Endoscopy Unit Service and Facility Standards for New Zealand

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Introduction

This document is prepared by the National Screening Unit (NSU) in its central agency role of commissioning and supporting the National Bowel Screening Programme (NBSP) in partnership with the Endoscopy Guidance Group for New Zealand (EGGNZ).

These standards are based primarily on the New Zealand Global Rating Scale (NZGRS). The remit of the standards include facilities, equipment, service management as well as clinical safety and quality. Some standards only apply to the provision of NBSP service. It should be noted that NBSP-specific standards do not apply to paediatric endoscopy.

Purpose

The primary objective of the National Screening Unit is the on going safety and quality of care provided by all national screening programmes to their participants, inclusive of the NBSP.

The National Endoscopy Quality Improvement Programme (NEQIP) facilitates safe, patient focused endoscopy services that are efficient, accountable and sustainable. This is achieved by implementation of the New Zealand Global Rating Scale. EGGNZ provides oversight, direction and strategic support to NEQIP, as well as developing standards in various areas of endoscopy.

This document outlines auditable endoscopy service standards as minimum requirements for the delivery of all endoscopy services across New Zealand. It forms the basis of an Endoscopy Quality Assurance framework in conjunction with NEQIP. These standards apply to all units including those delivering the National Bowel Screening Programme.

This document supercedes the previous 2017 EGGNZ guidelines “Endoscopy Unit Standards for Performing Bowel Cancer Screening in New Zealand” and the BSP pilot “Interim NBSP Facilities Standards and Guidance” from 2011.

New Zealand Global Rating Scale (NZGRS)

In May 2013, the Ministry of Health established the NEQIP to support district health boards (DHBs) in the provision of safe high-quality endoscopy care. NEQIP’s central quality improvement tool is the use of the New Zealand Global Rating Scale (NZGRS).

NBSP recognises NZGRS as the best ‘system enabler’ to achieve safe, high quality, patient-focused screening endoscopy care. The NZGRS is a web-based self-assessment tool that enables endoscopy units to assess and improve the provision of patient-centred care. It comprises four domains of clinical quality, quality of patient experience, workforce and training. NEQIP provides support to all DHB endoscopy units in the application of NZGRS and the development of Continuous Quality Improvement (CQI) plans.

All units submit NZGRS census data biannually. NBSP expects that each DHB will commit to consistently achieving a minimum of level B in three domains (clinical quality, quality of patient experience and workforce). Training of endoscopists is not the remit of the NSU and does not occur universally so is not a subject for this set of standards.

Document Ownership and Review

This document has been developed in partnership between the Ministry of Health and EGGNZ. The EGGNZ Endoscopy Unit Guidelines Working Group consists of representatives from:

National Endoscopy Quality Improvement Programme (NEQIP), Royal Australasian College of Surgeons (RACS), Royal Australasian College of Physicians (RACP), New Zealand Society of Gastroenterologists (NZSG), NZ Paediatric Gastroenterologists, Gastroenterology College of the New Zealand Nurses Organisation (NZNO), Australian New Zealand College of Anaesthetists (ANZCA), National Bowel Screening Programme (NBSP) of the National Screening Unit of the Ministry of Health.

Application

This standard document applies to all DHB endoscopy units in New Zealand.

Private endoscopy service providers may choose to apply the standards to establish a common quality assurance and audit process of their endoscopy unit; however the mechanism by which private units are provided access to the NZGRS and the third party audit capability is yet to be determined at time of publication.

Document Outline

The standards are formatted so that they can be readily assessed to specify:

- Name of standard
- Description of standard
- Rationale of standard
- Essential criteria
- Evaluation process
- Evaluation target

The standards cover the following areas:

1. Service Management
2. Facilities
3. Equipment
4. Medication
5. Quality and safety

Each standard is mandatory. It specifies the *minimum* requirement for compliance and is achieved when all indicators or criteria associated with it are met.

The standards are supported by guidance with further explanation of each criterion, and reference to any recognised published standards. The source for the external standards can be found in the references section. Where standards originate from the NZGRS the reference number for the measure is stated. Where standards do not originate from the NZGRS, specific reference material is provided.

Some guidelines referenced in this document are prepared in a jurisdiction outside New Zealand. As such their requirements must be moderated. New Zealand legislation and regulations and codes are essential requirements for New Zealand endoscopy units and form the basis of contractual requirements in the provision of publicly funded endoscopy services.

At times a standard refers to a DHB quality process, policy and/or a procedure. When these standards are adopted by a private endoscopy provider, the provider's quality policy framework will apply.

This document should be interpreted in a manner that is consistent with NBSP Interim Quality Standards (IQS) and 'NZS 8134 Health and Disability Services Standards' with the 'Code of Health and Disability Services Consumers' Rights 1996'.

Basic Principles

Endoscopy units will provide safe, patient focused services that are equitable, efficient, accountable and sustainable.

Standard 1.0 Service Management

Standard 1.1: Leadership and organisation

The unit has a structure for leadership, governance and accountability with clear reporting lines within the organisation.

Rationale	The purpose of this standard is to ensure the unit achieves an integrated and patient-focused endoscopy service. A unit requires a clear structure for leadership, management and accountability. This standard ensures that the basic components of this structure are in place.

