Guidelines for Local Credentialing in Adult Endoscopy

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Document History

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0.1		Initial draft for discussion at working group
0.2	31_05_18	Reformatted to EGGNZ template. Updated to reflect Essential, Achievable and Aspirational
0.3	12_06_18	Updated targets and essentials, Noted references to EGGNZ standards. Updated credentialing general comments to reference supportive practice
0.4	25_06_18	Updated to combine ERCP, AM and ML comments
0.5	04_07_18	Updated with track changes for ML and RW comments
0.6	18_07_18	Updated to reflect working group meeting 17_07_18. Capsule endoscopy and Interventional manoeuvres are removed. Previous version contains original criteria.
0.7	26_07_18	References checked and updated
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1.1	23_04_21	Updated to reflect working group meeting 21_04_21
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1.5	17_06_21	Edit from SG feedback – slight change of terminology from 'Essential' to 'Recommended' criteria.
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Document Sign-off

Role	Name	Sign-off Date
Certification Working Group Chair	Marianne Lill	17/6/21
EGGNZ Committee	EGGNZ	22/06/21
EGGNZ Chair	Russell Walmsley	28/06/21

Document Review: Due Date and Sign Off

Review Due	Name	Role	Sign Off Date

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Purpose

This paper is designed as a framework document to provide guidance for teams responsible for credentialing of endoscopists working in New Zealand. A transparent and appropriate method of credentialing endoscopists is a requirement of the Endoscopy Unit Services and Standards audit process and is legally required by any employing authority.

It is anticipated that this document will continue to develop over time, as new evidence emerges and in response to the needs of the New Zealand community. Recommended 'Future directions' provides an indication of items that are on the horizon and appear likely to become important for endoscopy quality in the future. Practitioners should be aware of these as they may be included as recommendations in future revisions of this document, after updated assessment of the literature and consultation with stakeholders

It is the right of the local credentialing committee to interpret this document in light of local practice and need.

How to use this document

The local credentialing committee should be empowered in decision making for their community. These guidelines outline requirements for local credentialing in specific endoscopy procedures. It is not implied that every endoscopist should be competent in all aspects of a certain endoscopy area, but rather that the institution should assess specific skills to allow appropriate use of their resources to meet local needs.

Background

At the time these guidelines were initially developed (August 2018) there were no nationally agreed criteria for credentialing or Certification of Competence in any endoscopy procedure in New Zealand. The Endoscopy Guidance Group for New Zealand (EGGNZ) and the New Zealand Conjoint Committee for Recognition of Training in Gastrointestinal Endoscopy (NZCCRTGE) supported by the Royal Australasian College of Surgeons (RACS) and Royal Australasian College of Physicians (RACP) came together to develop a process to address these issues. This work has led to an update in the criteria for recognition of training in endoscopy, as well as introduction of new pathways for recognition for International and Experienced practitioners via NZCCRTGE.

The National Bowel Cancer Screening Programme (NBSP) provides an opportunity to develop a programme of endoscopy quality improvement, spearheaded by the National Endoscopy Quality Improvement Programme (NEQIP) utilising the New Zealand Global Rating Scale (NZGRS) and supported by EGGNZ-generated standards.

The approaching audit against the Endoscopy Unit Service and Facilities Standards 2020 requires credentialing of endoscopists. Credentialing of individual practitioners is implicit in the NZGRS which forms the basis of the Standards, is already engaged in by all NBSP performing endoscopy units and should therefore be standardised across the country.

These guidelines will support individual Endoscopy Units to develop their own local methods for ensuring the competency of their endoscopy workforce and are based on national and international best practice [1, 2, 3]. This process we call Local Credentialing in Endoscopy.

General Principles of Local Credentialing in Endoscopy

- An endoscopist should be registered with the New Zealand Medical or Nursing Council in an appropriate vocational scope of practice which covers Endoscopy of Adults. Medical endoscopists who do not hold vocational scope in either General Surgery or Internal Medicine must work in a collegial relationship with an endoscopist who holds the correct scope and be credentialed accordingly.
- Completion of a training programme in endoscopy does not imply competence.
- Credentialing standards should be consistent throughout New Zealand.
- Competency in one endoscopy procedure does not imply competency in another.
- It is the responsibility of the individual healthcare institution (DHB or endoscopy unit) to assess their workforce for continuing competence.

