MIO-MOD/2025/62

القرار الوزاري رقم (54) لسنة 2025 م

بشأن اعتماد المعايير الوطنية لخدمات المناظير

وزير الصحة ووقاية المجتمع:

بعد الاطلاع:

- على القانون الاتحادي رقم (1) لسنة 1972 م بشأن اختصاصات الوزارات وصلاحيات الوزراء وتعديلاته،
- وعلى القانون الاتحادي رقم (4) لسنة 2015 م في شأن المنشآت الصحية الخاصة وتعديلاته ولائحته التنفيذية،
- وعلى القانون الاتحادي رقم (5) لسنة 2019 م في شأن تنظيم مزاولة مهنة الطب البشري ولائحته التنفيذية،
- وعلى القانون الاتحادي رقم (6) لسنة 2023 م بشأن مزاولة غير الأطباء والصيادلة لبعض المهن الصحية،
- وعلى المرسوم بقانون اتحادي رقم (4) لسنة 2016 م بشأن المسؤولية الطبية، وتعديلاته ولائحته التنفيذية،
- وعلى قرار مجلس الوزراء رقم (20) لسنة 2017 م باعتماد المعايير الموحدة لترخيص مزاولي المهن الصحية على مستوى الدولة وتعديلاته،
- وعلى قرار مجلس الوزراء رقم (11) لسنة 2021 م في شأن الهيكل التنظيمي لوزارة الصحة ووقاية المجتمع.

وبناء على مقتضيات المصلحة العامة،،،

قرّر ما يلي:

المادة (1): تعتمد المعايير الوطنية لخدمات المناظير المرفقة بهذا القرار.

المادة (2): ينشر هذا القرار في الجريدة الرسمية ويعمل به اعتباراً من اليوم التالي لتاريخ نشره.

عبدالرحمن بن محمد العويس

وزير الصحة ووقاية المجتمع

صدر بتاريخ: 20/03/2025

UNITED ARAB EMIRATES
MINISTRY OF HEALTH & PREVENTION
OFFICE OF THE MINISTER

الإمارات العربية المتحدة
وزارة الصحة ووقاية المجتمع
مكتب الوزير

مرفق القرار الوزاري رقم (54) لسنة 2025 م

بشأن اعتماد المعايير الوطنية لخدمات المناظير

National Standard of Endoscopy Services

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PURPOSE

This Standard defines specifications for endoscopy services in licensed healthcare facilities, aiming to ensure the highest levels of safety and quality for patients undergoing or using this service in the United Arab Emirates.

SCOPE

This regulation applies to licensed Healthcare Facilities approved under licensure to provide endoscopy services according to the specifications of this Standard.

ABBREVIATIONS

ACLS	:	Advanced Cardiac Life Support
AN	:	Assistant Nurse
BLS	:	Basic Life Support
ERCP	:	Endoscopic Retrograde Cholangiopancreatography
EUS	:	Endoscopic Ultrasound
IV	:	Intravenous
MOHAP	:	Ministry of Health and Prevention
PALS	:	Pediatric Advanced Life Support
PPE	:	Personal Protective Equipment

RN : Registered Nurse

UAE : United Arab Emirate

DEFINITIONS

Capnography is the monitoring of the concentration or partial pressure of carbon dioxide (CO2) in respiratory gases. Its main development has been as a monitoring tool for use during anesthesia and intensive care.

Endoscope is a flexible tube with an attached camera that is inserted into the body through a small cut or an opening in the body such as the mouth that allows the physician to look at parts of the body that could not be seen any other way. The physician may use forceps (small tongs) and snares or other devices through the endoscope channels to operate or remove tissue for biopsy. Endoscopes are often used in the prevention, early detection, diagnosis, staging, and treatment of diseases.

Endoscopic retrograde cholangiopancreatography (ERCP) is a procedure that enables the physician to examine the pancreatic and bile ducts. A bendable, lighted tube (endoscope) about the thickness of an index finger is placed through the mouth into the stomach and the first part of the small intestine (duodenum).

Endoscopic ultrasound (EUS) is a procedure that allows a physician to obtain either endoscopic images and/or ultra-sonographic images for information about the digestive tract and the surrounding tissue and organs, including the lungs. Consists of an endoscope with a miniaturized ultrasound device on the tip.

Endoscopy is a medical procedure performed with an endoscope to examine a patient's internal organs, acquire specimens, and perform minimal or sometimes more advanced invasive procedures, without making large incisions.

Global Rating Scale (GRS) is a tool used to assess and standardize the quality of endoscopic procedures. It provides a structured framework for evaluating various aspects of endoscopy, including technical skills, procedural knowledge, patient care, and overall performance.

