf (Accessed 01 June, 2023).
4. American Society of Anaesthesiologists (2020). Physical Status Classification System [Online]. Available at: <https://www.asahq.org/standards-and-guidelines/asa-physical-status-classification-system> (Accessed 01 June 2023).
5. American Society for Gastrointestinal Endoscopy (2018). ASGE guideline for infection control during GI endoscopy [Online]. Available on: https://www.asge.org/docs/default-source/education/practice_guidelines/doc-51e78060-cd85-4281-b100-6abebcb04c49.pdf (Accessed 01 June, 2023).
6. Australian Commission on Safety and Quality in Healthcare (2017). National Safety and Quality Health Service Standards. Guide for Day Procedure Services.
7. Australian and New Zealand College of Anaesthetists (2014). Guidelines for the Management of Major Regional Analgesia. ANZCA 2014.

8. Association of Anaesthetists (2019). Guidelines for day-case surgery 2019. Anesthesia – Perioperative medicine, critical care and pain. Guidelines from the Association of Anaesthetists and the British Association of Day Surgery [Online]. Available on: <http://www.qihub.scot.nhs.uk/media/458802/effective%20and%20safe%20pathways%20-%20mr%20doug%20mcwhinnie.pdf> (Accessed 01 June, 2021).
9. British Association for Day Surgery (2011). Excellence in Short Stay Surgery. Chapter 2: Day Case and Short Stay Surgery. The Association of Anaesthetists of Great Britain & Ireland The British Association of Day Surgery.
10. Buckley Hugo and Palmer James (2010). Overview of anaesthesia and patient selection for day surgery. Anaesthesia And Intensive Care Medicine. April 2010, Volume 11, Issue 4, Pages 147–152.
11. Burlingame Byron (2014). Operating Room Requirements for 2014 and Beyond. Facility Guidelines Institute.
12. Cabinet Decision no. (20) of 2017 Concerning Unified Qualification Requirements for licensing health professionals in the country.
13. Centre for Disease Control and Prevention (2008). Guideline for Disinfection and Sterilization in Healthcare Facilities [Online]. Available on: <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html> (Accessed 01 June, 2023).

14. De Cassai A, Boscolo A, Tonetti T, Ban I and Ori C (2019). Assignment of ASA-physical status relates to anaesthetists' experience: a survey-based national-study. Korean J Anesthesiol. 2019 Feb;72(1):53-59.
15. Dubai Health Authority (2019). Health Facility Guidelines. Part B-Day Surgical/Procedure Unit.
16. Doyle Daniel and Emily (2018). American Society of Anaesthetists Classification [Online]. Available on: <https://www.ncbi.nlm.nih.gov/books/NBK441940/> (Accessed 01 June, 2021).
17. Fox Justin, Vashi Anita, Ross Joseph and Gross Cary (2013). Hospital-based, acute care following ambulatory surgery centre discharge. Surgery. 2014 May; 155(5): 743–753. Published online 2013 Dec 14. DOI: 10.1016/j.surg.2013.12.008.
18. Howard R, Yin YS, McCandless L, Wang S, Englesbe M, Machado-Aranda D (2019). Taking Control of Your Surgery: Impact of a Prehabilitation Program on Major Abdominal Surgery. J. Am. Coll. Surg. 2019 Jan;228(1):72-80.
19. Knuf KM, Maani CV, Cummings AK (2018). Clinical agreement in the American Society of Anaesthetists physical status classification. Perioper Med (Lond). 2018;7:14.
20. Lee Jeong (2017). Anaesthesia for ambulatory surgery. Korean J Anesthesiol. 2017 Aug; 70(4): 398–406. Published online 2017 May 19. DOI: 10.4097/kjae.2017.70.4.398.
21. Ministry Of Health and Consumer Affairs (2008). Day Surgery Unit Guide Standards and Recommendations. Reports, Studies and Research 2008.

