

Competency Model for Skills Training in Gastrointestinal Endoscopy in Ireland



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Developed by the
National Endoscopy Training Committee

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Version 1.0



Contents

Executive summary	5
Background information	6
Current training landscape	6
HSE Acute Operations Endoscopy Programme	6
National Endoscopy Training Committee	6
Members of the National Endoscopy Training Committee	7
National Gastrointestinal Endoscopy Quality Improvement Programme	8
Scope of the Competency Training Model	9
What falls within the scope of the competency model?	9
What falls outside the scope of the competency model?	9
GI Endoscopy - Training Pathway Option	10
Phase one of training	11
Phase two of training	12
Final certification	12
Annual appraisal (EYA/ARCP)	12
Appendix 1 Record of performance for issuing a Provisional Approval Certificate in GI Endoscopy	13
Appendix 2 Record of performance for applying for a Final Certificate of Competence in GI Endoscopy	14
Appendix 3 Template for recording annual endoscopy appraisal	15
Appendix 4 Formative DOPS for gastroscopy	16
Appendix 5 Formative DOPS for colonoscopy and flexible sigmoidoscopy	23
Appendix 6 Certification (summative) DOPS for gastroscopy	29
Appendix 7 Certification (summative) DOPS for colonoscopy and flexible sigmoidoscopy	36
Appendix 8 DOPyS polypectomy for colonoscopy and sigmoidoscopy	43
Appendix 9 DOPS for upper GI bleeding	50
Appendix 10 Curriculum for HST in Gastroenterology	56
Appendix 11 Curriculum for HST in General Surgery	57
References	58

Executive Summary

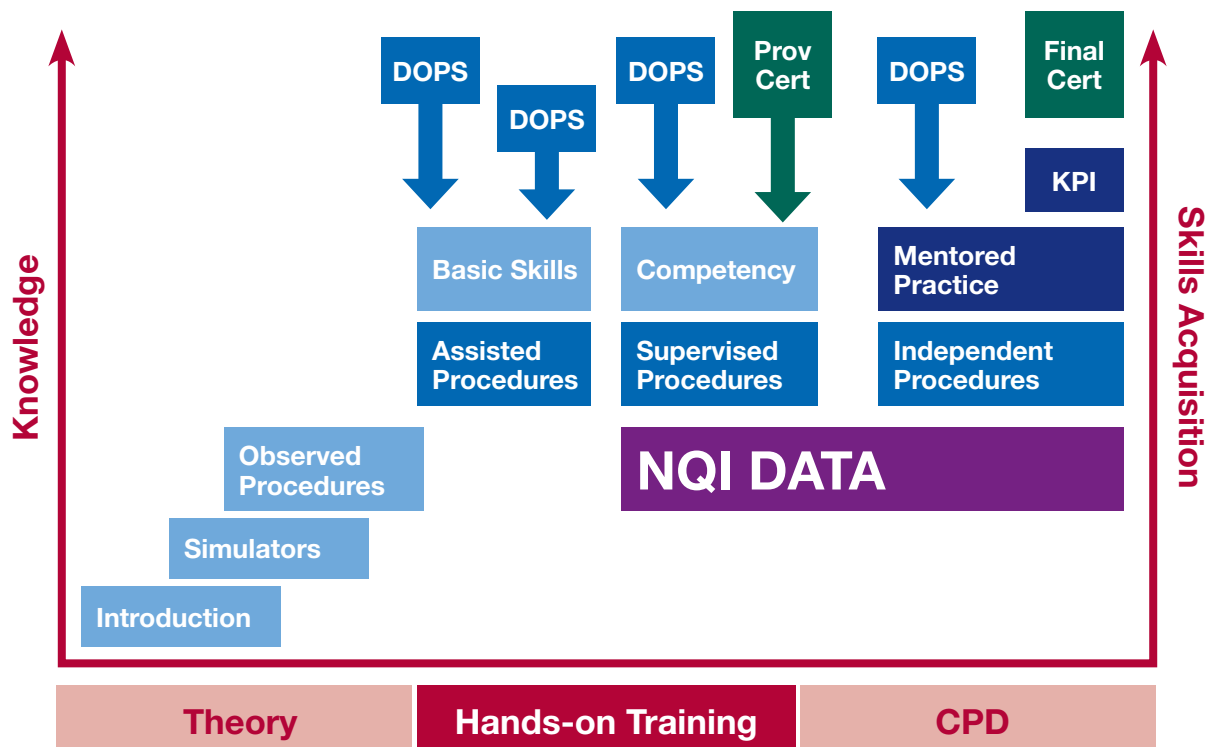
The purpose of this document is to describe a common outcomes based approach to skills acquisition in upper and lower gastrointestinal (GI) endoscopy suitable for adoption by gastroenterology and surgical specialty training programmes in Ireland. The model emphasises the primary importance of a training model that focuses predominantly on the acquisition and validation of competency in endoscopy skills rather than the evaluation of numbers of endoscopy procedures.

This competency model proposes an initial period of training (phase one) during which a specialist trainee should receive direct supervision in the relevant procedures by a competent endoscopist. This should continue until such time as the trainee has developed skills which allow them to perform procedures independently. A summative DOPS evaluation (based on direct observation of procedural skills) and assessment of the training record will then be performed to document **'provisional approval'**, allowing the relevant

procedure to be performed without direct supervision. This provisional approval is granted at a local level and will facilitate the trainee to enter a second stage (phase two) of training during, during which they continue to enjoy support from a consultant trainer. The emphasis on direct supervision will switch to one of hands-on skills training particularly focused on therapeutic endoscopy and more challenging or difficult procedures. Trainees during this phase will perform diagnostic procedures independently but with close scrutiny of key performance indicators. If issues arise with key performance indicators (KPIs) during the provisional approval period, this may be temporarily suspended to facilitate more a detailed re-assessment.

A **final certification** will then occur towards the end of the training programme, using a similar framework but with an additional focus on advanced skills (relevant therapeutic techniques and polypectomy skills). The final certification is granted by the relevant training body (RCPI/RCSI).

Fig. 1 Summary of pathway to competency in GI endoscopy



Background Information

Current training landscape

Training to perform and achieve competency in upper and lower gastrointestinal (GI) endoscopy is a key component of specialist training in Gastroenterology, which is currently administered by the Irish Committee on Higher Medical Training at the Royal College of Physicians of Ireland (RCPI) and in General Surgery, as part of the Higher Surgical Training Schemes. In addition, a large number of medical and surgical NCHDs undertake endoscopy training outside of a structured training programme. The current model of training in endoscopy has significant limitations as endoscopy trainees undertake hands-on training with variable levels of support and supervision. A final competency assessment is not always completed. The final level of skills achieved may differ significantly between trainees. The feedback from trainees is that they often feel under-equipped to undertake the full range of procedures necessary for independent practice in Ireland with the skills obtained during their training.