Healthcare professional shall mean a natural person who is authorized and licensed by the Concerned Health Authorities to practice any of the healthcare professions in the Emirate.

Patient is any individual who receives medical attention, care, or treatment by any healthcare professional or is admitted to a health facility.

1. REGISTRATION AND LICENSURE PROCEDURES

1.1. All health facilities providing endoscopy services must adhere to the legislations and regulations of the United Arab Emirates (UAE).

1.2. Health facilities aiming to provide endoscopic services must comply with the licensure and administrative procedures of the Concerned Health Authorities.

1.3. Licensed health facilities opting to add endoscopy services shall inform the Concerned Health Authorities and apply for a permission to provide the required service under the following facility types/subtypes:

1.3.1. Hospital (generalized or specialized), **Class 1-5 (Appendix 1)**

1.3.2. Day Care Surgery Centre; and **Class 1-2 only (Appendix 1)**

2. HEALTH FACILITY REQUIREMENTS

2.1. The health facility is responsible for ensuring convenient access for all patient groups to the facility and treatment areas.

2.2. The design of the health facility must ensure the safety of both patients and staff.

2.3. The health facility must meet the requirements of the Health Facility Guidelines, Endoscopy Unit related to each health authority.

2.4. The health facility must have suitable equipment and trained healthcare professionals capable of handling critical and emergency cases.

2.5. The health facility is obligated to install and operate equipment for the proposed services as per the manufacturer's specifications and as per national hospital standards.

2.6. Surgical and diagnostic endoscopic procedures are exclusively permitted in General Hospitals, Specialty Hospitals, or Day Surgical Centers.

2.6.1. Day Surgical Centers are restricted to providing endoscopic services for patients **categorized as 1-2 as per Appendix 1 and 2**. Cases involving laparoscopy,

complicated health conditions, co-morbidities, systemic diseases, and emergencies should be directed to a hospital setting.

2.7. Day Surgical Centers choosing to offer endoscopy services must have ventilators and hemodynamic monitoring equipment for Blood Pressure, Heart Rate, Cardiac Output, Central Venous Pressure (CVP), Pulmonary Artery Pressure, Oxygen Saturation (SpO2), and Temperature readily available on-site to undertake necessary patient resuscitation.

2.8. The health facility must establish the following policies and procedures, including but not limited to:

- Criteria for accepting patients.
- Patient assessment and admission.
- Patient education and obtaining informed consent.
- patient health records.
- Measures for infection control and management of hazardous waste.
- Incident reporting.
- Safeguarding patient privacy.
- Fall management policy.
- Lost and found policy.
- Medication management.
- Plans for emergency actions.

- Patient discharge or transfer.

2.9. The health facility must provide documented proof of the following:

- Transfer of critical/complex cases as needed.
- Discharge of patients.
- Follow-up after patient discharge.
- Clinical laboratory services.
- Maintenance services for equipment.
- Laundry services.
- Compliance with the requirements of medical waste management.
- Housekeeping services.

2.10. The health facility must maintain Standard Operating Procedures concerning the safe utilization of endoscopes, including, but not limited to, the following:

- Reprocessing of reusable equipment.
- Development of a protocol for the safe application of chemicals used in cleaning and disinfection processes.

2.11. The health facility shall maintain charter of patients' rights and responsibilities posted at the entrance of the premise in two languages (Arabic and English).

2.12. The health facility must ensure that all endoscopy procedures are conducted in adherence to international guidelines, such as the European Society of Gastrointestinal Endoscopy (ESGE) and the American Society for Gastrointestinal

Endoscopy (ASGE), covering all aspects of procedural techniques, patient safety, and infection control.

2.13. The health facility shall have in place a written plan for monitoring equipment for electrical and mechanical safety, with monthly visual inspections for apparent defects.

3. HEALTHCARE PROFESSIONALS' REQUIREMENTS

Endoscopic service staffing should be based on what is needed to create a safe environment for the patient and assure the safe conduct of endoscopic operations by healthcare personnel. Staffing requirements should consider both patient-related and procedural factors.

3.1. Diagnostic and therapeutic endoscopy procedures must be led by consultants specialized in Gastroenterology, General Surgery, Pediatric Gastroenterology, or Pediatric Surgery. These professionals must be privileged by the facility's Privileging Committee according to the specific requirements and standards of the health facility.

3.1.1. Refer to **Appendix 3** for detailed information on the types of endoscopies and the healthcare professionals authorized to perform each procedure.