22. National Institute for Clinical Excellence (2016). Multi-morbidity: Clinical assessment and Management. NICE guideline. Published: 21 September, 2016.
23. Quemb Danie and Stocker Mary (2014). Day surgery development and practice: key factors for a successful pathway. BJA, December 2014, Volume 14, Issue 6, Pages 256–261. doi:10.1093/bjaceaccp/mkt066.
24. Royal College of Surgeons (2015). Standards for Conscious Sedation in the Provision of Dental Care and Accreditation. The Intercollegiate Advisory Committee on Sedation in Dentistry. Available on: <https://www.rcseng.ac.uk/dental-faculties/fds/publications-guidelines/standards-for-conscious-sedation-in-the-provision-of-dental-care-and-accreditation/> (Accessed 01 June, 2021).
25. Royal College of Surgeons (2016). Professional Standards for Cosmetic Surgery. Cosmetic Surgery Interspeciality (CSIC).
26. South African Society of Anaesthetists (2015). Sedation Guidelines. SASA 2015.
27. Wang P et al. (2019). Same-Day vs Different-Day Elective Upper and Lower Endoscopic Procedures by Setting. JAMA Intern, Med. 2019 May 13. DOI: 1001/JAMA intern med.2018.8766.
28. UAE Federal Law number 11/2008 concerning Licensing Fertility Centre and the Cabinet Decision number (36) of 2009 promulgating the bylaw of the Licensing Fertility Centre law.
29. UAE Federal Law number 27/1981 Concerning the Prevention of Communicable Diseases
30. UAE Federal Law no. (4) of 2016 concerning Medical Liability.

31. World Health Organisation (2008). WHO surgical safety checklist and implementation manual. Available on: https://www.who.int/patientsafety/safesurgery/ss_checklist/en/ (Accessed 01 June, 2023).
32. World Health Organisation (2017). Safe management of wastes from health-care activities. A summary [Online]. Available on: <https://apps.who.int/iris/bitstream/handle/10665/259491/WHO-FWC-WSH-17.05-eng.pdf;jsessionid=413222CAEA8880A75D5F44380AA1CAA4?sequence=1> (Accessed 01 June, 2023).

APPENDICES

APPENDIX 1: SUMMARY OF DAY SURGICAL CENTRE CLASSIFICATIONS AND MINIMUM REQUIREMENTS

Requirements	Class A	Class B	Class CM	Class C
Led by Consultant OR specialist surgeon	✓	✓	✓	✓
Anaesthetist	-	1 part time (for endoscopy)	1 full time	1 full time
Minimum surgical team	Surgeon and Nurse	Surgeon and Nurse	Surgeon, anaesthetist and Nurse	Surgeon, anaesthetist and Nurse
Patient Category*	ASA I, II, III ¹	ASA I, II, III ¹	ASA I, II, III ¹	ASA I, II, III ¹
Medication management responsibility	Surgeon	Surgeon	Anaesthetist or pharmacist ²	Anaesthetist or pharmacist ²
Ventilator	-	✓ ³ (for endoscopy)	✓ ³	✓ ³
Operating theatre	✓	✓	✓	✓
Surgery duration	-	-	Not exceed 2 hours	Not exceed 3 hours ⁴
Point of Care Testing	✓	✓	✓ ⁵	✓ ⁵
Onsite laboratory ⁶	-	-	-	-
Onsite radiology ⁷	-	-	✓	✓
Emergency Medications & Equipment	✓ ⁸	✓ ⁸	✓	✓
Onsite Sterilizing area	✓ ⁹	✓ ⁹	✓	✓
Accreditation as per DHA policy within 2 years of license ¹⁰	✓	✓	✓	✓

*ASA-American Society of Anaesthesiologists

¹ Patients categorized as ASA PS III will need to be cleared for operation as per the medical assessment.

² DSC that provide ambulatory care pharmacy services must employ a full time pharmacist who will be responsible for medication management.

³One (1) portable ventilator is required for one (1) to four (4) OTs (backup) AND One (1) ventilator is required for two (2) beds in recovery bay.

⁴Only procedures requiring GA shall not start after 5:00pm.

