



Guidelines for Local Credentialing in Adult Endoscopy

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Document Sign-off

Role	Name	Sign-off Date
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Contents

Contents	3
Purpose	4
How to use this document	4
Background	4
General Principles of Local Credentialing in Endoscopy	5
Outline of Credentialing	6
Credentialing Guidelines for Endoscopy Procedures	7
1 General	7
1.1 Conscious Sedation	7
2 Specific Procedures	8
2.1 Gastroscopy Credentialing	8
2.2 Gastroscopy Recredentialing	8
2.3 Colonoscopy Credentialing	9
2.4 Colonoscopy Recredentialing	9
2.5 ERCP Credentialing	10
2.6 ERCP Recredentialing	10
2.7 EUS Credentialing	11
2.8 EUS Recredentialing	11
2.9 Capsule Endoscopy Credentialing	11
2.10 Capsule Endoscopy Recredentialing	11
2.11 Interventional Endoscopic Manoeuvres Credentialing	11
2.12 Interventional Endoscopic Manoeuvres Recredentialing	11
Definitions for this document	12
References	14
Appendix 1: The effect of teaching on colonoscopy KPIs	16
Appendix 2: Gloucester Comfort Scale	17

Purpose

This paper is designed as a discussion document to develop guidelines for DHB credentialing teams responsible for credentialing of endoscopists for their Endoscopy Units in New Zealand. A transparent and appropriate method of credentialing endoscopists will be a requirement of the up-coming Unit Accreditation process, and is legally required by any employing authority.

It is anticipated that this document will develop over a number of years. Initially credentialing should focus on all **essential** criteria with credentialing committees working towards achievable criteria within 2-3 years and eventually incorporating aspirational criteria in the longer term.

This document offers guidance to local credentialing committees for setting up such processes. It is the right of the 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, rather that the institution should assess specific skills to allow appropriate use of their resources.

Background

At the time these guidelines were 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 Conjoint Committee for Recognition of Endoscopy Training (NZCC) supported by the Royal Australasian College of Surgeons (RACS) and Royal Australasian College of Physicians (RACP) are working through a process to address these issues, but this will take some time as there are implications with what is happening across the Tasman.

The 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.

This programme of work will lead to the introduction of Accreditation for Endoscopy Units. Credentialing of individual practitioners is implicit in the NZGRS which will inform the accreditation criteria and should therefore be standardised across the country where possible.

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.
- 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 KPI 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 recognised by a reputable professional body as determined by the NZCC. 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 < 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 or an equivalent group of peers who perform endoscopy.
- All practitioners should hold, or be actively working towards NZCC recognition.
 - Where an endoscopist has not yet received recognition of training from the NZCC 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. 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.

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 practitioners⁴ 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 work place, 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 will 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 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 Conscious Sedation

Essential

- 1.1.1 Certificate of Resuscitation and Emergency Care (CORE) – Advanced, or as defined by local DHB policy

Achievable

- 1.1.2 Attendance at Introduction to Endoscopy or Basic Endoscopy course which contains specific teaching on pharmacology of conscious sedation, or
- 1.1.3 Equivalent conscious sedation training or experience with supportive evidence, or
- 1.1.4 Completion of EGGNZ approved University of Utah on line sedation training programme.¹

¹ <https://www.safesedationtraining.com/>

2 Specific Procedures

2.1 Gastroscopy Credentialing

Essential

- 2.1.1 Certified completion of a recognised Training Programme in Gastroscopy
- 2.1.2 D2 Intubation >95% ⁶

2.2 Gastroscopy Recredentialing

Essential

- 2.2.1 Recredentialing occurs every 3 years
- 2.2.2 Other criteria as required for credentialing
- 2.2.3 Attend CME with endoscopy specific component- at least every 3 years.
- 2.2.4 Attend appropriate Multidisciplinary meetings

Achievable

- 2.2.5 Minimum 150 procedures performed over 3 years to maintain competence ⁷
- 2.2.6 Gastric ulcers are biopsied 100% ^{6,8}
- 2.2.7 Barrett's will be described by Prague Criteria, >95% ^{9,10}
- 2.2.8 >95% appropriate antibiotics are given before the placement of PEG tube ¹¹

Aspirational

- 2.2.11 Barrett's will be biopsied using Seattle protocol , >90% ¹⁰
- 2.2.12 Peptic ulcers of the duodenum or stomach are investigated for H.pylori and treatment arranged appropriately >90% ⁸
- 2.2.13 Patient with GI haemorrhage with ulcers with High Risk criteria for rebleeding are treated with dual endoscopic therapy 95% ¹²