- Performance Indicator data provided as evidence for local credentialing should be contemporary and no more than 5 years old. Where an established endoscopist is starting practice in a new unit, then credentialing for that endoscopist ought to include assessing KPIs as described in the recredentialing sections.
- Credentialing guidelines for endoscopy procedures should be consistent with EGGNZ standards.

Outline of Credentialing

Recognition of Training

Any endoscopist applying for credentialing, should have completed a programme of endoscopy training which is delivered by a reputable professional body as determined by the NZCCRTGE. For more experienced practitioners they should be able to demonstrate evidence of established practice, with appropriate KPIs as suggested in this document.

Determination of Competence

- The number of completed procedures should only be used to indicate that an endoscopist might be ready to be assessed for competence. It does not mean they are competent.
- Credentialing to perform particular endoscopy categories should involve assessment of competence in manoeuvres associated with those procedures. For example, haemostasis of peptic ulcers, stenting in ERCP or removal of polyps of <2cm or > 2cm at colonoscopy.
- It is not implied that every endoscopist has to be competent in all aspects of a certain endoscopy area, rather that the institution should assess specific skills to allow appropriate use of the resource.
- The Endoscopy Lead, or a clinician with similar designated responsibility, should be responsible for overseeing the credentialing process, and should themselves be an active endoscopist. Where necessary to resolve disputes, the credentialing committee may choose to seek the advice of the local Endoscopy Users Group (EUG) or an equivalent group of peers who perform endoscopy.
- All practitioners should hold or be actively working towards NZCCRTGE recognition.
    - Where an endoscopist has not yet received recognition of training from the NZCCRTGE they should be able to continue in supported practice in order to accrue sufficient performance data to gain recognition of training.
    - Supported practice may be required for newly graduated endoscopists, overseas trained endoscopists, those returning to the workforce or those who have had a substantial drop in performance.
    - The level and type of support required should be assessed by the local department including the lead endoscopist and/or EUG. There will be variation in what level of support or supervision is appropriate depending on the individual circumstance, but it must be sufficient to ensure safe practice.
    - Advice for supporting underperforming endoscopists is available at https://eggnz.endoscopyquality.co.nz/assets/Uploads/Guidance-for-managing-and-supporting-underperformance-of-endoscopists-in-New-Zealand-FINAL2.pdf

Recredentialing

- Credentialing should only be valid for a designated period; therefore criteria for recredentialing are included in this document. The Ministry of Health (2010) recommends 5 yearly credentialing of practitioners [4] however those practitioners wishing to work Trans-Tasman will be required to apply for recertification in colonoscopy every 3 years. [5]
- Endoscopists should participate in audit of Key Performance Indicators (KPIs) and measures of competence, as required for local recredentialing. If the endoscopist has insufficient work volume to meet recredentialing minimum numbers or to calculate the relevant KPIs, within the local unit, the endoscopist ought to be invited to provide data from their other workplace, if available.
    - Local experts can determine whether training scopes are included in the relevant KPIs. However, this rule should be applied consistently within the DHB. If ProVation is being used to calculate the KPI then training scopes will be included in the in-built Quality Indicator report. To exclude training scopes is likely to be to

the advantage of the trainer (Appendix 1: The effect of teaching on colonoscopy KPIs) but will require more complex data manipulation.

- Additional criteria other than those used for credentialing might include;
    - Completion of an approved minimum number of specific procedures (e.g. oesophageal stent placements, EMRs, polypectomies)
    - Evidence of Continuing Medical Education (CME) which includes an appropriate endoscopy related component.

Credentialing to perform in supported practice

When endoscopists either do not meet credentialing standards or cannot provide sufficient performance data supported practice should be undertaken until credentialing standards are met.