⁵With additional Arterial Blood Gas Testing.

⁶DSC Class A and B that provides solely vascular or Ophthalmology Services may have contracted with external laboratory services if required.

⁷Class A and B may have contract with external radiology if required. Onsite or contracted radiology services is optional for DSC Class CM and C providing solely Ophthalmology or Vascular services.

⁸Ventilator is optional for DSC Class A and Class B without endoscopy but should have Automated External Defibrillator (AED) available.

⁹Sterilizing area can be outsourced in DSC Class A and B

¹⁰ Accreditation includes International Society for Quality in Healthcare (ISQua) approved entities such as and not limited to:

- Accreditation Canada International (ACI).
- American Association for Accreditation of Ambulatory Surgery Facilities (AAAASF).
- Australian Council of Healthcare Standards International (ACHSI).
- Joint Commission International (JCI) Ambulatory Care.
- Emirates International Accreditation Center (EIAC).
- American Accreditation Commission International (AACI).

APPENDIX 2: OPERATING THEATRE (OT) SPECIFICATION MATRIX

Class	OT	Recovery Room	Equipment
DSC Class A & B (without endoscopy)	- Min. 1 OT - Size: 20-30m²	Recommended	OT table: Required Anaesthesia Machine: Not required Ventilator in Recovery: Optional (1 ventilator for every 2 beds in the recovery bay) Portable Ventilator: Required (1 portable ventilator for 1-4 OTs (backup). Mobile x-ray: Optional Crash Cart Trolley: Required. ABG machine: Optional
DSC Class B (with endoscopy)	- Min. 1 endoscopy room - Size 25-30m²	Mandatory	OT table: Required Anaesthesia Machine: Not required Ventilator in Recovery: Optional (1 ventilator for every 2 beds in the recovery bay) Portable Ventilator: Required (1 portable ventilator for 1-4 OTs (backup). Mobile x-ray: Optional. Crash Cart Trolley: Required. Endoscope set with Cabinet: Required. Scopes storage cabinets (HEPA): optional ABG machine: Optional
Class C- M	- Min. 2 OTs - Size 30m² each	Mandatory	OT table: Required Anaesthesia Machine: Required Ventilator in Recovery: Required (1 ventilator for every 2 beds in the recovery bay) Portable Ventilator: Required (1 portable ventilator for 1-4 OTs (backup). Mobile x-ray: Required Crash Cart Trolley: Required ABG machine: Required
Class C	- Minimum 2 OTs - Size: 36m² each	Mandatory	OT table: Required Anaesthesia Machine: Required Ventilator in Recovery: Required (1 ventilator for every 2 beds in the recovery bay) Portable Ventilator: Required (1 portable ventilator for 1-4 OTs (backup). Mobile x-ray: Required Crash Cart Trolley: Required. ABG machine: Required

APPENDIX 3: DSC CLASSIFICATION (ANAESTHESIA, SEDATION AND PATIENT SAFETY I, II, AND III)

Health Facility CLASS A	Health Facility CLASS B	Health Facility CLASS CM	Health Facility CLASS C
Minimal Sedation (Anxiolysis) 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: • Normal respirations. • Normal eye movements. • Intact protective reflexes. • Amnesia may or may not be present. i. Topical anaesthesia, oral sedative and Local Anesthesia	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. 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. - Topical anaesthesia, Local Anesthesia and sedatives (oral or injection). - Regional Anesthesia. - Narcotic Analgesics. - Dissociative Anaesthetics. Note 1: 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 Note 2: Propofol, Spinal Anesthesia, Epidural Anesthesia, Endotracheal Intubation Anesthesia, Laryngeal Mask Airway Anesthesia, is <u>prohibited</u> in a Class B Centre. Note 3: Exceptions for permitted endoscopic (see Appendix 2)	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. - Topical anaesthesia, Local Anesthesia and Sedatives (oral or injection). - Regional Anesthesia. - Narcotic Analgesics. - Dissociative Anesthetics. - Spinal Anesthesia. - Epidural Anesthesia. Note 1: The use of Endotracheal Intubation Anesthesia, Laryngeal Mask Airway Anesthesia, and/or Inhalation General Anesthesia is <u>prohibited</u> in a Class CM Centre. Note 2: 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 injection.	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 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. - Topical anaesthesia, oral sedative and Local Anesthesia. - Regional Anesthesia. - Dissociative Anaesthetics - Epidural Anesthesia. - Spinal Anesthesia. - General Anesthesia (with or without Endotracheal Intubation or Laryngeal Mask Airway Anesthesia). Note 1: 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.