3.2. All healthcare professionals performing endoscopy must hold valid licenses and privileges from the Concerned Health Authorities and their health facility.

3.3. All healthcare professionals within the health facility must hold an active professional license and operate within the limits of their scope of practice.

3.4. All healthcare professionals involved in providing patient care are required to uphold a valid Basic Life Support (BLS) certification.

3.5. All healthcare professionals working in the Endoscopy procedure room should maintain a valid Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) training/ certification.

3.6. An Anesthetist must be present for each surgical procedure where deep sedation or general anesthesia is administered.

3.6.1. the anesthetist is responsible for managing anesthesia, narcotic and controlled medications, emergency medicine, any other medication and record-keeping.

3.7. The health facility must hire a biomedical engineer or engage in a contract with an accredited maintenance company to ensure the safety and optimal functioning of equipment.

3.8. On an annual basis, a written policy on staff training, as well as the type and frequency of core competency assessments, should be documented and monitored.

3.9. The Privileging Committee and/or the Medical Director of the health facility are responsible for granting privileges to physicians based on their education, training, experience, and competencies. These privileges undergo periodic review and

adjustment in accordance with the Concerned Health Authorities' clinical privileging policy.

3.10. Adequate Registered Nurses (RNs), Assistant Nurses (ANs) under supervision of RNs and/or Operation Theatre Technicians should be present to provide technical assistance during endoscopic procedures. For complex interventional procedures like Endoscopic ultrasound (EUS) and ERCP, additional staff may be necessary to ensure efficiency, safety, and quality.

3.11. Pediatric endoscopy for patients (**Appendix 1, category 1-2**) may be performed in a licensed day surgical center (**as per section 1.3**), provided that the clinician, anesthetist, and nurse are privileged to perform the specific procedure(s).

3.11.1. Treatment and care management must be conducted by a specialized Consultant pediatrician or a specialist pediatrician operating under the supervision of a qualified consultant authorized to provide such services.

3.12. Staff responsible for disinfecting endoscopes must ensure they have adequate training and accreditation to do so, and that they follow evidence-based practices and the manufacturers' recommendations.

4. CASE MIX

4.1. Endoscopy Services will exclusively be utilized for diagnosing conditions and illnesses. In specific cases, these services may be used for the removal of suspected or abnormal tissue or other simple procedures identified during diagnostic

endoscopy of patients classified as low risk (**Appendix 1, classification 1-2**). Such procedures are restricted to non-hospital settings for patients falling under classification 1 and 2. For patients falling into other categories (**Appendix 1, classification 3-5**), which include those requiring complex surgical interventions identified during endoscopy and patients with life-threatening or serious comorbidities that require specialized care must only be performed in a licensed hospital (general or specialized) equipped with specialist endoscopy diagnosis and surgical intervention services to manage high-risk cases involving anesthesia and sedation.

4.2. The classification of case mix, whether simple or complex, will be decided by the treating physician, type of facility, scope of services provided by their facility, the job responsibilities assigned to them by their employing facility, and the privileges granted, in alignment with the requirements of the Clinical Privileging Standard and the guidance provided in **Appendix 1**.

4.3. This standard applies for patient populations of all ages, including adults, children, pregnant women, and elderly patients, with specific considerations tailored to each group's unique needs and risks.

5. GENERAL REQUIREMENTS

5.1. The provision of this service is limited to medical condition stable patients without life-threatening, underlying conditions and/or co-morbidities, except where these

cases may be treated in healthcare facilities equipped with the requisite set of specialized healthcare professionals, equipment, and resources. The case mix is defined in section 4 of this standard.

5.1.1. Pre-endoscopy checklists should be used to minimize risks and ensure readiness for procedures.

5.2. Have a referral system suitable for the patient case mix. The referral system must include the management of emergency procedures and major complications requiring patient care and/or referral to a highly specialized facility with in-patient beds;

5.3. Have in place a documented plan for the immediate transfer of patients. The document must address practical issues for the immediate transfer of patients e.g. Advanced Life Support, crash cart, professional responsibilities, route of exit, free access for trolley, and wheelchair, access to inpatient beds and, transfer of necessary patient records;

5.4. Where possible, endoscopy services should be conducted in a hospital setting, and the service should be located near acute emergency services and operation theater. If this is not possible, arrangements for the enclosed transfer of patients must be established.

5.5. If endoscopy services are provided in a standalone day surgery center, the provider must ensure adherence to the Concerned Health Authorities Standard Interfacility

Patient Transfer for patient transfers. Additionally, they must meet the specified timeframes for emergency transport of patients outlined in the Concerned Health Authorities capacity master plan.