HSE Acute Operations Endoscopy Programme

A national endoscopy programme was established in mid-2016 to coordinate several activities to improve endoscopy services. The Endoscopy Programme is housed within the Acute Operations Division of the HSE and the programme is overseen by the National Endoscopy Steering Group.

Aim

The aim of the programme is to improve the delivery of endoscopy services across all Hospital Groups.

Objectives

The objectives of the programme are to:

1. Strengthen clinical governance for endoscopy services across Hospital Groups
2. Increase the capacity of endoscopy services to meet current and future demand
3. Develop and deliver additional training courses in endoscopy
4. Support improvements to validation and scheduling of endoscopy procedures
5. Support the roll out of referral pathways for endoscopy including eReferral
6. Support endoscopy units to engage with the JAG accreditation process
7. Support the development and expansion of BowelScreen – The national bowel screening programme in public hospitals

The National Endoscopy Working Group

Members of the working group include representatives from the Irish Society for Endoscopy Nurses, BowelScreen, the National Treatment Purchase Fund, the Gastrointestinal Endoscopy National Quality Improvement Programme, the Irish Cancer Society and the seven Hospital Group Clinical Leads for Endoscopy. The National Endoscopy Working Group is responsible for coordinating and progressing a number of inter-dependent activities to achieve the objectives of the programme.

For further information visit the programme website at www.hse.ie/eng/about/who/acute-hospitals-division/clinical-programmes/endoscopy-programme/

STEPS Programme

The Skills Training for Endoscopic Procedures (STEPS) Programme has been devised to deliver a series of training courses and other learning resources which supports the delivery of a competency based model of training. The aim of STEPS is to bring all GI endoscopy training courses in the Republic of Ireland under one umbrella with standardised content and learning objectives. STEPS is working with both the Royal College of Physicians of Ireland and the Royal College of Surgeons in Ireland to develop and provide courses for both physicians and surgeons working in GI endoscopy.

National Endoscopy Training Committee

The National Endoscopy Training Committee was established in 2018 under the auspices of the HSE Acute Operations Endoscopy Programme. The role of the committee is to make recommendations about GI endoscopy education and training in Ireland and develop GI endoscopy training programmes. The committee is working with both the Royal College of Physicians of Ireland (RCPI) and the Royal College of Surgeons in Ireland (RCSI) to deliver a unified approach to GI endoscopy training.

The objectives of the committee are to:

- develop a faculty of trainers and agree terms for provision of endoscopy training courses within a defined timeframe.
- proactively support and facilitate the work of the committee and Training Lead as the nationally agreed strategic model for the development of continuing medical education in endoscopy.
- provide a forum for strategic vision and clinical input into the deliverables associated with the role of Training Lead with the HSE Acute Operations Endoscopy Programme
- develop an online training facility to record procedures, provide feedback and allow access to educational material will be developed in collaboration with and supported by the RCSI and the RCPI.

Members of the National Endoscopy Training Committee

Committee member	Role on the Committee
Prof Glen Doherty , Consultant Gastroenterologist, St Vincent's University Hospital	Committee Chair & Training Lead, HSE Acute Operations Endoscopy Programme
Dr Jan Leyden , Consultant Gastroenterologist, Mater Misericordiae Hospita	Chair, NEQI Programme Working Group & Clinical Lead, HSE Acute Operations Endoscopy Programme
Mr Fiachra Cooke , Consultant General & Colorectal Surgeon, Waterford University Hospital	Consultant Surgeon representative
Mr Paul McCormick , Consultant General & Colorectal Surgeon, St. James' Hospital	Consultant Surgeon representative
Prof Deborah McNamara , Consultant General & Colorectal Surgeon, Beaumont Hospital	The RCSI colorectal and general surgical training programme representative
Prof Deirdre McNamara , Consultant Gastroenterologist Tallaght University Hospital	Irish Society of Gastroenterology representative
Mr Ken Mealy , Consultant Colorectal Surgeon, Wexford General Hospital	Co-Lead of the National Clinical Programme for Surgery
Dr Aoibhlinn O'Toole , Consultant Gastroenterologist, Beaumont Hospital	National Specialty Director for Gastroenterology Training
Dr Eoin Slattery , Consultant Gastroenterologist, Galway University Hospital	National Specialty Director for Gastroenterology Training
Prof Barbara Ryan , Consultant Gastroenterologist, Tallaght University Hospital	Physician representative
Dr Danny Cheriyan , Consultant Gastroenterologist, Beaumont Hospital	Physician representative
Grace O'Sullivan , Programme Manager, HSE Acute Operations Endoscopy Programme	Observer



National Gastrointestinal Endoscopy Quality Improvement Programme

The Conjoint Board of the RCPI and the RCSI launched a clinician led National Gastrointestinal (GI) Endoscopy Quality Improvement (NEQI) Programme in October 2011 in collaboration with the National Cancer Control Programme. This programme is managed by the RCPI. It has the following objectives:

- Improve patient care by minimising diagnostic errors in GI Endoscopy
- Develop a standardised national quality improvement system for GI Endoscopy
- Enable individual endoscopy units to review their performance against national target
- Identify good practice and areas for improvement and share findings with other participating units
- Improve communication within and between participating institutions

All public hospitals in Ireland participate in the programme and have agreed to implement practical quality improvement

measures, as outlined in the Guidelines for the National GI Endoscopy Quality Improvement Programme.

Endoscopy units upload their quality improvement data to the National Quality Assurance and Improvement System for Endoscopy (NQAIS-Endoscopy) on a quarterly basis. NQAIS-Endoscopy is an online quality information system which allows the NEQI Programme to generate national reports on the key quality indicators in endoscopy in Ireland. Endoscopy units can monitor, review and improve the quality of their work in the context of national norms as well as share best practice with other participants. Individual endoscopists can access their own data and benchmark their performance against the national data.

The NEQI Programme has defined key quality indicators that are used to assess the performance of an endoscopy unit. Key quality indicators include median sedation dosages, caecal intubation rates and polyp detection rates. This information is recorded in NQAIS-Endoscopy.

For further information visit the programme website at www.rcpi.ie/quality-improvement-programmes/gastrointestinal-endoscopy/

Scope of the Competency Training Model

What falls within the scope of the competency model?

The model offers a framework for delivery and certification of competency based training in GI endoscopy within accredited training programmes operated by a recognised training body such as RCPI/RCSI. It covers training in upper and lower GI endoscopy, both the diagnostic and core therapeutic aspects (i.e. endoscopic haemostasis and polypectomy). Both Colleges have a defined curriculum for training within their own specialty (outlined below). Training in GI endoscopy is only one aspect of the overall training offered in Gastroenterology (RCPI) or General Surgery (RCSI) and implementation of this competency model should be aligned with the broader training programme. Trainees should use their training records (logbooks/portfolios) to record training and progress. The relevant training body should assess and certify trainees in accordance with the framework offered by this model.