ASA PS Classification	Definition	Examples including but not limited to
ASA I	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use
ASA II	A patient with mild systemic disease	Mild diseases only without substantive functional limitations. Current smoker, social alcohol drinker, pregnancy, obesity (30<BMI<40), well-controlled DM/HTN, mild lung disease
ASA III	A patient with severe systemic disease	Substantive functional limitations; One or more moderate to severe diseases. Poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥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
ASA IV	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
ASA V	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
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes	
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 IV-VI patients are not permitted in a DSC setting		

APPENDIX 4: DSC CLASSIFICATION AND PERMITTED MEDICATIONS

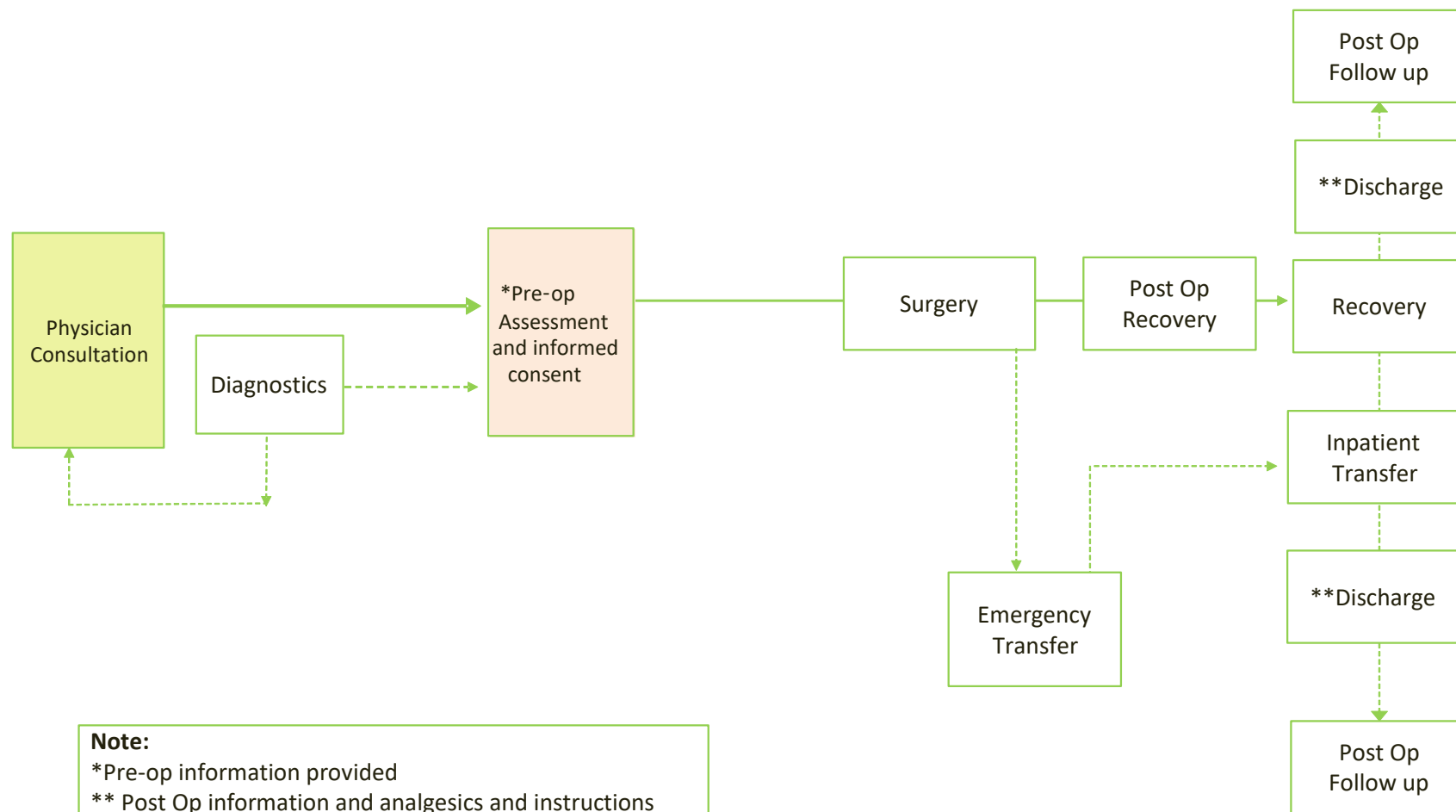
No.	Day Surgical Classification (A, B, CM or C)	Method of Delivery*	Medications
1.	A	Topical Anesthesia	Benzocaine, lidocaine, lignocaine, prilocaine
	A	Oral sedative	Alprazolam Clonazepam Diazepam Midazolam needs reversible agent Lorazepam Chlordiazepoxide Chloral Hydrate
	A	Local Anesthesia	Lidocaine Prilocaine benzocaine Mepivacaine Bupivacaine Ropivacaine Levobupivacaine Other local anaesthesia may be provided if licensed by MoHAP
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 Opioid Analgesics	Pethidine Hydrochloride Fentanyl (only for permitted endoscopic procedures)
	B	Regional Anesthesia	Lidocaine Mepivacaine Levobupivacaine Bupivacaine Ropivacaine