Credentialing Guidelines for Endoscopy Procedures

1 General

1.1 Sedation

Recommended criteria	1.1.1	Certificate of Resuscitation and Emergency Care (CORE) – Advanced, or as defined by local DHB policy
	1.1.2	Completion of EGGNZ approved Safe Sedation Training [https://www.safesedationtraining.com] on-line sedation training programme.
Future directions	1.1.3	Participation in in-situ high fidelity simulation of endoscopy emergencies

2 Specific Procedures

2.1 Gastroscopy Credentialing

Recommended criteria	2.1.1	Certified completion of a recognised Training Programme in Gastroscopy
	2.1.2	D2 Intubation >95% for diagnostic UGI endoscopy [6]
	2.1.3	Two DOPS observed by senior endoscopy colleagues on arrival in department

2.2 Gastroscopy Recredentialing

Recommended criteria	2.2.1	Recredentialing occurs every 3 years
	2.2.2	All other criteria as required for credentialing
	2.2.3	Attend CME with an endoscopy specific component- at least every 3 years
	2.2.4	Attend appropriate Multidisciplinary meetings (refer to Definitions)
	2.2.5	Minimum 150 UGI endoscopies performed over 3 years to maintain competence for diagnostic procedures [7]
Future directions	2.2.6	Gastric ulcers are biopsied >80%
	2.2.7	Peptic ulcers of the duodenum or stomach are investigated for *H. pylori* and treatment arranged appropriately >90% [8]
	2.2.8	Patient with GI haemorrhage with ulcers with High Risk criteria for rebleeding are treated with dual endoscopic therapy 95%. [12] OTSC is a valid alternative, as a single stage therapy, where available.
	2.2.9	>95% appropriate antibiotics are given at the time of the placement of PEG tube [11]
	2.2.10	Barrett's will be described by Prague Criteria, >95% for patients undergoing surveillance for Barrett's Oesophagus [9,10]
	2.2.11	Barrett's will be biopsied using Seattle protocol, >90% for patients undergoing surveillance for Barrett's Oesophagus [10]
	2.2.12	Mini-audit of 20 procedures demonstrating minimum of standard 8 photo set (as per ESGE recommendations; proximal and distal oesophagus, cardia in retroflexed, lesser curve in retroflexion to include fundus, angulus, antrum, duodenal bulb and D2 at ampulla) >95%[23]

2.3 Colonoscopy Credentialing

Recommended criteria

2.3.1	Certified completion of a recognised Training Programme in Colonoscopy
2.3.2	Caecal Intubation rate (unadjusted) of >90% [13, 7] or >95% for Bowel Cancer screening patients [14]
2.3.3	Polyp Detection Rate; 40% in all colonoscopies both diagnostic and screening [7] or, where this is available, Adenoma detection rate (ADR);>25% in non-screening patients, >50 years old, with intact colons [13]
2.3.4	Withdrawal time minimum of >6 minutes in >90% of complete, non-interventional colonoscopies (no manoeuvres such as biopsies or polypectomy) [13]
2.3.5	Two DOPS observed by senior endoscopy colleagues on arrival in department

2.4 Colonoscopy Recredentialing

Recommended criteria

2.4.1	Recredentialing occurs every 3 years
2.4.2	Caecal Intubation Rate (CIR)(unadjusted) 95% [14]
2.4.3	All other criteria as required for credentialing
2.4.4	Participate in continuing colonoscopy medical education and quality improvement programme; GESA Recertification is encouraged once accessible [https://recert.gesa.org.au/about.php]
2.4.5	Attend CME with an endoscopy specific component- at least every 3 years.
2.4.6	Attend appropriate Multidisciplinary meetings
2.4.7	Minimum of lower GI endoscopies performed annually to maintain competence for diagnostic procedures: 150 over 3 years [14,16]
2.4.8	Polyp Retrieval Rate >95% (unadjusted) [13]
2.4.9	Where available, comfort Level moderate/severe on Gloucester Comfort Scale; <10% [17] as measured by a 3rd party e.g. nurse in charge (Appendix 2: Gloucester Comfort Scale)