RCPI – Institute of Medicine (IOM) Higher Specialist Training Programme in Gastroenterology

The curriculum for HST in Gastroenterology is updated regularly and is available for download at <https://www.rcpi.ie/training/our-specialties/>. It defines the number of supervised endoscopy procedures and the competency level required to complete the HST programme (see Appendix 10).

RCSI – Intercollegiate Surgical Curriculum Programme (ISCP)

The general surgery curriculum is available at <https://www.iscp.ac.uk/media/1103/general-surgery-curriculum-aug-2021-approved-oct-20v3.pdf>. This introduces an outcomes based approach including new assessments called the multiple consultant report (MCR) encompassing the new concepts of the generic professional capabilities (GPCs) and capabilities in practice (CiPs). The new curriculum uses the level of supervision required for a procedure as a key determinant of when a trainee is ready for independent practice and includes recommendations on indicative numbers of procedures (See Appendix 11).

What falls outside the scope of the competency model?

It is recognised that there are doctors in training who undertake some or all of their endoscopy training outside of a specialty training programme. These individuals should be encouraged to keep a logbook of training undertaken and the National Doctor Training Programme (NDTP) now offers an electronic logbook to facilitate this (<https://www.nchder.ie/>). This competency model serves as a useful tool for hospitals to provide structure and oversight of all of the training in GI endoscopy that they deliver. There is, however, no structure at present that permits a formal final certification of endoscopy skills outside of an RCPI/RCSI training programme.

Training in specialist endoscopic techniques such as endoscopic ultrasound (EUS), endoscopic retrograde cholangiopancreatography (ERCP), small bowel enteroscopy and other forms of therapeutic luminal endoscopy fall outside the scope of this competency framework.

GI Endoscopy - Training Pathway Option

In both gastroenterology and surgical specialties, trainees should have the opportunity to train in either upper and/or lower gastrointestinal endoscopy. The expectation is that most gastroenterologists and general surgeons will undertake training in both upper and lower gastrointestinal endoscopy, including colonoscopy. Gastroenterology trainees who decide to focus on hepatology may be permitted to only train in diagnostic and therapeutic upper gastrointestinal endoscopy. Surgical trainees in non-colorectal disciplines may be allowed to train solely in upper gastrointestinal

endoscopy and sigmoidoscopy. In all cases, a focus on emergency endoscopy/therapeutics and the management of gastrointestinal bleeding should be incorporated as these are likely to form part of the on-call skills requirements for general surgeons and gastroenterologists into the future. Trainees should decide which option best suits their training needs early in their training programme (i.e. by the end of the second year of specialist training) but should seek advice from and follow the requirements of their own specialty training programme.

Table. 1 Options for training in gastrointestinal (GI) endoscopy

Option 1	Upper GI endoscopy only <ul style="list-style-type: none">including diagnostic gastroscopy and therapeutic haemostasis
Option 2	Upper GI endoscopy with flexible sigmoidoscopy <ul style="list-style-type: none">including diagnostic gastroscopy and therapeutic haemostasisincluding basic polypectomy skills
Option 3	Upper GI endoscopy with full colonoscopy <ul style="list-style-type: none">including diagnostic gastroscopy and therapeutic haemostasisincluding basic and advanced polypectomy skills



Phase one of training

During phase one, prior to obtaining provisional approval, trainees should only undertake endoscopic procedures with supervision by their consultant trainer or another competent endoscopist. All endoscopy trainers should register as a user with NQAIS Endoscopy allowing them to view both their own and their trainees NQI data. Direct supervision is necessary during the initial phase to ensure that trainees acquire the necessary technical skills for safe and timely insertion and scope withdrawal. In addition, it is vital that they receive adequate support in the recognition of pathology and appropriate training in the appropriateness of biopsy and pre and post procedural management of the patient. During phase one the trainee should undertake at least a basic endoscopy skills course and undergo regular formative DOPS evaluation (minimum one per quarter). Examples of suitable DOPS forms are set out in appendices 1 – 9.

Provisional approval

Once a trainee has completed the required minimum number of procedures and is deemed competent/independent by their trainer they can seek 'provisional approval'. For this the trainee is required to complete an additional summative upper and/or lower GI DOPS form, signed by their named consultant trainer. The applicant must score 'competent for independent practice' for all the summative DOPS procedures (deemed equivalent to Supervision Level III or above in the surgical curriculum; Appendix 11). Once completed, the trainee submits copies of their quarterly NQAIS reports to date and completed DOPS forms in a portfolio to their Unit Training Lead who will then issue a *Provisional Approval Certificate in GI Endoscopy* to the trainee. The requirements for provisional approval are primarily based on competency but include a minimum number of directly supervised procedures as defined by the curriculum of the specialist training programmes (Appendix 10 and 11). A minimum of 200 procedures is suggested in both upper and/or lower gastrointestinal endoscopy prior to 'provisional approval'. This figure is based on international data and represents the average number of procedures required to achieve independent competence (See references). It should be recognised that some trainees will need to undertake a greater number of procedures to attain the necessary levels of skill. If trainees undertake between 2 – 4 procedures each week it is envisaged that provisional approval can be completed during or by the end of the year two of endoscopy training. Training programmes and individual posts should be structured to prevent/minimise interruptions in endoscopy skills acquisition. Each trainee should have access to a minimum of one endoscopy session per week throughout their endoscopy training programme.

The provisional approval summative DOPS should be performed by the named consultant trainer during the training year in question with independent verification by a second named trainer (ideally from a different discipline). The two trainers undertaking the certification process

will review in detail the training records to ensure that an adequate number of procedures have been undertaken and that skills acquisition has occurred to a satisfactory degree. The certification DOPS evaluation will involve two directly observed procedures in either upper GI endoscopy (option one) and/or lower gastrointestinal endoscopy. The trainee should receive a grade in the DOPS evaluation of 'competent for independent practice' across all domains, for all of the procedures evaluated. If a procedure performed as part of the certification DOPS evaluation is terminated by the trainer because of specific difficulties with the procedure (e.g. patient factors), an additional procedure should then be performed with certification to the required level of competency.

If a trainee does not successfully complete the evaluation for provisional approval at first attempt an additional training plan should be agreed and completed and the process can then be repeated. There is no limit on the number of times the process can be repeated.

Summary of requirements for provisional approval

1. Registration as a user on NQAIS Endoscopy
2. NQAIS reports documenting completion of a suggested minimum number of 200 of each procedure (upper and/or lower) with satisfactory KPI (minimum D2 intubation \geq 95%; caecal intubation rate \geq 90%, unassisted physically i.e. the trainer does not take the scope)
3. Four most recent (within last three months) formative upper and/or lower GI DOPS scoring overall 'competent for independent practice'. No individual item in the last four DOPS can be scored 'maximum supervision' or 'significant supervision'
4. The trainee has completed the mandatory Basic Endoscopy Skills course
5. The trainee has completed a hands on colonoscopy course. This is recommended for all trainees, unless the trainee is training in upper GI endoscopy only.