5.6. A referral agreement should be established with a nearby hospital in the event of complications during endoscopy procedures (**Appendix 1, Category 1-2**) that require patient transfer. A copy of this agreement must be submitted to Concerned Health Authorities.

5.7. Ensure that the facility has access to ambulance parking. If the facility is not situated on the ground floor, there must be ready access via special lifts that comply with legal dimensions to safely transport patients on a trolley.

5.8. Only physicians at the appropriate level and training with prerequisite facility requirements and privileges are permitted to operate with lasers for therapeutic endoscopy purposes **as per sections 4.1 & 4.2.**

5.8.1. Training will incorporate principles of use, clinical applications, risks to patients and staff, safety procedures, and care of the equipment.

5.8.2. The laser fiber must be carefully examined before use to ensure that the fiber is not broken. Broken optic fibers risk potential damage to the endoscope and risk to the patient and staff.

5.8.3. During laser procedures, protective eye equipment must be worn when using laser technology. If the procedure is expected to generate significant amounts of

laser plume or airborne debris, appropriate measures should be taken to control these fumes. Adherence to careful work practices is important.

5.9. Access to the use, sharing, transmission, and reporting of the data must comply with the Data Management Policy of each Concerned Health Authority.

5.10. Have in place the systems, policies, and operating procedures as per the requirements of Clinical Laboratory Standards related to the Concerned Health Authorities.

5.11. The health facility should ensure regular training and education for staff in the utilization of emergency management equipment. Documentation of training and competency assessments should comply with the requirements of the training provider.

6. CLINICAL MANAGEMENT

6.1. All patients scheduled for endoscopy procedures must undergo an anesthesia risk score assessment **as per Appendix 1**. Procedures for Adult and Pediatric cases falling under **Categories 3-5 (Appendix 1)** must exclusively take place in a licensed Hospital setting equipped with specialized equipment and expertise, as outlined in **sections 3.11.1 and 4.1** of this Standard.

6.2. Clinical management providers must adhere to the following:

6.2.1. Have in place a record of referral for endoscopy; and meet the minimum requirements;

6.2.2. Maintain a record indicating the date when the endoscopic procedure was conducted.

6.2.3. Maintain a record of the endoscopic procedure, including findings, patient outcomes, prognosis, consent form, and follow up

6.2.4. have in place a record of the Global Rating Scale (GRS) assessment and improvement plan; and

6.2.5. Facilities must prioritize and demonstrate compliance with evidence-based guidelines for cleaning, sterilization, and decontamination, as per internationally recognized standards such as the Medicines and Healthcare Products Regulatory Agency (MHRA) and Centers for Disease Control and Prevention (CDC).

6.2.6. Monitor and document potential sterilization failures leading to instrument recalls. Evaluate and record whether additional training for personnel or equipment maintenance is required.

7. USES OF ENDOSCOPIC DIAGNOSTIC PROCEDURES

7.1. Endoscopy is generally used to diagnose a range of conditions and illnesses such as breathing disorders, chronic diarrhea, incontinence, internal bleeding, irritable bowel syndrome, stomach ulcers, urinary tract infections, pancreaticobiliary disease, and cancer, among others. Examples of endoscopies include:

- Bronchoscopy
- Esophagogoscopy, Gastroscopy, Duodenoscopy

- Sigmoidoscopy
- Colonoscopy
- ERCP (Endoscopic retrograde cholangiopancreatography)
- Gynecological Endoscopy
- Cystoscopy
- Arthroscopy
- Proctoscopy
- Ureteroscopy

8. DESIGN REQUIREMENTS

The facility must be designed per the Facility Guideline standards. In addition, it must:

8.1. Have the requisite range of equipment for functional diagnostics, medical technology, and ancillary supplies, including requisite equipment and technologies as defined in Sections 4 and 7 of this Standard:

8.1.1. Have in place a reception and administration area, a waiting area, procedure rooms, consulting rooms, nurse station, storage area, separate reprocessing area, staff room, toilets and change rooms, waste disposal area, primary recovery room, and secondary recovery room (where appropriate)

8.1.2. A clinical scrub basin or sink must be located immediately adjacent to the procedure room.

8.1.3. Clean-up, scrub, and set-up rooms should be situated in close proximity to the procedure room.

8.1.4. The procedure room must be equipped with:

- Tested and approved fully immersible endoscopic equipment,
- Endoscope light source/video processor,
- Medical grade monitor/video,
- Suction (x2) –patient and instrument,
- Oxygen and accessory equipment,
- Pulse oximeter,
- Non-invasive blood pressure monitoring,
- Oxygen outlets (wall-mounted or oxygen cylinders with tubing),
- Hand washing facilities,
- Electrosurgical unit,
- Emergency drugs, and
- Intercom emergency call system