Essential criteria

	Audit Standard criteria	*Guidance* Refer to NZGRS measure number
1.1a	There is a designated endoscopy clinical lead.	1.1
1.1b	There is an endoscopy leadership team (see glossary) comprising clinical, nursing and managerial lead roles, each with defined responsibilities.	1.2
1.1c	There is a defined governance structure based on the Endoscopy User Group (*see glossary*) with clear lines of reporting and accountability.	1.4
1.1d	There is an annual audit plan for the service with named leads and timescales for completion.	1.5
1.1e	The clinical endoscopy leadership team have dedicated, non-clinical time in their job plans/roles to lead the service.	1.7
1.1f	There are defined processes and timescales to review and maintain all policies and standard operating procedures.	1.8
1.1g	The endoscopy leadership team has the managerial and administrative support to organise and deliver the service effectively.	1.9
1.1h	The service has appropriate technical support to enable effective service delivery.	1.10
1.1i	The endoscopy leadership team has access to timely and appropriate information on capacity, demand and waiting times on which to base operational and planning decisions.	1.11
1.1j	The endoscopy leadership team review and set the service's strategic objectives on an annual basis and develop plans to achieve these objectives.	1.12
1.1k	There are systems in place to ensure that the leadership team seek and receive feedback about their performance on an annual basis.	1.14
1.1l	There is an annual process in place to consider and plan resources for new service developments.	1.15

Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.
Evaluation targets	No quantitative target. All criteria are met.

Standard 1.2: Policy and procedure management

The endoscopy unit has documented quality assurance and clinical policies and procedures that are regularly updated and shared with unit staff to ensure a high-quality service.

Rationale	The quality of endoscopy care is managed and coordinated within an endoscopy unit using written protocol and procedure documents that outline quality assurance and clinical procedures.	
Essential criteria		*Audit Standard criteria*
	1.2a	Policy and procedure documents are centrally accessible and available to all staff.
	1.2b	All policy and procedure documents are reviewed and updated two-yearly, or earlier if required
	1.2c	All relevant staff are notified of changes to all policies and procedures.
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.	
Evaluation targets	No quantitative target. All criteria are met.	

Standard 1.3: Appropriateness of endoscopy procedure

The unit implements and monitors systems to ensure appropriate referrals for all endoscopy procedures.

Rationale	A patient-centred quality unit must ensure that patients receive the most appropriate investigation and intervention.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	1.3a	There are referral guidelines available for all diagnostic procedures.	5.1
	1.3b	There is a local policy for prioritising referrals.	5.2
	1.3c	Endoscopy referral forms enable the provision of sufficient clinical information to permit prioritising of the appropriateness of the referral against guidelines.	5.3
	1.3d	Referral guidelines for procedures other than direct access have been agreed by all who perform those procedures.	5.5
	1.3e	All referrals from non-endoscopists within primary and secondary care are prioritised by an endoscopist who performs that procedure, unless agreed 'direct access' protocols exist.	5.6
	1.3f	Inpatient endoscopy requests are triaged daily to prioritise clinically urgent cases.	5.7
	1.3g	An audit of the prioritising process is undertaken once per year, with an action plan formulated where problems are identified.	5.8
	1.3h	All referral guidelines are reviewed on an annual basis, with amendments disseminated to appropriate stakeholders.	5.10
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 1.4: Access and booking

There are systems and processes in place to ensure that the service is accessible, timely and patient- centred.

Rationale	A patient-centred endoscopy unit must ensure that the resources are used appropriately.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	1.4a	The service has agreed processes to support endoscopy waiting list management, booking and scheduling practices.	10.1
	1.4b	Roles and responsibilities for the management of waiting lists, booking and scheduling are clearly defined and documented.	10.2
	1.4c	There is an agreed process for determining and monitoring the capacity of each endoscopy list.	10.4
	1.4d	The service has a process for identifying patients at risk of breaching waiting times and these are appropriately escalated and actioned.	10.5
	1.4e	There is a process for pooling of referrals to ensure that patients are booked in turn.	10.6
	1.4f	All inpatient procedures are performed within the timescale allocated by the grading clinician.	10.7
	1.4g	The endoscopy service achieves optimum endoscopy wait times as per national and local requirements.	10.8
	1.4h	All urgent inpatient upper gastrointestinal and ERCP (where available) procedures are performed within 24 hours.	10.9
	1.4i	There is an electronic scheduling system that facilitates efficient booking and scheduling.	10.10
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 1.5: Delivery and planning

There are policies, processes and schedules in place to ensure that resources and capacity are used effectively.

Rationale	The purpose of this standard is to ensure that resources and capacity are utilised effectively and efficiently.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	1.5a	Agreed delivery and planning (productivity) metrics are documented in the service operational policy.	11.1
	1.5b	There is a weekly review of waits, demand, capacity and scheduling.	11.2
	1.5c	There is sufficient flexibility in job plans to enable backfilling of vacant lists.	11.3, 11.9
	1.5d	Booking efficiency is monitored (through DNA and cancellation monitoring) at least monthly and is fed back to endoscopy staff and the Endoscopy User Group (EUG).	11.4
	1.5e	The service offers a contact service for all patients before the date of the procedure to identify and address any logistic, transport and social issues to avoid late cancellations/non-attendance.	11.5
	1.5f	Demand, capacity and utilisation data are used on an on-going basis for business planning to ensure sufficient capacity, and the service has an agreed production or service plan if shortfalls are identified.	11.8
	1.5g	There is an annual planning and delivery report for the service with an action plan to support service planning.	11.7
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 1.6: Endoscopy workforce capability

The endoscopy unit has an appropriately trained workforce.