Phase two of training

Once a trainee is successful in obtaining provisional approval, they may then be permitted to perform endoscopy independently as long as there is a consultant trainer immediately available in the unit. The precise scope of practice and supervision arrangements of each trainee remain at the discretion and approval of their named consultant trainer.

During phase two trainees will continue to require a named supervising consultant for all procedures, but not necessarily require direct supervision at all times. It is important that during phase two trainees continue to enjoy direct hands-on training in order to develop skills, particularly in endoscopic haemostasis, polypectomy techniques and other therapeutic modalities relevant to their subspecialty interest.

During phase two trainees should also undertake additional mandatory training courses relevant to their subspecialty interest. Advanced training courses in polypectomy skills and GI bleeding/endoscopic haemostasis should be completed by the end of the training programme.

During phase two, monitoring of the key performance indicators of trainees is especially important. This should be undertaken by quarterly analysis of the endoscopist's NQAIS reports by the named consultant trainer and unit training lead. In addition, within the structured training programme, these reports should be reviewed in detail at each annual training evaluation (EYA – end of year assessment in RCPI programme/ARCP – Annual Review of Competence Progression in RCSI programmes) in the relevant college in order to ensure satisfactory progress. If trainees fail to meet the minimum standards defined for key performance indicators (as defined NQI endoscopy guidelines) the training lead within each endoscopy unit may recommend that their provisional approval be suspended. A variable period of direct supervision will usually then be required and summative DOPS evaluation repeated before provisional approval is re-instated.



Final certification

Final evaluation and certification will again be performed by the named consultant trainer during the training year in question with independent verification by a second named trainer (ideally from a different discipline). It is suggested that this be performed in the penultimate year of the training programme to allow a period for remediation of any outstanding skills deficits identified prior to the end of the programme.

The trainee will apply to the relevant speciality training programme for a *Final Certificate of Competence in GI Endoscopy* which documents competency to perform gastroscopy and/or sigmoidoscopy or full colonoscopy independently. Provisional approval does not expire (but may be suspended) and there is no time limit between provisional approval and final certification. It is suggested that applicants complete a minimum of 100 additional procedures after provisional approval in order to demonstrate competency and to be eligible for final certification.

The two trainers undertaking the certification process will review in detail the training record to ensure that NQAIS reports show satisfactory performance metrics, that further formative DOPS for polypectomy and haemostasis skills have been undertaken and that skills acquisition has occurred to a satisfactory degree.

Summary of requirements for final certification

1. Maintain registration as a user on NQAIS Endoscopy
2. The trainee has successfully completed Phase one of training (provisional approval)
3. NQAIS reports documenting completion of a suggested number of 100 (additional) of each procedure (upper and/or lower) with satisfactory KPI
4. Completion of relevant final summative DOPS (scoring 'competent for independent practice')
5. Completion GI Bleeding DOPS (minimum x4) demonstrating ability to perform endoscopic haemostasis (scoring 'competent for independent practice')
6. Completion of DOPyS evaluation (minimum x4) demonstrating ability to remove stalked and sessile polyps <2cms in size (scoring 'competent for independent practice')
7. The trainee has attended a mandatory Hands on Colonoscopy course.
8. Attendance at a GI bleeding and/or Polypectomy Skills course is highly recommended

Annual appraisal (EYA/ARCP)

An endoscopy focused annual appraisal as part of the EYA/ARCP remains a core aspect of training. The annual review involves examining KPIs based on the reports generated by the NQI programme, DOPS evaluations and an appraisal of progress in skills acquisition. The importance of this is manifold but will assist in early identification of trainees with a need for additional support and training. It will allow specific training goals to be defined for the next training year and ensure the training post to which a trainee is allocated is aligned with these training goals and targets.

Appendix 1 Record of performance for issuing a Provisional Approval Certificate in GI Endoscopy

Name of Trainee	
IMCRN	

1.) GASTROSCOPY	
Number of procedures to date (NQI Record) (NQI report appended)	
Completed Formative DOPS (minimum four) (overall – ‘competent for independent practice’)	YES / NO
Completed Summative DOPS (appended - ‘competent for independent practice’)	YES / NO

2.) COLONOSCOPY / FLEXIBLE SIGMOIDOSCOPY (Delete as appropriate)	
Number of procedures to date (NQI Record) (NQI report appended)	
Completed Formative DOPS (minimum four) (overall – ‘competent for independent practice’)	YES / NO
Completed Summative DOPS (appended - ‘competent for independent practice’)	YES / NO

TRAINEE I have submitted copies of the NQI Records and Summative DOPS evaluations and wish to receive provisional approval for GI endoscopy	SIGNATURE	DATE
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TRAINER I have assessed the above-named trainee and confirm that they now have satisfied the requirements for final certification	SIGNATURE	DATE
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UNIT TRAINING LEAD I have reviewed the documentation submitted and confirm that the requirements for final certification have been satisfied	SIGNATURE	DATE
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Appendix 2 Record of performance for applying for a Final Certificate of Competence in GI Endoscopy

Name of Trainee	
IMCRN	

1.) GASTROSCOPY (Delete as appropriate)

Number of procedures to date (NQI Record) (NQI summary report appended)	
Completed FINAL Summative DOPS (appended - 'competent for independent practice')	YES / NO

2.) FLEXIBLE SIGMOIDOSCOPY (Delete as appropriate)

Number of procedures to date (NQI Record) (NQI report appended)	
Completed Summative DOPS (appended - 'competent for independent practice')	YES / NO

3.) COLONOSCOPY (Delete as appropriate)

Number of procedures to date (NQI Record) (NQI report appended)	
Completed FINAL Summative DOPS (appended - 'competent for independent practice')	YES / NO

TRAINEE I have submitted copies of the NQI Records and Summative DOPS evaluations and wish to receive final certification in GI endoscopy	SIGNATURE	DATE
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TRAINER I have assessed the above-named trainee and confirm that they now have satisfied the requirements for final certification	SIGNATURE	DATE
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TRAINING PROGRAMME DIRECTOR I have reviewed the documentation submitted and confirm that the requirements for final certification have been satisfied	SIGNATURE	DATE
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Appendix 3 Template for recording annual endoscopy appraisal

TRAINEE DETAILS		
Name:	Date of appraisal:	
National Training Number:	IMCRN:	
Programme (Tick ✓)	Year of Training:	
RCPI – HST in Gastroenterology <input type="checkbox"/>	Date of Provisional Skills Approval:	
RCSI - HST in General Surgery <input type="checkbox"/>	Date of Final Endoscopy Certification:	
Other (please specify) _____		

CHECKLIST	(Tick ✓ to indicate completion or add a comment)
Review of goals/ areas for improvement arising from previous year's structured appraisal	
Review of NQI reports for current training year	
DOPS completed (minimum 1 per quarter)	
Courses Completed	
Review of progress towards provisional skills approval and/or final certification	
Feedback on endoscopy trainer(s)	
Agree learning goals/areas for improvement for coming training year (please list below)	Additional Comments by Trainee
1.)	
2.)	
3.)	