2.3 Colonoscopy Credentialing

Essential

- 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 patients¹⁴
- 2.3.3 Polyp Detection Rate; 40% in all colonoscopies both diagnostic and screening⁷ or; where this is available ADR:
 - a. >25% in non-screening patients, >50 years old, with intact colons¹³ or
 - b. >35% in screening patients¹⁵
- 2.3.4 Withdrawal time minimum of >6 minutes in >90% of non-interventional colonoscopies (no manoeuvres such as biopsies or polypectomy)¹³
- 2.3.5 Complication Rate:
 - a. Post polypectomy bleeding 1:100^{13,14}
 - b. Overall perforation rate <1:1000^{13,14}
 - c. Rate of intermediate or serious complications relating to perforation or bleeding requiring hospital admission within 30 days <1:100¹⁴

2.4 Colonoscopy Recredentialing

Essential

- 2.4.1 Recredentialing occurs every 3 years
- 2.4.2 Caecal Intubation Rate (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
- 2.4.5 Attend CME with endoscopy specific component- at least every 3 years.
- 2.4.6 Attend appropriate Multidisciplinary meetings

Achievable

- 2.4.7 Minimum numbers performed annually to maintain competence: 150 over 3 years^{14,16}
- 2.4.8 Polyp retrieval Rate >95% (unadjusted)¹³
- 2.4.9 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)
- 2.4.10 Rectal biopsies for unexplained diarrhoea >95%¹²
- 2.4.11 Complication Rate:
 - a. Post polypectomy perforation <1:500¹⁴

Aspirational

- 2.4.12 Withdrawal time (in scopes without manoeuvres) mean of 9 minutes^{7,12}
- 2.4.13 Appropriate polyp surveillance interval recommendations >95%⁷
- 2.4.14 Lesions of 1 cm or more should be tattooed, as per NBSP guidelines^{7,13}

2.5 ERCP Credentialing

Essential

- 2.5.1 Completion of a recognised Training Programme in ERCP

2.6 ERCP Recredentialing

Essential

- 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 endoscopy specific component- at least every 3 years.
2.6.4 Attend appropriate Multidisciplinary meetings

Achievable

- 2.6.5 Minimum 150 procedures performed over 3 years to maintain competence ¹⁶
2.6.6 Selective CBD cannulation of >85% ¹⁶
2.6.7 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

Aspirational

- 2.6.8 Complication rate for level 1 & 2 procedures <6:100 ¹⁸

For further information see the definitions on page 13: Level 1 procedures (ERCP) ¹⁸ Level 2 procedures (ERCP) ¹⁸

2.7 EUS Credentialing

Essential

- 2.7.1 Completion of a recognised Training Programme in Endoscopic Ultrasound

2.8 EUS Recredentialing

Essential

- 2.8.1 Recredentialing occurs every 3 years
2.8.2 Minimum suggested number to maintain competency TBC

Achievable

- 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}

Aspirational

- 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

Under Development

2.10 Capsule Endoscopy Recredentialing

Under Development

2.11 Interventional Endoscopic Manoeuvres Credentialing

Under Development

2.12 Interventional Endoscopic Manoeuvres Recredentialing

Under Development

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} <ul style="list-style-type: none"> 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 – Achievable	Criteria recognised as important, but at present not considered essential for 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
Criteria – Aspirational	Criteria which are more difficult to achieve and should therefore to targets for the longer term e.g. within 5 years. I.e. performance criteria that should be measured when this becomes possible.
Criteria - Essential	Criteria essential 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
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.
Recertification in Other Endoscopic Procedures	To be developed
Recognised Training Programme	Training programmes recognised by the Conjoint Committee for Recognition of Endoscopy Training in New Zealand (the ‘Conjoint Committee’) as being equivalent to New Zealand or Australian training programmes. Training courses approved by any other agency should be reviewed by the Conjoint Committee to determine equivalency to NZ standards.

<p>Recognition of Training</p>	<p>A process whereby the completion of an Endoscopy Training Programme from a recognised Educational organisation is confirmed. This should be undertaken by the Conjoint Committee or equivalent international body.</p>
<p>Recredentialing</p>	<p>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.</p>
<p>Supported Practice</p>	<p>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.</p>

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Appendix 1: The effect of teaching on colonoscopy KPIs

Authors: van Rijnsoever M, Hendel D, Patrick A, Burnmeister 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™ 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

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

Patient comfort and quality in Colonoscopy. Ekkelenkamp VE, Dowler K, Valori RM, et al World J Gastroenterol 2013;19:2355–61