8.1.5. Have in place x-ray equipment including:

- Image intensifier,
- Radiation protection room,
- X-ray aprons, thyroids collars, belts and gloves,
- X-ray monitoring devices (for staff),

8.1.6. Resuscitation equipment including:

- Air viva - masks, bags, airways,
- Intravenous access equipment.
- Plasma expanders,
- Intravenous fluids including normal saline, dextrose,
- Portable oxygen and suction equipment
- Emergency drugs,
- Electro-cardiograph machine,
- Cardiac defibrillator,
- Two laryngoscopes,
- Endotracheal tubes and accessories.

8.1.7. Appropriate equipment for sedation including the ability to deliver oxygen, suction, and patient monitoring equipment.

8.1.8. Electrosurgical equipment for therapeutic purposes must be suitable for gastrointestinal procedures, tested, and sterilized following each procedure. Healthcare facilities must follow the recommended guidelines for electrosurgical units as per the European Society of Gastrointestinal Endoscopy guidelines or international equivalent.

8.1.9. Puncture-resistant containers for biohazardous materials and sharps must be readily available and securely located to ensure safe disposal and minimize the risk of contamination.

8.1.10. Source of uninterruptible secondary Source of power supplied by generator or battery source.

8.1.11. Designated areas or containers should be available for the safe disposal of medical waste, including sharps, biohazardous materials, and other potentially infectious waste.

8.1.12. The Cleaning and Disinfection of equipment area will include:

- A designated area for washing endoscopes with negative pressure.
- sinks for soaking and rinsing sufficiently sized to prevent tight coiling of the endoscope which may damage the fiber-optic cables in the instrument.
- An ultrasonic cleaner for accessory equipment used in procedures.
- Automated endoscope cleaning/ disinfecting machines.
- Compressed air to aid drying of endoscopic equipment after cleaning.
- A handwashing basin.
- A safety eyewash facility.
- An emergency shower.
- Stainless steel benches with space to accommodate the length of the endoscopes.

- Storage for disinfected scopes on a bench or shelf with appropriate ventilation.

The Sterilizing/Disinfection area will include an autoclave to sterilize accessory instruments if a sterile supply service is not available.

9. EQUIPMENT USE AND MAINTENANCE

The lifespan of an endoscope is, in most cases, determined by the quality of its maintenance.

9.1. Endoscopes should be stored safely, hanging vertically in cupboards through which air can be circulated and should be based on the manufacturer's recommended shelf life for storage and reprocessing.

9.2. Before use, all endoscopic instruments should be inspected. The Registered Nurse (RN) or Assistant Nurse (AN) should set up the endoscopic equipment, ensuring that the water bottle and other accessories are appropriately cleaned, and the endoscope is disinfected.

9.2.1. Monthly testing should be conducted on the final rinse water from the endoscope washer disinfector and the rinse sample cultures taken from endoscopic channels and water bottles.

9.3. The physician is responsible for checking the final status, readiness, functionality, and safety of the equipment.

9.4. All equipment shall be properly calibrated and adjusted.

9.5. Additionally, the equipment should be of sufficient quantity and quality to meet service requirements. It must be suitable, functional, accessible, up-to-date, and appropriately maintained for optimal performance.

10. ENDOSCOPIC SEDATION

The choice of specific sedation agents and the level of sedation targeted should be determined on a case-by-case basis by the physician performing the procedure in consultation with the patient.

10.1. Sedation related equipment

10.1.1. Before the initial use and periodic, a certified biomedical engineer must inspect and validate all sedation-related equipment per the manufacturer's specifications to ensure their proper functionality.

10.1.2. The procedure room should have electronic devices for monitoring and presenting data on pulse, blood pressure, oxygen saturation, electrocardiogram, and the source of oxygen and mouth suction.

10.2. Sedation related environment

10.2.1. A health facility offering endoscopy services must adhere to applicable federal laws and local regulations concerning the licensing and/or certification of all staff engaged in administering and monitoring sedation. Training and competencies should be documented.

10.2.2. The health facility should establish discharge criteria. Patients who received intravenous (IV) sedation during an endoscopic procedure should be discharged only in the presence of a responsible healthcare professional.

10.2.3. Before starting the procedure, a focused history and physical examination, including the patient's current medications, and other pertinent details, must be completed.