SIGNATURE OF TRAINEE	DATE
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SIGNATURE(S) OF APPRAISAL PANEL	DATE
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Appendix 4 Formative DOPS for gastroscopy

Date of Procedure			
Trainee Name		IMC Registration No.	
Trainer Name		IMC Registration No.	
Outline of case			
Difficulty of case Please tick (✓)	Easy <input type="checkbox"/>	Moderate <input type="checkbox"/>	Complicated <input type="checkbox"/>

Level of supervision Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
PRE-PROCEDURE					
Assess Indication					
Risk Assessment					
Confirms Consent					
Preparation inc. PPE					
Equipment Checks					
Sedation					
Monitoring					
Comments					

Level of supervision Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
INSERTION AND WITHDRAWAL					
Scope handling					
Angulation / tip control					
Suction/air/lens cleaning					
Intubation and oesophagus					
Stomach					
2nd part of duodenum					
Problem solving					
Pace and Progress					
Patient Comfort					
Comments					
VISUALISATION					
Oesophagus					
Gastro-oesophageal junction					
Fundus					

Level of supervision Please tick (✓)	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
Lesser curve					
Greater curve					
Incisura					
Pylorus					
1st part duodenum					
2nd part of duodenum					
Comments					
MANAGEMENT OF FINDINGS					
Recognition					
Management					
Complications					
Comments					
POST-PROCEDURE					
Report writing					
Management plan					
Comments					

Level of supervision Please tick (✓)	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)					
Communication and teamwork					
Situation awareness					
Leadership					
Judgement and decision making					
Comments					
LEARNING OBJECTIVES FOR THE NEXT CASE					
The objectives should be added to the trainee's personal development plan (PDP) once DOPS is completed					
1.					
2.					
3.					
Overall Degree of Supervision required Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
Please tick (✓) appropriate box					

DOPS form descriptors

PRE PROCEDURE	
Indication	<ul style="list-style-type: none"> Assesses the appropriateness of the procedure and considers possible alternatives
Risk assessment	<ul style="list-style-type: none"> Assesses co-morbidity including drug history Assesses any procedure related risks relevant to patient Takes appropriate action to minimise any risks
Confirms Consent	<ul style="list-style-type: none"> Early in training the consent process should be witnessed by the trainer, once competent it is acceptable for the trainee to confirm that valid consent has been gained by another trained person. During the summative DOPS the process of obtaining consent should be witnessed and assessed Complete and full explanation of the procedure including proportionate risks and consequences without any significant omissions and individualised to the patient Avoids the use of jargon Does not raise any concerns unduly Gives an opportunity for patient to ask questions by adopting appropriate verbal and non-verbal behaviours Develops rapport with the patient Respects the patient's own views, concerns and perceptions
Preparation	<ul style="list-style-type: none"> Ensures appropriate pre-procedure checks and PPE use are performed as per local policies Ensures that all assisting staff are fully apprised of the current case Ensures that all medications and accessories likely to be required for this case are available
Equipment Check	<ul style="list-style-type: none"> Ensures the available scope is appropriate for the current patient. Ensures the endoscope is functioning normally before attempting insertion checking all channels and connections, light source and angulation locks are off.
Monitoring	<ul style="list-style-type: none"> Ensures appropriate monitoring of oxygen saturation and vital signs pre- procedure Ensures appropriate action taken if readings are sub-optimal Demonstrates awareness of clinical monitoring throughout procedure
Sedation	<ul style="list-style-type: none"> When indicated inserts and secures IV access and uses appropriate topical anaesthesia Uses sedation and/or analgesic doses in keeping with current guidelines and in the context of the physiology of the patient Drug doses checked and confirmed with the assisting staff
INSERTION AND WITHDRAWAL	
Scope handling	<ul style="list-style-type: none"> Exhibits good external control of gastroscope at all times. Efficient and effective manipulation, using rotation of the head of the scope with the left hand to generate torque and the right hand to insert and withdraw. Minimizes external looping in shaft of instrument.
Angulation controls	<ul style="list-style-type: none"> Demonstrates ability to use angulation controls appropriately, using the left hand only during the vast majority of the procedure.
Suction/air/lens cleaning	<ul style="list-style-type: none"> Well-judged and timely use of distension, suction and lens clearing.
Tip control	<ul style="list-style-type: none"> Use of torque and angulation wheels independently and in combination, as necessary to elicit excellent controlled tip movement. Avoids unnecessary mucosal contact, maintaining luminal view when possible.
Intubation and Oesophagus	<ul style="list-style-type: none"> Insertion through the mouth and pharynx under endoscopic vision. Careful and safe intubation of the oesophagus under endoscopic vision. Passage down the oesophagus under endoscopic vision.

DOPS form descriptors

Stomach	<ul style="list-style-type: none"> • Smooth passage through the stomach and pylorus, maintaining luminal views. • Rapid recognition of all major landmarks.
2nd part of duodenum	<ul style="list-style-type: none"> • Insertion into second part of duodenum. • Optimisation of scope position in second part of duodenum.
Pro-active Problem Solving	<ul style="list-style-type: none"> • Demonstrates and can articulate a logical approach to resolving technical challenges (bend negotiation, pathology encountered, large hiatus hernia) to ensure complete gastroscopy achieved. • Is able to adapt approach depending on anatomy and technical challenge faced ensuring best option is used. • Early recognition of lack of success of a technique with adaptation or change in strategy to next appropriate potential solution.
Pace and Progress	<ul style="list-style-type: none"> • Completes whole procedure in reasonable and appropriate time, without rushing and without unduly prolonging the procedure
Patient comfort	<ul style="list-style-type: none"> • Conscious awareness of patient discomfort and potential causes at all times • Applies logical strategy to minimise any potential or induced discomfort, including anticipation of problems and reducing patient anxiety • Appropriate escalation of analgesic use if technical strategies unsuccessful in managing patient discomfort
VISUALISATION	
Oesophagus	<ul style="list-style-type: none"> • Full and careful visualisation of the whole length of the oesophagus
Gastro-oesophageal junction	<ul style="list-style-type: none"> • Correct identification of the both the gastro- oesophageal junction and the squamo-columnar junction. • Full views of gastro-oesophageal junction from both proximally and distally.
Fundus	<ul style="list-style-type: none"> • Full visualisation of all areas of the gastric fundus with retrograde viewing
Lesser curve	<ul style="list-style-type: none"> • Full visualisation of whole length of lesser curve using antegrade and retrograde viewing
Greater curve	<ul style="list-style-type: none"> • Full visualisation of whole length of greater curve using antegrade and retrograde viewing
Incisura	<ul style="list-style-type: none"> • Full visualisation of proximal and distal margins of the incisura
Antrum and pylorus	<ul style="list-style-type: none"> • Full visualisation of the antrum, pylorus and pyloric channel
1st part duodenum	<ul style="list-style-type: none"> • Full and careful visualisation of all walls of the 1st part of the duodenum
2nd part duodenum	<ul style="list-style-type: none"> • Careful visualisation of distal duodenum
MANAGEMENT OF FINDINGS	
Recognition	<ul style="list-style-type: none"> • Rapid, accurate and thorough determination of normal and abnormal findings. • Appropriate use of mucosal enhancement techniques.
Management	<ul style="list-style-type: none"> • Takes appropriate specimens as indicated by the pathology and clinical context. • Full and appropriate attempt to visualise important associated lesions. • Performs endoscopic therapy or interventions appropriately for the pathology and clinical context (includes taking no action)
Complications	<ul style="list-style-type: none"> • Ensures the risk of complications is minimised • Rapid recognition of complications both during and after the procedure. • Manages any complications appropriately and safely.