Future directions

2.4.10	Sessile Serrated Adenoma/Polyp Detection rate in patients >50 years old >4%
2.4.11	Rectal biopsies for unexplained diarrhoea >95% [12]
2.4.12	Complication Rate: a. Post polypectomy perforation <1:500 [14]
2.4.13	Withdrawal time minimum of >9 minutes in >90% of complete, non-interventional colonoscopies (no manoeuvres such as biopsies or polypectomy) [7,12]
2.4.14	The percentage of detected cancers and polyps >15mm or with suspicious morphology or pit pattern analysis at any size, are marked by a tattoo, with the exception of those located in: a. Caecum b. Distal 4 cm of the rectum (i.e. palpable by rectal digital examination) Standard 95% [7,13]
2.4.15	Appropriate polyp surveillance interval recommendations >95% [7]
2.4.16	Polyps will be described by the PARIS classification in all worrying lesions or those >1.5cm. Standard >95%.
2.4.17	Polyp pit pattern will be described using Kudo or NICE (if /when available on ProVation) classification in all worrying lesions or those >1.5cm. Standard >95%.

2.5 ERCP Credentialing

Recommended criteria	2.5.1	Completion of a recognised Training Programme in ERCP
	2.5.2	Selective CBD cannulation of >80%

2.6 ERCP Recredentialing

Recommended criteria	2.6.1	Recredentialing occurs every 3 years
	2.6.2	Participate in continuing ERCP medical education and quality improvement programme
	2.6.3	Attend CME with an endoscopy specific component- at least every 3 years
	2.6.4	Attendance at appropriate Multidisciplinary meetings
	2.6.5	Minimum 150 procedures performed over 3 years to maintain competence [16]
Future directions	2.6.6	Complication Rate: a. Post ERCP pancreatitis rates < 1:15 [16] b. Mortality <1:100 [16] c. Perforation <1:500 [12] d. Haemorrhage <1:100 [7]
	2.6.7	Complication rate for level 1 & 2 procedures * <6:100 [18]
	2.6.8	Adequate biliary drainage achieved - >75%

*For further information see Definitions

2.7 EUS Credentialing

Recommended criteria	2.7.1	Completion of a recognised Training Programme in Endoscopic Ultrasound

2.8 EUS Recredentialing

Recommended criteria	2.8.1	Recredentialing occurs every 3 years
	2.8.2	Minimum suggested number to maintain competency TBC
Future directions	2.8.3	GI Cancers staged by AJCC/UICC TNM Staging system; 98% [2, 7, 19, 20]
	2.8.4	Pancreatic mass measurements documented; 98% [19,20]
	2.8.5	Subepithelial layers documented; 98% [19,20]
	2.8.6	Diagnostic rate a. solid lesion EUS-FNA 85% [2, 7, 19, 20] b. Diagnostic Rate for malignancy in pancreatic mass FNA; 70% [2, 7, 19, 20] c. Mediastinal Lymph node FNA; >90% [2, 7, 19, 20]
	2.8.7	Complication Rate: a. Acute pancreatitis <1:50 [2, 7, 19, 20] b. Perforation <1:200 [2, 7, 19, 20] c. Significant Bleeding <1:100 [2, 7, 19, 20]

2.9 Capsule Endoscopy Credentialing

Recommended criteria	2.9.1	Online capsule course/modules e.g. the National Endoscopy training Initiative (NETI) of the Gastroenterological Society of Australia [https://www.gesa.org.au/education/face-to-face-education/]
	2.9.2	Experience in optical Upper or Lower GI Endoscopy

	2.9.3	Assessed by 20 dual read capsules (with written or electronic record + 5 DOPS) by a reader with full accreditation
	2.9.4	Minimum lifetime cases – 30
	2.9.5	Participation in audit and quality assurance

2.10 Capsule Endoscopy Recredentialing

Recommended criteria	2.10.1	Recredentialing occurs every 3 years
	2.10.2	All criteria as for initial credentialing
	2.10.3	Minimum number to maintain competency – 60 read over three years
Future directions	2.10.4	Attendance at a capsule endoscopy course (in person or virtual)
	2.10.5	Colon visualisation documented in >80%
	2.10.6	Attend CME with a capsule endoscopy specific component- at least every 3 years
	2.10.7	Capsule retention rate <2% (calculated over >100 cases)

2.11 Interventional Endoscopic Manoeuvres Credentialing and Recredentialing

Individual departments should ensure that there is local policy regarding how endoscopists are credentialed/recredentialed for interventional procedures not covered above. Future evidence may result in more specific advice being provided.