Rationale	A capable well-trained and professionally developed workforce is able to deliver a high quality service.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	1.6a	There are policies and systems in place to ensure that there are sufficient competent staff within the service with an appropriate mix of skills to enable delivery of the service.	15.1
	1.6b	The service rosters staff according to service activity and competency level. Allocation of the workforce must be based on the expected duration and complexity of the service activity.	15.2
	1.6c	There is a process in place to ensure that all new team members receive a service-specific induction.	15.3
	1.6d	There is a training needs analysis for all new staff that supports the needs of the service.	15.4
	1.6e	There is a training needs analysis for substantive staff when there is a change or adoption of new practice, when team members leave, during succession planning or at least yearly, which is agreed by the appropriate senior manager responsible for each workforce group.	15.5
	1.6f	All staff have undergone Treaty of Waitangi and Tikanga/kawa Maori training.	15.6
	1.6g	A workforce skill-mix review is completed on at least an annual basis for all functions of the service and an impact assessment of the gaps is made and objectives are agreed on how these will be addressed in the immediate year.	15.7
	1.6h	There are processes to ensure the recruitment of suitable staff in a timely manner.	15.10
	1.6i	Feedback on the service specific induction programmes is gathered from staff at least annually, with modifications as required.	15.12
	1.6j	Workforce development plans are in place to address anticipated demand over the next 2–5 years.	15.15
	1.6k	The service has an active approach to succession planning for senior staff roles.	15.16

	1.6l	There are appropriate numbers of suitably trained staff for the level of sedation being administered on each list.	Reference : *ANZCA. (2014). PS09: Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures. Melbourne, Australia: Australian and New Zealand College of Anaesthetists*
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 1.7: Personnel / list composition (only applicable to NBSP practice)
NBSP endoscopy is performed with the appropriate staffing, skill-mix and time to perform quality procedures.

Rationale	NBSP colonoscopies have a higher yield of pathology which may require specific endoscopic skills and result in each procedure taking longer than routine diagnostic colonoscopy.		
Essential criteria		*Audit Standard criteria*	*Guidance*
	1.7a	All NBSP colonoscopists are credentialed to meet EGGNZ Individual standards.	Reference: *The Endoscopy Guidance Group for New Zealand. (2017). Endoscopy Standards for Individual Colonoscopists Performing Bowel Cancer Screening in New Zealand.*
	1.7b	There is a minimum of three colonoscopists with appropriate NBSP credentialing to deliver NBSP services.	The minimum recommended number of NBSP colonoscopists is three to ensure service continuity. This criterion is designed to ensure that the provision of NBSP colonoscopy does not fall to a single endoscopist. Three endoscopists will allow continuity of the service, taking into account cover for leave, sickness, and to allow for variations in other duties. Refer to: *The Endoscopy Guidance Group for New Zealand. (2017). Endoscopy Standards for Individual Colonoscopists Performing Bowel Cancer Screening in New Zealand.*
	1.7c	There are appropriate numbers of suitably trained staff for the level of sedation being administered on each list.	Reference: *ANZCA. (2014). PS09: Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures. Melbourne, Australia: Australian and New Zealand College of Anaesthetists*
	1.7d	The clinical nursing team directly engaged in NBSP lists will be appropriately trained, have the right skill mix and be regularly assessed.	Gastroenterology Knowledge and Skills Framework (KSF) Directly Observed Practical Skills (DOPS) Refer to: *www.nzno.org.nz/groups/colleges_sections/colleges/nzno_gastroenterology_nurses_college/resources*
	1.7e	There is a maximum of 5 cases per 4 hour list.	
	1.7f	There is access to a timely anaesthetic-assisted sedation list for appropriate cases, as required.	
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		

Evaluation targets	No quantitative target. All criteria are met.

Standard 2 - Facilities

Standard 2.1: Endoscopy unit facilities

The unit provides a person-centred, safe, comfortable, accessible, clean, clinically and culturally appropriate environment.

Rationale: Patients are more likely to feel at ease, and the desired outcome achieved, when their journey through the endoscopy facility is person-centred, clean, safe, comfortable, and culturally appropriate and the facilities are easily accessible.

Essential criteria

	Audit Standard criteria	*Guidance*
2.1a	**Reception area** The reception area is of sufficient size to accommodate the expected throughput for the unit.	Recommended sizes as per Schedule of Accommodation -. *Australasian Health Infrastructure Alliance. (2016). Australasian Health Facility Guidelines - Part B - Health Facility Briefing and Planning 0270 - Day Surgery Procedure Unit*.
2.1b	**Waiting area** The waiting area can accommodate the usual number of patients and other family/whānau people who would be waiting at any time.	
2.1c	**Office area** The office area is of sufficient size to support administrative functions.	
2.1d	**Preparation and holding area** The preparation and holding area are of sufficient size and appropriate facilities are provided to enable patients to change and toilet prior to undergoing procedures and wait in a suitably discrete location under supervision of staff. Facility must have appropriate space for patient preparation - enemas etc.	
2.1e	**Procedure room fittings and features** Minimum requirements for any endoscopy procedure room include: • A minimum of two suction ports (for patient and instrument) • Oxygen and accessory equipment • Access to hand-washing facilities • Intercom or emergency call system • Data ports • Adjustable and appropriate lighting • Appropriate temperature and ventilation	Procedure rooms are appropriately constructed, fitted out and maintained in accordance with NZS 8134.1.4. *Standards of New Zealand. (2018). Health and Disability Services Standards. NZS 8134.0.2018* Recommended sizes as per Schedule of Accommodation -. *Australasian Health Infrastructure Alliance. (2016).* If conscious sedation is given – requirements as per ANZCA PS09 (2014) If under General Anaesthesia – refer to *ANZCA. (2012). PS55 - Recommendations on Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations*.