DOPS form descriptors

POST PROCEDURE	
Report writing	<ul style="list-style-type: none"> Records a full and accurate description of procedure and findings Uses appropriate endoscopy scoring systems
Management plan	<ul style="list-style-type: none"> Records an appropriate management plan (including medication, further investigation and responsibility for follow-up).
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)	
Communication and teamwork	<ul style="list-style-type: none"> Maintains clear communication with assisting staff Gives and receives knowledge and information in a clear and timely fashion Ensures that both the team and the endoscopist are working together, using the same core information and understand the 'big picture' of the case Ensures that the patient is at the centre of the procedure, emphasising safety and comfort Clear communication of results and management plan with patient and/or carers
Situation awareness	<ul style="list-style-type: none"> Ensure procedure is carried out with full respect for privacy and dignity Maintains continuous evaluation of the patient's condition Ensures lack of distractions and maintains concentration, particularly during difficult situations Intra-procedural changes to scope set-up monitored and rechecked
Leadership	<ul style="list-style-type: none"> Provides emotional and cognitive support to team members by tailoring leadership and teaching style appropriately Supports safety and quality by adhering to current protocols and codes of clinical practice Adopts a calm and controlled demeanour when under pressure, utilising all resources to maintain control of the situation and taking responsibility for patient outcome
Judgement and / decision making	<ul style="list-style-type: none"> Considers options and possible courses of action to solve an issue or problem, including assessment of risk and benefit Communicates decisions and actions to team members prior to implementation Reviews outcomes of procedure or options for dealing with problems Reflects on issues and institutes changes to improve practice

Appendix 5 Formative DOPS for colonoscopy and flexible sigmoidoscopy

Date of Procedure			
Trainee Name		IMC Registration No.	
Trainer Name		IMC Registration No.	
Outline of case			
Difficulty of case Please tick (✓)	Easy <input type="checkbox"/>	Moderate <input type="checkbox"/>	Complicated <input type="checkbox"/>

Level of supervision Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
PRE-PROCEDURE					
Indication					
Risk					
Confirms Consent					
Preparation Inc. PPE					
Equipment check					
Monitoring					
Sedation					
Comments					

Level of supervision Please tick (✓)	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
PROCEDURE					
Scope handling					
Tip control					
Air management					
Proactive problem solving					
Loop management					
Patient comfort					
Pace and progress					
Visualisation					
Comments					
MANAGEMENT OF FINDINGS					
Recognition					
Management					
Complications					
POST-PROCEDURE					
Report writing					
Management plan					
Comments					

Level of supervision Please tick (✓)	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)					
Communication and teamwork					
Situation awareness					
Leadership					
Judgement and decision making					
Comments					
LEARNING OBJECTIVES FOR THE NEXT CASE					
The objectives should be added to the trainee's personal development plan (PDP) once DOPS is completed					
1.					
2.					
3.					
Overall Degree of Supervision required Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
Please tick (✓) appropriate box					

DOPS form descriptors

PRE PROCEDURE	
Indication	<ul style="list-style-type: none"> Assesses the appropriateness of the procedure and considers possible alternatives
Risk assessment	<ul style="list-style-type: none"> Assesses co-morbidity including drug history Assesses any procedure related risks relevant to patient Takes appropriate action to minimise any risks
Confirms Consent	<ul style="list-style-type: none"> Early in training the consent process should be witnessed by the trainer, once competent it is acceptable for the trainee to confirm that valid consent has been gained by another trained member of staff. During the summative DOPS the process of obtaining consent should be witnessed and assessed Complete and full explanation of the procedure including proportionate risks and consequences without any significant omissions and individualised to the patient Avoids the use of jargon Does not raise any concerns unduly Gives an opportunity for patient to ask questions by adopting appropriate verbal and non-verbal behaviours Develops rapport with the patient Respects the patient's own views, concerns and perceptions
Preparation	<ul style="list-style-type: none"> Ensures appropriate pre-procedure checks and PPE use are performed as per local policies Ensures that all assisting staff are fully appraised of the current case Ensures that all medications and accessories likely to be required for this case are available
Equipment Check	<ul style="list-style-type: none"> Ensures the available scope is appropriate for the current patient and indication Ensures the endoscope is functioning normally before attempting insertion
Monitoring	<ul style="list-style-type: none"> Ensures appropriate monitoring of oxygen saturation and vital signs pre- procedure Ensures appropriate action taken if readings are sub-optimal Demonstrates awareness of clinical monitoring throughout procedure
Sedation	<ul style="list-style-type: none"> When indicated inserts and secures IV access and uses appropriate topical anaesthesia Uses sedation and/or analgesic doses in keeping with current guidelines and in the context of the physiology of the patient Drug doses checked and confirmed with the assisting staff Uses Nitrous Oxide (Entonox) appropriately*
PROCEDURE	
Scope handling	<ul style="list-style-type: none"> Exhibits good control of head and shaft of colonoscope at all times Angulation controls manipulated using the left hand during the procedure Demonstrates ability to use all scope functions (buttons/biopsy channel) whilst maintaining stable hold on colonoscope. Minimises external looping in shaft of instrument
Tip control	<ul style="list-style-type: none"> Integrated technique: Combines tip and torque steering to accurately control the tip of colonoscope and manoeuvre the tip in the correct direction. Individual components: Tip steering: Avoids unnecessary mucosal contact and maintains luminal view, avoiding need for blind negotiation of flexures and 'slide-by' where possible Torque steering: Demonstrates controlled torque steering using right hand/fingers to rotate shaft of colonoscope Luminal awareness: Correctly identifies luminal direction using all available visual clues, and avoids red outs
Air management	<ul style="list-style-type: none"> Appropriate insufflation and suction of air to minimise over-distension of bowel while maintaining adequate views