11. MEDICATION & MEDICATION ADMINISTRATION PRACTICES

11.1. The health facility must maintain written policies outlining the methods for drug storage, monitoring of drug inventory, and expiration dates. Additionally, the facility should maintain documentation of compliance with these policies.

11.2. A qualified and licensed healthcare professional (physician/pharmacist/RN) shall oversee the medication usage.

11.3. Medication must be securely stored under the environmental conditions specified by the manufacturer. It is strongly recommended to use single-dose vials for all sedative and analgesic medications.

11.4. Controlled substances shall be stored in a single locked cabinet, and a daily medication log shall be maintained.

11.5. Storage and disposal of controlled drugs shall comply with federal laws and local regulations.

11.6. Medication should only be administered under the order of the supervising physician when applicable.

11.7. Reversal agents for opioids and benzodiazepines should be readily available.

11.8. A written policy shall be in place for the identification, documentation, and review of adverse drug reactions.

11.9. The health facility providing endoscopic services must maintain a policy on the proper storage and handling of anesthesia agents. Additionally, the facility is required to comply with MOHAP regulations regarding the storage, handling, and maintenance of records for narcotics and controlled medications.

11.10. To avoid the transmission of pathogens due to improper use or reuse of syringes, multi-dose drug vials, and IV equipment, adhere to the following standards:

11.10.1. Preparation of medications for multiple patients should take place in an area separate from direct patient care areas or procedure rooms.

11.10.2. All medication, including those used for sedation, must be appropriately labeled unless it is for immediate use—prepared and administered immediately without leaving the provider's hand.

11.10.3. Medications labeled on the container or specified in the package insert as "single patient use" should be exclusively used for a single patient, and any remaining medication should be disposed of.

11.10.4. New fluid administration sets such as IV tubing units, should be used for each patient.

11.10.5. An aseptic technique, involving the cleansing of access diaphragms of medication vials with 70% alcohol before introducing a device in the vial, should be used in the preparation and administration of injections. Single-dose vials, ampules, bags, or bottles of IV solution should be used for a single patient only.

11.10.6. The use of a single-dose vial is recommended over multiple-dose vials, particularly when medications are administered to multiple patients.

11.10.7. When multiple-dose vials are used for more than one patient, they should be kept in a centralized medication area and prevent their entry into patient procedure rooms. These vials should be appropriately dated upon opening and disposed of per protocols, adhering to nationally accepted guidelines from MOHAP and those published by the Centers for Disease Control and Prevention.

11.10.8. reuse of a syringe again to access a medication vial or solution, even with a new needle, is strictly prohibited.

11.10.9. Administering medications to multiple patients with the same syringe, irrespective of changing the needle or using an intervening length of IV tubing, is strictly prohibited.

11.10.10. Used syringes and needles should be disposed of at the point of use in a sharps container that is both closable and designed to be puncture-resistant and leak-proof.

11.10.11. It is important to establish a clearly defined policy for the management of sharp and sharps-related injuries, which should include the reporting of blood and body fluid exposures.

11.10.12. A record of sedation medications wasted between patients should be maintained to facilitate the reconciliation of used and wasted vials at the end of each day.

11.10.13. When tubes of lubricant are used for more than one examination, it is important to adhere to proper infection control practices. Any tube that has been potentially contaminated should be discarded.

12. INFECTION CONTROL

12.1. Healthcare professionals directly involved in endoscopic procedures where there is a risk of splashes or contamination are required to wear the appropriate PPE such as gloves, face/eye shields, and impervious gowns.

12.2. Properly clean and disinfect frequently touched surfaces in the endoscopic procedure area, such as endoscopy keyboards, video monitors, consoles, or contaminated equipment, at the start of the day, between cases, and during terminal cleansing.

12.3. The endoscopy facility must have a terminal cleansing plan outlining methods and chemical agents for cleansing and disinfecting the procedural space at the end of each day.

12.4. Before the first case of the day, staff should confirm that all procedural and recovery areas have undergone thorough and proper cleansing.

12.5. Each patient should be considered as a potential infection source, and all endoscopes and accessory devices must be decontaminated with the same degree of rigor following an endoscopic procedure.

12.5.1. All healthcare professionals providing endoscopy services must undergo training in infection control and adhere to standard procedures for infection control.

12.5.2. The process of endoscope reprocessing contains two fundamental components:

- Manual cleaning involves brushing and exposing all external and accessible internal components to a low-foaming, endoscope-compatible detergent.
- Automatic disinfection includes rinsing and drying all exposed surfaces of the endoscope.

13. PATIENT CARE

13.1. The endoscopy setup shall be capable of providing the required level of sedation/anesthesia.

13.2. Physicians responsible for administering sedation must have the knowledge and skills to identify instances where the sedation level exceeds the intended depth. They should be adept at managing and supporting patients' cardiopulmonary responses to sedation accordingly.