Appendix 1: The effect of teaching on colonoscopy KPIs

Authors: van Rijnsoever M, Hendel D, Patrick A, Burmeister S, Walmsley RS

Title: The effect of teaching on colonoscopy Key Performance Indicators (KPIs) auditable outcomes.

Institution: Department of Gastroenterology, North Shore Hospital, Waitemata District Health Board.

Introduction;
Teaching colonoscopy takes time, however there is limited evidence of the effect of teaching on key performance indicators (KPI) and other measurable outcomes.
In this large cohort study we aimed to compare outcomes of colonoscopies performed by trainers or trainees.

Methods:
Patient Group: all colonoscopy cases for 3 large District Health Boards between January 2010 to August 2017 were extracted from Provation^{tm} endoscopy database.
Data analysed: demographics, procedure times, caecal intubation rates (CIR) , terminal ileal intubation rate (TIR), indications, polypectomy rate (PDR), withdrawal time, Glasgow Comfort Score (GCS) and drug doses.
Local ethics approval Ref. XXXX.

Results:
A total of 70,805 colonoscopies were recorded of which 12,108 were performed by a trainee endoscopist. Consultant was required to assist trainee in 28.3% of training colonoscopies.

KPI / Auditable Outcome	Training list	Consultant list	P value
CIR (95%CI)	93.6% (93.2-94.1)	95.1% (94.9-95.3)	p<0.001
TIR	66.1% (65.2-66.9)	72.3% (71.9-72.7)	p<0.001
Withdrawal time minutes. (non-interventional)	9.1 (9.7-10.1)	7.7 (7.6-7.7)	P<0.001
Withdrawal time minutes (interventional)	18.9 (18.1-18.7)	14.7 (13.7-14.6)	P<0.001
PDR – diagnostic	35.1% (34.1-36.1)	34.2% (33.7-34.7)	p=0.12
PDR – surveillance	54.7% (52.8-56.7)	54.7% (53.7-55.8)	p=0.9
GCS	1.66 (1.64-1.67)	1.88 (1.85-1.91)	p<0.001
Fentanyl dosage	82.3 (81.8-82.8)	80.6 (79.7-81.5)	p<0.001
Midazolam dosage	2.56 (2.54-2.57)	2.61 (2.57-2.64)	P=0.01

Conclusion;
Colonoscopies done by trainees with or without the help of their trainer take longer, require more sedation and are more painful than those done by the trainers themselves.
There is no detrimental affect on PDR. We were unable to investigate complication rates from this dataset.
Trainers should remain alert to outcomes that they can influence, such as discomfort, during teaching.

Appendix 2: Gloucester Comfort Scale

Nurse-completed Gloucester Comfort Scale [24]

1.	No	no discomfort, resting comfortably throughout
2.	Minimal	one or two episodes of mild discomfort, well tolerated
3.	Mild	more than two episodes of discomfort, adequately tolerated
4.	Moderate	significant discomfort, experienced several times during the procedure
5.	Severe	extreme discomfort, experienced frequently during the procedure

Abbreviations List

ADR	Adenoma Detection Rate
AJCC / UICC	American Joint Committee on Cancer / Union for International Cancer Control
CBD	Common Bile Duct
CIR	Caecal Intubation Rate
CME	Continuing Medical Education
DOPS	Direct Observation of Procedural Skills
EGGNZ	The Endoscopy Guidance Group for New Zealand
EMR	Endoscopic Mucosal Resection
ERCP	Endoscopic Retrograde Cholangiopancreatography
EUG	Endoscopy Users Group
EUS-FNA	Endoscopic Ultrasound – Fine Needle Aspiration
NBSP	National Bowel Screening Programme
NEQIP	National Endoscopy Quality Improvement Programme
NETI	National Endoscopy Training Initiative
NICE	National Institute for Health and Care Excellence
NZCCRTGE	New Zealand Conjoint Committee for Recognition of Training in Gastrointestinal Endoscopy
OTSC	Over the scope clip
PEG	Percutaneous Endoscopic Gastrostomy,
TNM	Tumour, nodes, and metastases
UGI	Upper Gastrointestinal