	B	Dissociative Anaesthetics	Ketamine (only for permitted endoscopic procedures)
3.	CM	Topical Anesthesia	See Health Facility Class A and B
	CM	Oral Sedatives	See Health Facility Class A and B
	CM	Local Anesthesia	See Health Facility Class A and B
	CM	Intravenous Sedatives	See Health Facility Class B (plus propofol)
	CM	Intravenous Analgesics	See Health Facility Class B Fentanyl
	CM	Regional Anesthesia	See Health Facility Class B
	CM	Dissociative Anaesthetics	Ketamine
	CM	Spinal Anesthesia	Bupivacaine Ropivacaine Lidocaine Levobupivacaine
	CM	Epidural Anesthesia	Bupivacaine Ropivacaine Levobupivacaine Lidocaine Fentanyl Pethidine Morphine
4.	C	Topical Anesthesia	See Health Facility Class A , B and CM
	C	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 Thiopental Injection Midazolam Injection Diazepam

			Sevoflurane, Isoflurane Halothane Ketamine Dexmedetomidine Morphine Sulfate Injection Pethidine Hydrochloride Fentanyl Remifentanyl
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*Other topical and local anaesthesia may be provided if licensed by MoHAP

APPENDIX 5: DAY SURGICAL CENTRE CARE PATHWAY



APPENDIX 6: MINIMUM REQUIREMENTS FOR INFORMED CONSENT FORM

Informed Consent Form for Patients
Name of Healthcare Professional: _____
Name of Health Facility: _____
Name of Patient: _____ File No: _____
This Informed Consent Form has two parts: • Information Sheet (to share information about the treatment with you) • Certificate of Consent (for signatures if you agree to go ahead with the treatment)
<i>You will be given a copy of the full Informed Consent Form</i>
PART I: Information Sheet
I, Dr. _____ with license No: _____ should be performing the _____ treatment/ procedure on Miss/Mrs./Mr. _____ aged _____ years, on date _____.
Description of the Procedure and Process
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.
Side Effects
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.
Risks
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.
Complications

Inform and explain any possible complications that could be caused as a result of the treatment.

Discomforts

Explain and describe the type and source of any anticipated discomforts in addition to the side effects and risks discussed above.

Benefits

Mention only those activities that will be actual benefits of the treatment.