DOPS form descriptors

Pro-active problem solving	<ul style="list-style-type: none"> • Anticipates challenges and problems (e.g. flexures and loops) • Uses appropriate techniques and strategies to prevent problems and minimise difficulties and patient discomfort • Recognition: Early recognition of technical challenges and difficulties preventing progression (e.g. loops, fixed pelvis) • Management: Can articulate and demonstrate a logical approach to resolving technical challenges, including early change in strategy when progress not being made
Loop management	<ul style="list-style-type: none"> • Uses appropriate techniques (tip and torque steering, withdrawal, position change) to minimise and prevent loop formation • Early recognition of when loop is forming or has formed • Understands and can articulate techniques for resolution of loops • Resolves loops as soon as technically possible, to minimise patient discomfort and any compromise to scope function • Recognises when loop resolution not possible and safely inserts colonoscope with loop, with awareness and management of any associated patient discomfort
Pace and progress	<ul style="list-style-type: none"> • Takes sufficient time to maximise mucosal views • Insertion of colonoscope speed adjusted to minimise looping, prevent problems and manage difficulties • Able to complete both insertion and withdrawal at pace consistent with normal service lists, adjusted, depending on difficulty of procedure • Extent of examination is appropriate to the indication
Patient comfort	<ul style="list-style-type: none"> • Conscious awareness of patient discomfort and potential causes at all times • Applies logical strategy to minimise any potential or induced discomfort, including anticipation of problems and reducing patient anxiety • Able to utilise effective colonoscopy techniques to resolve the majority of pain- related problems without the need for increased analgesia • Appropriate escalation of analgesic use if technical strategies unsuccessful in managing patient discomfort
Visualisation	<ul style="list-style-type: none"> • Visually and digitally examines the rectum and perineum (or stoma) area to ensure no obstruction or contraindication to insertion of instrument • Well-judged and timely use of screen washes and water irrigation to ensure clear views • Utilises positional changes to maximise mucosal views • Ensures optimal luminal views throughout the examination • Uses mucosal washing and suction of fluid to ensure optimal visualisation of mucosa, particularly at potential blind spots (caecal pole, flexures, recto- sigmoid). • Retroversion in the rectum should be performed to fully visualise the lower rectum and dentate line. If rectal retroversion is not possible, the reason should be indicated. • Recognises and identifies landmarks of complete examination (appendix orifice, ileo-caecal valve, tri-radiate fold or anastomosis/neo-terminal ileum) • There is photo-documentation (or video) of significant findings and landmarks of completion
MANAGEMENT OF FINDINGS	
Pathology recognition	<ul style="list-style-type: none"> • Accurate determination of normal and abnormal findings • Appropriate use of mucosal enhancement techniques
Pathology management	<ul style="list-style-type: none"> • Takes appropriate specimens as indicated by the pathology and clinical context • Performs relevant therapy or interventions if appropriate in clinical context (includes taking no action) • For management of polyps please use DOPyS
Complications	<ul style="list-style-type: none"> • Ensures risk of complications is minimised • Rapid recognition of complications both during and after the procedure • Manages any complications appropriately and safely

DOPS form descriptors

POST PROCEDURE	
Report writing	<ul style="list-style-type: none"> • Records a full and accurate description of procedure and findings • Extent of the procedure is recorded in the report and supported by image/video recording • Uses appropriate endoscopy scoring systems
Management plan	<ul style="list-style-type: none"> • Records an appropriate management plan (including medication, further investigation and responsibility for follow-up).
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)	
Communication and teamwork	<ul style="list-style-type: none"> • Maintains clear communication with assisting staff • Gives and receives knowledge and information in a clear and timely fashion • Ensures that both the team and the endoscopist are working together, using the same core information and understand the 'big picture' of the case • Ensures that the patient is at the centre of the procedure, emphasising safety and comfort • Clear communication of results and management plan with patient and/or carers
Situation awareness	<ul style="list-style-type: none"> • Ensure procedure is carried out with full respect for privacy and dignity • Maintains continuous evaluation of the patient's condition • Ensures lack of distractions and maintains concentration, particularly during difficult situations • Intra-procedural changes to scope set-up monitored and rechecked
Leadership	<ul style="list-style-type: none"> • Provides emotional and cognitive support to team members by tailoring leadership and teaching style appropriately • Supports safety and quality by adhering to current protocols and codes of clinical practice • Adopts a calm and controlled demeanour when under pressure, utilising all resources to maintain control of the situation and taking responsibility for patient outcome
Judgement and decision making	<ul style="list-style-type: none"> • Considers options and possible courses of action to solve an issue or problem, including assessment of risk and benefit • Communicates decisions and actions to team members prior to implementation • Reviews outcomes of procedure or options for dealing with problems • Reflects on issues and institutes changes to improve practice

Appendix 6 Certification (summative) DOPS for gastroscopy

Date of Procedure			
Trainee Name		IMC Registration No.	
Assessor Name		IMC Registration No.	
Outline of case			
Difficulty of case Please tick (✓)	Easy <input type="checkbox"/>	Moderate <input type="checkbox"/>	Complicated <input type="checkbox"/>

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
PRE-PROCEDURE		
Indication		
Risk		
Confirms Consent		
Preparation Inc. PPE		
Equipment check		
Monitoring		
Sedation		
Comments		

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
INSERTION AND WITHDRAWAL		
Scope handling		
Angulation / tip control		
Suction/air/lens cleaning		
Intubation and oesophagus		
Stomach		
2nd part of duodenum		
Problem solving		
Pace and Progress		
Patient Comfort		
Comments		
VISUALISATION		
Oesophagus		
Gastro-oesophageal junction		
Fundus		
Lesser curve		
Greater curve		
Incisura		
Pylorus		

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
1st part duodenum		
2nd part duodenum		
Comments		
MANAGEMENT OF FINDINGS		
Recognition		
Management		
Complications		
Comments		
POST-PROCEDURE		
Report writing		
Management plan		
Comments		

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
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ENTS (ENDOSCOPIC NON-TECHNICAL SKIL)		
---	--	--

Communication and teamwork		
Situation awareness		
Leadership		
Judgement and decision making		
Comments		

RECOMMENDED AREAS FOR FUTURE DEVELOPMENT		
---	--	--

1.	
2.	
3.	