2.1f	Additional equipment required for procedures involving radiological examination: • X-ray equipment such as Image • intensifier • Radiation protected room • X-ray aprons / thyroid collars / belts/ gloves • X-ray monitoring devices (for staff)	Refer to *Gastroenterological Society of Australia. (3rd Edition 2006: Reprinted 2011). Endoscopy: Standards for Endoscopic Facilities and Services. Victoria: Digestive Health Foundation*
2.1g	Appropriate ventilation and filtration for units performing Bronchoscopy.	Refer to: *Australasian Health Infrastructure Alliance. (2016). Australasian Health Facility Guidelines - Part B - Health Facility Briefing and Planning 0270 - Day Surgery Procedure Unit.*
2.1h	**Separate reprocessing area** There must be a separate reprocessing area adjacent to the procedure rooms. • Adequate sinks and bench areas • Ultrasonic cleaning machine • Medical air / Compressed air • Filtered water • Storage drying cabinets (clean area) see also 3.1j.	Recommended sizes as per Schedule of Accommodation -. *Australasian Health Infrastructure Alliance. (2016).* Refer to - *Standards of New Zealand. (2014). Reprocessing of reusable medical devices in health service organizations. AS/NZS 4187:2014.* Refer to: *Gastroenterological Society of Australia. (3rd Edition 2006: Reprinted 2011). Endoscopy: Standards for Endoscopic Facilities and Services. Victoria: Digestive Health Foundation*.
2.1i	**Clinical support areas** Dedicated and separate storage should be provided for a range of stock, consumables and equipment.	Recommended sizes as per Schedule of Accommodation -. *Australasian Health Infrastructure Alliance. (2016).*
2.1j	**Consulting / Interview room** Consulting rooms are located appropriately close to the recovery room, are constructed to ensure patient privacy and confidentiality of discussions and contain furniture and fittings.	
2.1k	**Nurses' station** There should be a nurses' station for preparation and recovery.	
2.1l	Accessible staff room.	
2.1m	Staff toilet & changing rooms.	

	2.1n	Patient toilet and changing area (including disability and bariatric access facility).	Facilities are provided to protect patient privacy including provision for disabled patients and preparation rooms for enemas. There is wheelchair access to the facility and procedural rooms which complies with disability regulations in accordance with NZS 8134.1.4. *Standards of New Zealand. (2018).*
	2.1o	Waste disposal area.	
	2.1p	The recovery area has separated stage 1 and 2 facilities. Stage 1 requires: • Vital sign monitoring • Suction, • Oxygen and • Call facilities	Refer to: *ANZCA. (2018). PS04 - Statement on the Post-Anaesthesia Care Unit.* The recovery area is: • appropriate to the number of procedures and in accordance with NZS 8134.1.4 Standards of New Zealand. (2018). • appropriately located adjacent to the procedure room and is freely accessible by a normal recovery trolley. • appointed with appropriate equipment and emergency systems per bed space.
	2.1q	There are systems in place to ensure that access to particular areas is restricted where appropriate (includes decontamination).	Refer to NZGRS measure. 9.9 for guidance.
	2.1r	The endoscopy unit is of appropriate size to allow safe flow of patients and staff through the facility in case of emergency.	The discounted circulation rate should be 35% - as per Schedule of Accommodation. *Australasian Health Infrastructure Alliance. (2016).*
	2.1s	Where children are managed in a procedure unit, there is some separation between children and adults.	*Refer to: ANZCA. (2019). PS29- Guideline for the Provision of Anaesthesia Care to Children.*
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified issues are addressed through the CQI process.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 3.0 Equipment

Standard 3.1: Essential hardware

The equipment should be of sufficient quantity and quality to meet the service requirements.

Rationale	Safe, effective endoscopy requires appropriate, modern equipment of sufficient quantity to ensure optimal clinical outcomes.		
Essential criteria		*Audit Standard criteria*	*Guidance*
	3.1a	There is sufficient volume of equipment to match service demand.	Volume of equipment should be sufficient to maximise efficiency, avoid patient delays and ensure patient safety. Reprocessing times and unexpected equipment malfunction should be taken into account.
	3.1b	**Endoscopy Equipment** • A range of endoscope sizes to cope with anticipated difficulties, [adult or paediatric] • High Definition White Light Endoscopes with appropriate HiDef video screens • Narrow Band / Blue Light Imaging capability	Including paediatric diameter endoscopes, and a long colonoscope. Refer to: *Gastroenterological Society of Australia. (3rd Edition 2006: Reprinted 2011). Endoscopy: Standards for Endoscopic Facilities and Services. Victoria: Digestive Health Foundation.* Note: Magnetic Positioning Devices improve Caecal Intubation Rates (CIR) and reduce the sedation needs for patients, as well as aiding localisation of lesions. They are a recommended additional item of equipment, but not deemed essential at this time.