Definitions for this document

Certification	The action or process of providing someone with an official document attesting to a status or level of achievement e.g. to attest to a level of competence in an endoscopic procedure.
Competence	The minimum level of skill, knowledge and expertise, derived through training and experience that is required to perform a task or procedure safely and proficiently.
Continuing Medical Education (CME)	Continuing medical education as per the relevant Council definitions. [21,22] • Endoscopists should be able to demonstrate some appropriate endoscopy component to their CME.
Credentialing	The process of review and verification of fitness to practice typically performed by an organisation to grant specific clinical privileges such as performing procedures at that institution.
Credentials	Documents provided as an indication of clinical competence.
Criteria – Future directions	Criteria recognised as important, but at present not required for credentialing in NZ. The criteria should be considered as a target which is achievable within the next 2 – 3 years. i.e. performance criteria that are recommended to be measured as more detailed assessments
Recommended criteria	Criteria recommended for credentialing to occur.
Key Performance Indicators (KPI)	Measurable outcome of Endoscopic Procedure that is internationally recognised as reflecting improved clinical outcomes.
Level 1 procedures (ERCP) [18]	Deep cannulation of duct of interest via main papilla, biopsy/cytology Biliary stent removal/exchange
Level 2 procedures (ERCP) [18]	Biliary stone extraction < 10mm Treat biliary leaks Treatment of extrahepatic strictures (benign or malignant) Place prophylactic pancreatic stents
Multidisciplinary meetings	Appropriate Multi-Disciplinary Meetings (MDMs) are those at which GI pathology +/- radiology is discussed and treatment planned. These could include (but are not limited to) upper or lower GI MDM, benign GI MDM, polyp MDM, IBD meetings, GI histology meetings. Regular attendance (>20 meetings per year) should be documented.
Proctor	An independent and unbiased endoscopist in a position to evaluate and monitor the skills and ability of another endoscopist.
Recertification in Colonoscopy	Australian recertification scheme for colonoscopy run by Gastroenterology Society of Australia (GESA) [16] in partnership with RACP and RACS, to review on-going experience, workload and KPIs using a mini-audit of a continuous case series of 150 endoscopies every three years submitted via an online logbook, a cognitive refresher quiz and assessment against set KPIs. There is also a method of auditing a proportion of applications.
Recognised Training Programme	Advanced Training in GI endoscopy is provided in New Zealand by the Royal Australasian College of Physicians (RACP) as part of the vocational scope training for Internal Medicine (Gastroenterology), by the New Zealand Association of General Surgeons (NZAGS) on behalf of the Royal Australasian College of Surgeons (RACS) and by the University of Auckland Nurse Endoscopy course. These training programmes are recognised by NZCCRTGE.

	Overseas training may also be recognised via the International Practitioner Pathway (IPP) for practitioners from International training schemes that can be clearly assessed as being equivalent to Australasian training (at least three years of formal advanced fellowship training in endoscopy as a Gastroenterologist or General Surgeon) https://nzsg.org.nz/training-resources/endoscopy-training/
Recognition of Training	A process whereby the completion of an Endoscopy Training Programme from a recognised Educational organisation is confirmed. This should be undertaken by the NZCCRTGE or equivalent international body.
Recredentialing	The process to review credentialing criteria. Recredentialing should be applied to experienced practitioners to ensure continued achievement of published standards, KPIs and local and national requirements.
Supported Practice	The ability to carry out a procedure with support, supervision or under specific restrictions as appropriate depending on the individual circumstance. The support or restriction will be set by the local committee and must be sufficient to ensure safe practice.

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