Confidentiality

Explain how the clinical team will maintain data confidentiality, especially with respect to the information about the patient, including photography and videography.

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 7: SURGICAL SAFETY CHECKLIST

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

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

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APPENDIX 8: 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 Paediatric 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 injection because of lack of cooperation or adverse physiologic response to stress.

APPENDIX 9: 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 for Class B, CM and C)
Suction at the bedside
 - 6.3.2. Oxygen and oxygen delivery devices (cannula, mask)
 - 6.3.3. Appropriate oral and nasal airways (paediatric and adult as appropriate)
 - 6.3.4. Continuous non-invasive 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 injection 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 injection 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 yield 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 apnoea 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 SaO₂ 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 10: ALDERTHS SCORING SYSTEM FOR RECOVERY AND DISCHARGE FROM THE RECOVERY ROOM

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

Discharge Criteria	Discharge Score
Activity	
Moving all four limbs spontaneously or on command	2
Moving two limbs spontaneously or on command	1
No movement of limbs neither spontaneously nor on command	0
Breathing	
Able to breathe deeply and coughing adequately	2
Dyspnoea or shortness of breath	1
Apnoea	0
Circulation	
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
Consciousness	
Fully conscious	2
Responding to verbal commands	1
Not responding	0
SaO2	

Able to maintain SaO2 > 92% on room air	2
Needs oxygen therapy to maintain SaO2 > 90	1
SaO2 < 90% despite oxygen therapy	0
Total Score	

1. All patients should be assessed and scored on admission, in individual intervals and before discharge from the recovery area.
2. Values should be documented in the anaesthesia chart.
3. The scoring includes five features:
4. Activity, Breathing, Circulation, Consciousness and SaO2
5. 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.
6. The patient should be discharged from the recovery area only if the total score $\geq$ nine or at the pre-sedation baseline.

APPENDIX 11: 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
Vital Signs	
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
Ambulation	
Steady gait and no dizziness	2
With assistance	1
None / dizziness	0
Nausea & Vomiting	
No or minimal	2
Moderate	1
Severe	0
Pain	
No or minimal	2
Moderate	1
Severe	0
Surgical Bleeding	

No or minimal	2
Moderate	1
Severe	0
Total Score (Discharge Home)	

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 ≥ 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 12: SELECTION CRITERIA FOR DENTISTRY UNDER GENERAL ANAESTHESIA IN DSC.

1. The selection criteria of general anaesthesia should be only considered in extremely uncooperative children, children with lack of psychological maturity and or with mental/medical disability, in significant surgical procedures that require immediate or comprehensive dental care, and where local anaesthesia is ineffective.
2. If the surgery involves the first permanent molars, root canal therapy and/or extraction of permanent molars, a consultation and assessment is required by the oral surgeon, endodontist and orthodontist prior to general anaesthesia.
3. The pre-op assessment shall be conducted in the same health facility where the procedure will take place.
4. Consent for the elective procedure shall be provided by the parent and should not exceed 4 weeks prior to the day of the procedure. A second consent is mandatory on the day of the procedure and must elaborate risk, benefits and alternatives. This includes and not limited to metal crowns, extraction of permanent teeth or extraction of primary anterior teeth.
5. Class II restorations in primary molars should not be performed under general anaesthesia.
6. The Day surgical Center shall meet the following required healthcare professionals:
 - The Anaesthesiologist must have experience in paediatric anaesthesia field and hold valid Paediatric Advanced Life Support (PALS) certificate.

- The paediatrician and dental surgeon should hold a valid Paediatric Advanced Life Support (PALS) certificate.
 - The day surgical centre must have a paediatrician on board who should be informed ahead of time about the procedure and should be available onsite during the procedure to assist in emergency situations, if needed.
 - The Dental surgeon must be a Specialist /Consultant in one of dental surgical specialties, not a General Dentist.
7. Adherence to all other requirements for category C listed in the standards for standalone day surgical centres and DHA guidelines for complete oral rehabilitation under general anaesthesia.