3.1c	**Endoscopy Accessories** There should be an adequate supply of accessories suited to the endoscopic interventions undertaken within the unit including: • Forceps • Snares (range of sizes, braided and single filament) • Injection needles • Dilators and guide wires • Loops • Clips • Coagulation device(s) – e.g. Heater probe, Coag-Grasper forceps • Spray catheters (and appropriate chromoendoscopy chemicals) • Other devices appropriate to achieve haemostasis	Refer to: *Gastroenterological Society of Australia. (3rd Edition 2006: Reprinted 2011). Endoscopy: Standards for Endoscopic Facilities and Services. Victoria: Digestive Health Foundation*
3.1d	Carbon dioxide insufflation is available	
3.1e	Endoscopy-specific Electro Surgical Unit (ESU) ESUs are required to have integrated circuitry that, at a minimum, allows blending, variation and alternation of cutting and coagulation current as well as mono and bipolar delivery.	Refer to: *J.F Rey, U. Beilenhoff et al.. (2010). European Society of Gastrointestinal Endoscopy (ESGE) guideline: the use of electrosurgical units. European Society of Gastrointestinal Endoscopy (ESGE)* Refer to: *American Society for Gastrointestinal Endoscopy (ASGE). (2013). Electrosurgical generators - Technology Status Evaluation Report*.
3.1f	Patient monitoring system for continuous CO_2 monitoring, oxygen saturation and automated blood pressure measurement.	Refer to: ANZCA PS09 (2014)
3.1g	Ancillary Equipment • Procedural Trolleys which: o Allow head tilt, (Trendelenburg and reverse Trendelenburg) o Have brakes, o Have safety rails • Stethoscope • Access to ECG monitoring • Means of measuring glucose and ketones • Transportable oxygen cylinder • Portable suction • Device to measure patient core temperature	

	3.1h	**Resuscitation Equipment** Each facility shall have ready access to resuscitation equipment for adult and paediatric patients (where appropriate), including: • A range of equipment for advanced airway management (for example, masks, oropharyngeal airways, laryngeal mask airways, laryngoscopes and endotracheal tubes). • A means of inflating the lungs with oxygen (for example, a self-inflating bag and mask) • Adequate intravenous access equipment • Intravenous fluids including normal saline, dextrose etc. • Full range of emergency drugs, including sedation reversal agents • Portable oxygen with equipment for delivery to the patient e.g. Hudson Mask/Nasal Prongs • Portable suction • Defibrillator	Refer to - *ANZCA Recommendations on Minimum Facilities for Safe Administration of Anaesthesia in Operating Suites and Other Anaesthetising Locations (PS55), 2012*
	3.1i	**Electronic Reporting System**, with capacity to provide auditable outcome data.	
	3.1j	**Reprocessing** The unit has: • Automated reprocessing for endoscopic equipment, using an Automatic Flexible Endoscope Reprocessor. • Drying and storage cabinets	As referenced in standard *AS/NZS 4187:2014*
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 3.2: Maintenance of equipment

All equipment is suitable, functional, accessible, up-to-date and appropriately maintained for optimal performance.

Rationale	Equipment that is regularly maintained as part of QA activities and has undergone compliance testing, meeting the manufacturer's specifications for use, will contribute to a safe and effective patient examination.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	3.2a	Guidelines and standards for endoscope decontamination are easily accessible in the unit.	9.2
	3.2b	Testing and validation of the decontamination equipment and associated machinery is carried out according to national decontamination requirements and guidance and action is taken if necessary, on results which fall outside the acceptable parameters.	9.3
	3.2c	There is a designated decontamination lead who has overall responsibility for endoscopy decontamination practice.	9.6
	3.2d	There are systems in place to ensure that access to particular areas is restricted where appropriate (includes decontamination).	9.9
	3.2e	There are systems in place to ensure equipment is appropriate and available for patients, staff, children and those with particular needs.	9.10
	3.2f	There are systems in place to ensure the management and control of environmental conditions (includes decontamination).	9.11
	3.2g	There are systems in place to ensure the maintenance and quality assurance of all equipment with corresponding records (includes decontamination).	9.12
	3.2h	There are systems in place to ensure that equipment replacement is planned (includes decontamination equipment).	9.13
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 4.0 Medication

Standard 4.1: Storage of medication

All medication is safely and appropriately stored, with the correct level of security and access.

Rationale	Medications are stored as per manufacturer's guidelines and jurisdictional requirements.		
Essential criteria		*Audit Standard criteria*	*Guidance*
	4.1a	The service has a policy on the storage of controlled medications.	Local DHB policies apply Custody of controlled drugs as per part 4 (28) of the Misuse of Drugs Regulations. *(1977). Misuse of Drugs Regulations (SR1977/37)* Refer to: *Ministry of Health. (1981). Medicines Act*
	4.1b	The service has a policy on the maintenance of a controlled drug register.	Local DHB policies apply Registers, records and returns as per part 6 (37) of the *Misuse of Drugs Regulations (1977)*
	4.1c	The service has a policy on the storage, use and disposal of medications.	Medsafe website for storage of individual medicines. Refer to: *ANZCA. (2018). PS51 - Guidelines for the Safe Management and Use of Medicines in Anaesthesia*
Evaluation process	Internal and external audits and visualisation of security of controlled drugs.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 4.2 Administration of medication

All medication is appropriately and safely administered.

Rationale	The dispensing and administering of medications must be undertaken by appropriately trained staff using agreed guidelines and protocols.		
Essential criteria		*Audit Standard criteria*	*Guidance*
	4.2a	The unit has a policy on administration of all medications used in the endoscopy unit.	Refer to local DHB / Hospital policies on drug administration • *NZNO. (2018). NZNO Guidelines on the administration of Medicines. New Zealand.* Medications used under Section 29 of the Medicines Act 1981 shall be appropriately recorded to allow review.
	4.2b	The unit has a policy on the administration of sedation and/or anaesthesia in endoscopy.	Refer to: • *ANZCA. (2014). PS09 Guidelines* *or* • *Academy of Medical Royal Colleges. (2013). Safe Sedation Practice for Healthcare Procedures: Standards and Guidance.*
	4.2c	Staff prescribing and administering sedation for endoscopy have been locally credentialed.	Credentialing in safe procedural sedation should follow section 1.1 of • *The Endoscopy Guidance Group for New Zealand (EGGNZ). (2018). Guidelines for Local Credentialing in Adult Endoscopy.* • *ANZCA. (2014). PS09* Further competencies in Procedural Sedation: • *ANZCA. (2019). Safe procedural sedation competencies.* Local training and self-learning packages completed
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.0 Quality and Safety

Standard 5.1: QI programme involvement

The service works collaboratively to implement an active quality assurance programme with an ethos of continuous quality improvement (CQI).