13.3. Before undergoing the endoscopic procedure, the patient is required to sign an informed consent form that details the risks, benefits, and alternatives.

13.4. Patient Assessment

13.4.1. A comprehensive patient assessment process must be conducted with the collaboration of a multidisciplinary team, focusing on the clinical and priority needs of each patient.

13.4.2. The patient assessment should encompass various aspects, including but not limited to medical history, physical, social, psychological, and anesthetic assessment (if applicable), and identification of patients.

13.4.3. Before starting the endoscopic procedure, the patient, staff, and performing physician should verify the correct patient and procedure to be performed.

13.4.4. When required, the health facility must have the capability to stabilize critically ill patients and facilitate their transfer to a higher level of care if the facility is unable to manage the patient on-site.

13.4.5. The discharge plan should commence at admission and involve various staff, information, and resources. Considerations for discharge preparation should include, but not be limited to:

- The pickup person.
- Travel distance to home.
- No driving policy.

- Environmental conditions, such as stairs, access to toilet or bedroom.
- The carer's/authorized persons' contact details and their awareness of possible issues and requirements following discharge.
- Contact numbers after discharge, such as the doctor or emergency contact.
- Discharge arrangements.
- Healthcare professionals should use a formal risk assessment process.
- Food appropriate for the patient and consistent with the patient's condition and clinical care shall be provided.

13.5. All patients undergoing endoscopy should be monitored, with the frequency determined by various factors such as the type of sedation, duration, and complexity of the procedure, and the patient's condition. At a minimum, monitoring should occur before the procedure, following the administration of sedatives, at regular intervals during the procedure, during the initial recovery, and just before discharge.

13.6. The health facility must have procedures in place to promptly rescue patients who experience a sedation level deeper than initially intended.

13.7. When aiming for moderate sedation, the healthcare professional tasked with patient monitoring may engage in brief, interruptible tasks. Minimal monitoring is necessary, which may involve electronic assessment of vital signs such as blood

pressure, respiratory rate, heart rate, and pulse oximetry, along with visual monitoring of the patient's level of consciousness and discomfort.

13.8. When deep sedation is targeted, the healthcare professional overseeing patient monitoring must be exclusively dedicated to that task and is not permitted to undertake any other functions during the procedure.

13.8.1. Capnography is used in EUS, ERCP, and colonoscopy to evaluate the adequacy of ventilation, thereby reducing the occurrence of hypoxemia and apnea. Consideration may be given to utilizing capnography for endoscopy conducted under deep sedation and the use of CO2 insufflation.

13.9. Documentation of the clinical assessments and monitoring data during sedation and recovery is required.

14. KEY PERFORMANCE INDICATORS

14.1. A comprehensive record of KPIs must be maintained quarterly. This includes the following criteria:

14.1.1. **Clinical Quality**

- Potential preventable Hospitalization
- Rate of Unplanned readmissions within 28 days
- Number of Referrals
- Intention to Treat Rate
- Numbers Treated

- Complication Rate
- Adenoma Detection Rate (for Colonoscopy Only)
- Polyp Detection Rate (for Colonoscopy Only)
- Polyp Retrieval Rate (for Colonoscopy Only)

14.1.2. **Patient Happiness**

- Average waiting time for Elective Surgery
- Recommendation to others

14.1.3. **Patient Safety**

- Rate of 30-day mortality after surgery
- Rate of Medical Errors
- Rate of Medication Errors
- Over Sedation Rate
- Average Withdrawal Time (mins) from Cecum (for Colonoscopy Only)
- Intubation Rate (Incomplete Colonoscopy)

APPENDICES

APPENDIX 1: American Society of Anesthesiology Classification System (Adult and Pediatric cases)

Class	Description
1	Patient has no organic, physiologic, biochemical, or psychiatric disturbance (healthy, no comorbidity).
2	Mild-moderate systemic disturbance caused either by the condition to be treated surgically or by other pathophysiologic processes (mild moderate condition, well controlled with medical management; examples include diabetes, stable coronary artery disease, stable chronic pulmonary disease).
3	Severe, systemic disturbance or disease from whatever cause, even though it may not be possible to define the degree of disability with finality (disease or illness that severely limits normal activity and may require hospitalization or nursing home care; examples include severe stroke, poorly controlled congestive heart failure, or renal failure).