Rationale	A high quality endoscopy service requires a documented, comprehensive continuous quality improvement programme.		
Essential criteria		*Audit Standard criteria*	*Guidance*
	5.1a	The service is engaged in the National Endoscopy Quality Improvement Programme (NEQIP), using the New Zealand Global Rating Scale (NZGRS) as the service improvement tool.	Refer to: https://nz.jagaccreditation.org
	5.1b	The service has an annual audit programme incorporating all relevant NZGRS audit activities.	Refer to: https://nz.jagaccreditation.org
	5.1c	There is an established EUG which provides leadership and quality governance of the endoscopy service with defined terms of reference and clear lines of reporting and accountability.	Responsibility for quality governance lies with the Endoscopy User Group (EUG) which reports to the organisation's quality and clinical governance systems.
Evaluation process	External assessment processes ensure that criteria are complied with and identified issues are addressed through the CQI process and quality plan. NZGRS census reports.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.2: Patient safety processes

The endoscopy service has processes in place to identify, respond to and learn from adverse events.

Rationale	Continuous quality improvement requires appropriate processes to identify and address adverse events.		
Essential criteria		*Audit Standard criteria*	*Guidance* *Refer to NZGRS measure number*
	5.2a	Systems are in place for monitoring adverse events within the endoscopy service.	2.1 Refer to: Health Quality & Safety Commission New Zealand. (2017). National Adverse Events Reporting Policy.
	5.2b	There is routine use of an endoscopy pre, peri and post procedure safety checklist.	2.2
	5.2c	The service requires a patient's fitness for oral bowel cleansing agents to be assessed and documented prior to bowel preparation being dispensed.	2.3
	5.2d	The leadership team review adverse events at least every 3 months (For NBSP services the requirement is monthly).	2.4
	5.2e	There are local policies or protocols for the management of diabetes, anticoagulation, antiplatelet use, antibiotic and implantable devices in patients undergoing endoscopy.	2.5
	5.2f	The endoscopist and the endoscopy nurses meet before each list to identify any potential problems, including high-risk patients or procedures, and to anticipate the need for equipment or accessories.	2.6
	5.2g	A process is in place for identifying and reviewing all deaths occurring within 30 days of an endoscopic procedure and all unplanned admissions within 30 days of an endoscopic procedure.	2.9
	5.2h	Reviews of 30-day mortality include an assessment of the appropriateness of the procedure and any contribution of the procedure itself to the cause of death.	2.10
	5.2i	Actions required in response to learning from adverse events are implemented within 3 months of being reported.	2.11
	5.2j	The unit has systems in place to monitor and act upon outcomes from upper gastrointestinal (GI) bleeds and mortality and readmission resulting from procedures.	2.7, 2.8, 2.12, 2.13, 2.14
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan. NZGRS census reports.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.3: Respect and dignity

The unit implements and monitors systems to ensure that the privacy, dignity and security of all patients are respected throughout their journey.

Rationale	All patients and whānau have a right to be treated with respect and dignity.		
Essential criteria		*Audit Standard criteria*	*Guidance* *Refer to NZGRS measure number*
	5.3a	The service has a respect, dignity and security policy, which includes the care and cultural considerations of all patients accessing the service.	7.1
	5.3b	There are policies for safeguarding vulnerable adults and children within the department.	7.2
	5.3c	There is a range of communication methods and materials to ensure that patients are appropriately informed about what they should expect from the service.	7.4
	5.3d	There are facilities available for any clinical conversations to be held in private.	7.6
	5.3e	Patient-identifiable material is not openly displayed in areas accessible to other patients, relatives or carers.	7.8
	5.3f	The patient experience of privacy and dignity is formally assessed at least annually using patient feedback methods.	7.10
	5.3g	The presence of relatives in clinical areas is not permitted unless the clinical team determines it to be in the patient's best interest to do so (e.g. if the patient is a vulnerable adult or a child).	7.11
	5.3h	Appropriate pre and post-procedure separation for all patients is provided from the admission stage onwards in the patient journey, including the recovery area.	7.9, 7.13
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified issues are addressed through the CQI process and the Quality Plan.		
Evaluation targets	All criteria are met.		

Standard 5.4: Consent process (including patient information)

The unit implements and monitors systems to ensure that informed patient consent is obtained for each procedure.

Rationale	Patients are given sufficient information to be able to make informed choices about their care.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	5.4a	There is a published patient information sheet available for all procedures performed in the service.	8.1
	5.4b	There is a policy within the service for informed consent which includes withdrawal of consent during an endoscopic procedure.	8.2
	5.4c	All patients are given time to ask questions about the procedure before consent is agreed and before entering the procedure room on the day.	8.3
	5.4d	All consent forms are signed by the patient or their representative before the patient enters the endoscopy room.	8.4
	5.4e	There is a documented process in place for obtaining informed consent for those who are unable to sign on their own behalf.	8.5
	5.4f	'High-risk' patients and patients scheduled for 'high-risk' procedures are informed of the additional risk by the endoscopist carrying out the procedure and there is a process to document this.	8.6
	5.4g	High-risk groups undergo pre- assessment before the date of the procedure to prepare them properly for procedures.	8.7
	5.4h	Non-compliance of any consent issue is recorded as an adverse event.	8.9
	5.4i	There is a process to review and update all patient information annually.	8.10
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.5: Patient comfort

The unit ensures that it implements and monitors systems to ensure optimal comfort of patients at all stages of their care.

Rationale	Minimising patient discomfort is an important part of endoscopy care. The comfort level is a key quality indicator of endoscopist performance.		
Essential criteria		*Audit Standard criteria*	*Guidance* Refer to NZGRS measure number
	5.5a	Patients receive information ahead of time which provides a realistic description of the level of discomfort to be expected during the procedure.	3.1
	5.5b	The service is able to use CO_2 insufflation.	3.2
	5.5c	Nurses monitor and routinely record patient pain and discomfort during and after the procedure using a validated scoring scale.	3.3
	5.5d	Patient comfort scores are reviewed at least twice per year by the endoscopy leadership team and data are fed back to individual endoscopists.	3.4
	5.5e	There is a documented process for remedial action and six- monthly review when an endoscopist's patient comfort scores fall below agreed levels.	3.5
	5.5f	A process is in place for review of an individual's endoscopy practice by the service clinical lead and/or the organisation's senior leadership team where patient comfort levels do not reach acceptable levels after a remedial period.	3.6
	5.5g	The service is able to offer a full range of sedation techniques including provision of anaesthetic services to maximise comfort, minimise patient anxiety and perform highly technical endoscopy.	3.7
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.6: Results of endoscopy procedures

The unit implements and monitors systems to ensure robust and timely interpretation, reporting and communication of results.

Rationale	Timely communication and actioning of results is essential to ensure optimal clinical outcomes.		
Essential criteria		*Audit Standard criteria*	*Guidance* *Refer to NZGRS measure number*
	5.6a	All endoscopy reports are completed on the day of the procedure and include follow-up details.	6.1
	5.6b	There is a process for referring patients with a suspected or definite cancer diagnosis to the appropriate multidisciplinary team (MDT).	6.3
	5.6c	Endoscopy reports are sent to the patient's GP and also to the referring clinician (if different) within one working day of the procedure.	6.4
	5.6d	The service has a robust process to track suspected and unexpected malignant histology.	6.5
	5.6e	There are local processes in place to identify who reviews and approves pathology reports when received by the service.	6.6
	5.6f	There is a local policy outlining the process for timely dissemination (within 5 working days of receipt of the report) of additional information to referring clinicians.	6.7
	5.6g	If a cancer is suspected at the procedure, the patient is referred to the relevant cancer clinical nurse specialist (CNS) or equivalent either before discharge from the service or within one working day.	6.9
	5.6h	All endoscopy reports are communicated electronically on the day of the procedure.	6.10
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.7: Clinical quality assessment

The unit implements and monitors systems to ensure the clinical and technical quality of all procedures performed.

Rationale	In order to assure the quality of the endoscopy service, there needs to be continuous assessment and monitoring of robust clinical quality measures.

Essential criteria		*Audit Standard criteria*	*Guidance* *Refer to NZGRS measure number*
	5.7a	Key quality indicators and auditable outcomes for procedures performed in the service are available in the department in accessible form.	4.1
	5.7b	Systems are in place for monitoring by the EUG or equivalent quality indicators and auditable outcomes for endoscopy.	4.2
	5.7c	Individual endoscopists are given feedback on their procedure key performance indicators (KPIs) at least twice per year. Note: for units providing bowel screening services, KPI data collation and feedback processes are mandated by the NBSP on a three-monthly basis.	4.3
	5.7d	Individual endoscopists are given feedback on their late outcomes (30-day mortality and 30-day unplanned admissions) at least twice per year. Note: for units providing bowel screening services, collation and feedback of late outcomes data are mandated by the NBSP on a three-monthly basis.	4.4
	5.7e	The service has a policy on managing endoscopist performance and the action required if levels are not achieved and maintained.	4.5 Refer to: *The Endoscopy Guidance Group for New Zealand. (2020). Guidance for managing and supporting underperformance of endoscopists in New Zealand.*
	5.7f	There is an endoscopy reporting system (ERS) in place to capture immediate procedural and performance data.	4.6
	5.7g	The service collects and audits separate data for inpatients who undergo endoscopy. This is used to assess the indication, waiting times, auditable outcomes and quality indicators.	4.9
	5.7h	The service collects details of all 'off unit' *(see glossary)* gastrointestinal endoscopy that occurs in the organisation. This is audited and action plans are formulated.	4.10

	5.7i	There are processes in place to provide feedback and report on quality of bowel preparation for colonoscopy	Quality of bowel prep using the Boston Bowel Prep Score:. KPI of ≥90% of either: a. Boston Bowel Prep Score (BBPS) on withdrawal of ≥6, with no single segment score <2, or b. excellent/adequate In cases of inadequate bowel prep – the patient is offered a repeat procedure within 3 months.
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Standard 5.8: Post procedure care and aftercare

The unit implements and monitors systems to ensure that patients are prepared for discharge and understand what the plan of care is thereafter.