4	Severe systemic disorder that is already life-threatening, not always correctable by the operation (examples include come, acute myocardial infarction, respiratory failure requiring ventilator support, renal failure requiring urgent dialysis, bacterial sepsis with hemodynamic instability).
5	The moribund patient who has little chance of survival.

APPENDIX 2: DEFINITION AND LEVELS OF SEDATION/ANALGESIA*

Criteria	**LEVEL 1**	**LEVEL 2**	**LEVEL 3**	**LEVEL 4**
	Minimal Sedation Anxiolysis	**Moderate Sedation/ Analgesia ("Conscious Sedation")**	**Deep Sedation/ Analgesia**	**General Anesthesia**
Responsiveness	Normal response to verbal stimulation	Purposeful** response to verbal or tactile stimulation	Purposeful** response following repeated or painful stimulation	Unarousable even with painful stimulus
Airway	Unaffected	No intervention required	Intervention may be required	Intervention often required
Spontaneous Ventilation	Unaffected	Adequate	May be inadequate	Frequently inadequate

Cardiovascular Function	Unaffected	Usually maintained	Usually maintained	May be impaired

Level 1. Minimal Sedation (Anxiolysis) is a drug-induced state during which patients respond normally to verbal commands. Although cognitive function and physical coordination may be impaired, airway reflexes, and ventilatory and cardiovascular functions are unaffected.

Level 2. Moderate Sedation/Analgesia ("Conscious Sedation") is a drug-induced depression of consciousness during which patients respond purposefully** to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained.

* Monitored Anesthesia Care (MAC) does not describe the continuum of depth of sedation; rather it describes a specific anesthesia service in which anesthesiologists have been requested to participate in the care of a patient undergoing a diagnostic or therapeutic procedure.

** Reflex withdrawal from a painful stimulus is not considered a purposeful response.

Level 3. Deep Sedation/Analgesia is a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully** following repeated or painful stimulation. The ability to independently maintain ventilatory function may be

impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.

Level 4. General Anesthesia is a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

Because sedation is a continuum, it is not always possible to predict how an individual patient will respond. Hence, practitioners intending to produce a given level of sedation should be able to rescue*** patients whose level of sedation becomes deeper than initially intended. Individuals administering Moderate Sedation/Analgesia ("Conscious Sedation") should be able to rescue*** patients who enter a state of Deep Sedation/Analgesia, while those administering Deep Sedation/Analgesia should be able to rescue*** patients who enter a state of General Anesthesia.

** Reflex withdrawal from a painful stimulus is NOT considered a purposeful response.

*** Rescue of a patient from a deeper level of sedation than intended is an intervention by a practitioner proficient in airway management and advanced life support. The

qualified practitioner corrects adverse physiologic consequences of the deeper-than-intended level of sedation (such as hypoventilation, hypoxia, and hypotension) and returns the patient to the originally intended level of sedation. It is not appropriate to continue the procedure at an unintended level of sedation.

APPENDIX 3: TYPES OF ENDOSCOPIES

Endoscopies fall into categories, based on the area of the body that they investigate.
The American Cancer Society (ACS) lists the following types of endoscopies:

Type	Area examined	Where scope is inserted	Doctors who typically perform the surgery
Arthroscopy	Joints	Through a small incision near the examined joint	Orthopedic Surgeon
Bronchoscopy	Lungs	Into the nose or mouth	Pulmonologist or Thoracic Surgeon
Colonoscopy	Colon	Through the anus	Gastroenterologist or Colorectal Surgeon
Cystoscopy	Bladder	Through the urethra	Urologist or Gynecological Surgeon or Urogynecologist
Enteroscopy	Small intestine	Through the mouth or anus	Gastroenterologist
Hysteroscopy	Inside of the uterus	Through the vagina	gynecologists or gynecological surgeons

Laparoscopy	Abdominal or pelvic area	Through a small incision near the examined area	various types of surgeons and Gynecologist
Laryngoscopy	Larynx	Through the mouth or nostril	otolaryngologist, also known as an ear, nose, and throat (ENT) doctor
Mediastinoscopy	Mediastinum, the area between the lungs	Through an incision above the breastbone	thoracic surgeon
Sigmoidoscopy	Rectum and the lower part of the large intestine, known as the sigmoid colon	Into the anus	gastroenterologist or Colorectal Surgeon
Ureteroscopy	Ureter	Through the urethra	urologist
Upper gastrointestinal endoscopy, also known as an esophagogastroduodenoscopy	Esophagus and upper intestinal tract	Through the mouth	gastroenterologist
Thoracoscopy, also known as a pleuroscopy	Area between the lungs and the chest wall	Through a small incision in the chest	pulmonologist or thoracic surgeon