Rationale	Patients require written information/instructions after their endoscopy to refer to once they have left the unit, to ensure safety and early detection of complications.		
Essential criteria		*Audit Standard criteria*	*Guidance* *Refer to NZGRS measure number*
	5.8a	There are procedure-specific aftercare patient information sheets for all procedures performed in the service.	12.1
	5.8b	There is a 24-hour hospital-based contact number for patients who have questions and experience problems, and the contact is aware of the protocol to advise and manage patients.	12.2
	5.8c	All patients are told the outcome of the endoscopic procedure prior to discharge.	12.4
	5.8d	All patients are provided with verbal and written information about the next steps appropriate for their care including follow up arrangements.	12.5
	5.8e	All patients are informed if further information from pathological specimens will be available, from whom and when.	12.6
	5.8f	All patients are offered a copy of the endoscopy report or a patient-centred version of it. If this is deemed inappropriate, the reason is recorded in the file.	12.7
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified issues are addressed through the CQI process.		
Evaluation targets	All criteria are met.		

Standard 5.9: Patient involvement

The unit implements and reviews systems to ensure that patients are able to feed back on their experience of the service and that the feedback is acted upon.

Rationale	Patient-centred quality endoscopy units need to demonstrate quality improvement, which is responsive to the views of the patients.		
Essential criteria		*Audit Standard criteria*	*Guidance* *Refer to NZGRS measure number*
	5.9a	The endoscopy service complaints procedure is documented and is clearly available for patients, relatives, whānau and carers to access.	13.1
	5.9b	There are processes in place to ensure that complaints are reported, investigated, recorded and analysed with findings disseminated to relevant parties and acted upon.	13.4
	5.9c	The service conducts an annual patient feedback survey on the patient experience in endoscopy. Patient feedback is discussed at EUG meetings, with action planning, and review.	13.5, 13.6
	5.9d	The service uses more than one method to obtain patient feedback on a regular basis.	13.7
	5.9e	A summary of patient feedback and changes made is available for patients to view.	13.8
	5.9f	Patients participate in planning and evaluating services.	13.11
Evaluation process	Internal and external audit processes are used to ensure that the criteria are complied with and identified risks or issues are addressed through a CQI process and the Quality Plan.		
Evaluation targets	No quantitative target. All criteria are met.		

Glossary of Terms

Quality Audit	Audits are an essential quality assurance tool to be used for verifying objective evidence of processes, to assess how successfully processes have been implemented, for judging the effectiveness of achieving any defined target levels. For the benefit of the organisation, quality auditing should not only report non-conformances and corrective actions, but also highlight areas of good practice. Audits can be classified as internal or external or independent audits.
Auditor	An auditor performs an audit in accordance with specific laws, standards, or rules required of the entity being audited. An external auditor provides an independent assessment, with findings and corrective actions, based on triangulated evidence of variation between current practice and the required standard.
Credentialing	The process of review and verification of fitness to practise typically performed by an organisation to grant specific clinical privileges such as performing procedures at that institution.
Criteria	Essential requirement to meet the standard. In audit it will be evaluated to assess conformity to the standard, sometimes described as compliance to the standard.
Continuous Quality Improvement	Refers to the iterative process of *plan, do, check, act* to ensure processes are 'fit for purpose' and identifies early where errors may occur in the system.
Endoscopy Leadership Team	The Endoscopy Leadership team consists of (as a minimum): Service Manager, Nurse Lead, and a Clinical lead.
Endoscopy User Group	An Endoscopy User Group (EUG) should be regarded as the key forum for the discussion of governance, operational management and development of their endoscopy service. The EUG's responsibility should include keeping record of regular EUG meetings and leading clinical review to include a rolling audit schedule and actions arising. It should be the environment where the effectiveness of actions is assessed. Refer to the Knowledge Management System (KMS) in the NZGRS for more guidance and sample templates for Terms of Reference for this group.
Essential Criteria	The essential criteria are components of service provision that are required to be in place in order to achieve the indicator.
Evaluation Target	Evaluation targets are specified where quantitative measures are available. If no target has been set, the expectation is that full compliance with all criteria will be met. The evaluation target clearly identifies the level of compliance required to meet the specific standard, indicator or criteria.
Evaluation Process	The evaluation process is the means through which the criteria are assessed.
Off unit	Any procedure performed in settings outside the main endoscopy unit e.g. theatres, intensive care unit, emergency department, etc. Off unit procedures are not always captured on the electronic reporting system. This does not refer to those outsourced to other healthcare providers.
Patient centred	Providing care and support that is respectful of and responsive to individual patient preferences, needs and values, and ensuring that patient values guide all clinical and support decisions.

Policy	A document that states, in writing, a course or principles of action adopted by a provider and/or clinical service.
Quality Indicators	The quality indicators are measurable elements of service provision. Quality indicators relate to the outcome or performance of staff or services.
Skill mix	A combination of different types of staff members who are employed in a clinical service who have the required skills and competencies to carry out the work of the clinical service and deliver the pathway.
Standard	A standard is mandatory, specifies the minimum requirement for compliance or conformity, and wherever possible, is outcome and quality focused. Each standard will always specify the objective that is required. A standard outlines the requirements, specifications, guidelines, or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose. The standard is achieved when all indicators or criteria associated with it are met.

Abbreviations

ANZCA	Australian and New Zealand College of Anaesthetists
BCS	Bowel Cancer Screening
CQI	Continuous Quality Improvement
DOPS	Direct Observation Procedural Skills
EGGNZ	Endoscopy Guidance Group for New Zealand
EUG	Endoscopy User Group
GESA	Gastroenterological Society of Australia
KMS	Knowledge Management System
KPI	Key Performance Indicators
NBSP	National Bowel Screening Programme
NEQIP	National Endoscopy Quality Improvement Programme
NZGRS	New Zealand Global Rating Scale
NZNO	New Zealand Nurses Organisation
NZSG	New Zealand Society of Gastroenterology
MoH	Ministry of Health
RACP	Royal Australasian College of Physicians
RACS	Royal Australasian College of Surgeons

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