Overall Degree of Supervision required	Not competent for independent practice supervision required	Competent for independent practice no supervision required
Please tick (✓) appropriate box		

Assessor name		IMC Registration No.	
Assessor signature			

DOPS form descriptors

PRE PROCEDURE	
Indication	<ul style="list-style-type: none"> Assesses the appropriateness of the procedure and considers possible alternatives
Risk assessment	<ul style="list-style-type: none"> Assesses co-morbidity including drug history Assesses any procedure related risks relevant to patient Takes appropriate action to minimise any risks
Confirms Consent	<ul style="list-style-type: none"> Early in training the consent process should be witnessed by the trainer, once competent it is acceptable for the trainee to confirm that valid consent has been gained by another trained person. During the summative DOPS the process of obtaining consent should be witnessed and assessed Complete and full explanation of the procedure including proportionate risks and consequences without any significant omissions and individualised to the patient Avoids the use of jargon Does not raise any concerns unduly Gives an opportunity for patient to ask questions by adopting appropriate verbal and non-verbal behaviours Develops rapport with the patient Respects the patient's own views, concerns and perception
Preparation	<ul style="list-style-type: none"> Ensures appropriate pre-procedure checks and PPE use are performed as per local policies Ensures that all assisting staff are fully apprised of the current case Ensures that all medications and accessories likely to be required for this case are available
Equipment Check	<ul style="list-style-type: none"> Ensures the available scope is appropriate for the current patient. Ensures the endoscope is functioning normally before attempting insertion checking all channels and connections, light source and angulation locks are off.
Monitoring	<ul style="list-style-type: none"> Ensures appropriate monitoring of oxygen saturation and vital signs pre-procedure Ensures appropriate action taken if readings are sub-optimal Demonstrates awareness of clinical monitoring throughout procedure
Sedation	<ul style="list-style-type: none"> When indicated inserts and secures IV access and uses appropriate topical anaesthesia Uses sedation and/or analgesic doses in keeping with current guidelines and in the context of the physiology of the patient Drug doses checked and confirmed with the assisting staff
INSERTION AND WITHDRAWAL	
Scope handling	<ul style="list-style-type: none"> Exhibits good external control of gastroscope at all times. Efficient and effective manipulation, using rotation of the head of the scope with the left hand to generate torque and the right hand to insert and withdraw. Minimizes external looping in shaft of instrument.
Angulation controls	<ul style="list-style-type: none"> Demonstrates ability to use angulation controls appropriately, using the left hand only during the vast majority of the procedure.
Suction/air/lens cleaning	<ul style="list-style-type: none"> Well-judged and timely use of distension, suction and lens clearing.
Tip control	<ul style="list-style-type: none"> Use of torque and angulation wheels independently and in combination, as necessary to elicit excellent controlled tip movement. Avoids unnecessary mucosal contact, maintaining luminal view when possible.
Intubation and oesophagus	<ul style="list-style-type: none"> Insertion through the mouth and pharynx under endoscopic vision. Careful and safe intubation of the oesophagus under endoscopic vision. Passage down the oesophagus under endoscopic vision.

DOPS form descriptors

Indication	<ul style="list-style-type: none"> Assesses the appropriateness of the procedure and considers possible alternatives
Risk assessment	<ul style="list-style-type: none"> Assesses co-morbidity including drug history Assesses any procedure related risks relevant to patient Takes appropriate action to minimise any risks
Confirms Consent	<ul style="list-style-type: none"> Early in training the consent process should be witnessed by the trainer, once competent it is acceptable for the trainee to confirm that valid consent has been gained by another trained person. During the summative DOPS the process of obtaining consent should be witnessed and assessed Complete and full explanation of the procedure including proportionate risks and consequences without any significant omissions and individualised to the patient Avoids the use of jargon Does not raise any concerns unduly Gives an opportunity for patient to ask questions by adopting appropriate verbal and non-verbal behaviours Develops rapport with the patient Respects the patient's own views, concerns and perception
Preparation	<ul style="list-style-type: none"> Ensures appropriate pre-procedure checks and PPE use are performed as per local policies Ensures that all assisting staff are fully appraised of the current case Ensures that all medications and accessories likely to be required for this case are available
Equipment Check	<ul style="list-style-type: none"> Ensures the available scope is appropriate for the current patient. Ensures the endoscope is functioning normally before attempting insertion checking all channels and connections, light source and angulation locks are off.
INSERTION AND WITHDRAWAL	
Stomach	<ul style="list-style-type: none"> Smooth passage through the stomach and pylorus, maintaining luminal views. Rapid recognition of all major landmarks.
2nd part of duodenum	<ul style="list-style-type: none"> Insertion into second part of duodenum. Optimisation of scope position in second part of duodenum.
Pro-active Problem Solving	<ul style="list-style-type: none"> Demonstrates and can articulate a logical approach to resolving technical challenges (bend negotiation, pathology encountered, large hiatus hernia) to ensure complete gastroscopy achieved. Is able to adapt approach depending on anatomy and technical challenge faced ensuring best option is used. Early recognition of lack of success of a technique with adaptation or change in strategy to next appropriate potential solution.
Pace and Progress	<ul style="list-style-type: none"> Completes whole procedure in reasonable and appropriate time, without rushing and without unduly prolonging the procedure
Patient comfort	<ul style="list-style-type: none"> Conscious awareness of patient discomfort and potential causes at all times Applies logical strategy to minimise any potential or induced discomfort, including anticipation of problems and reducing patient anxiety Appropriate escalation of analgesic use if technical strategies unsuccessful in managing patient discomfort
VISUALISATION	
Oesophagus	<ul style="list-style-type: none"> Full and careful visualisation of the whole length of the oesophagus
Gastro- oesophageal junction	<ul style="list-style-type: none"> Correct identification of the both the gastro- oesophageal junction and the squamo-columnar junction. Full views of gastro-oesophageal junction from both proximally and distally

DOPS form descriptors

Fundus	<ul style="list-style-type: none"> • Full visualisation of all areas of the gastric fundus with retrograde viewing
Lesser curve	<ul style="list-style-type: none"> • Full visualisation of whole length of lesser curve using antegrade and retrograde viewing
Greater curve	<ul style="list-style-type: none"> • Full visualisation of whole length of greater curve using antegrade and retrograde viewing
Incisura	<ul style="list-style-type: none"> • Full visualisation of proximal and distal margins of the incisura
Antrum and pylorus	<ul style="list-style-type: none"> • Full visualisation of the antrum, pylorus and pyloric channel
1st part duodenum	<ul style="list-style-type: none"> • Full and careful visualisation of all walls of the 1st part of the duodenum
2nd part duodenum	<ul style="list-style-type: none"> • Careful visualisation of distal duodenum
MANAGEMENT OF FINDINGS	
Recognition	<ul style="list-style-type: none"> • Rapid, accurate and thorough determination of normal and abnormal findings. • Appropriate use of mucosal enhancement techniques.
Management	<ul style="list-style-type: none"> • Takes appropriate specimens as indicated by the pathology and clinical context. • Full and appropriate attempt to visualise important associated lesions. • Performs endoscopic therapy or interventions appropriately for the pathology and clinical context (includes taking no action)
Complications	<ul style="list-style-type: none"> • Ensures the risk of complications is minimised • Rapid recognition of complications both during and after the procedure. • Manages any complications appropriately and safely.
POST PROCEDURE	
Report writing	<ul style="list-style-type: none"> • Records a full and accurate description of procedure and findings • Uses appropriate endoscopy scoring systems
Management plan	<ul style="list-style-type: none"> • Records an appropriate management plan (including medication, further investigation and responsibility for follow-up).
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)	
Communication and teamwork	<ul style="list-style-type: none"> • Maintains clear communication with assisting staff • Gives and receives knowledge and information in a clear and timely fashion • Ensures that both the team and the endoscopist are working together, using the same core information and understand the 'big picture' of the case • Ensures that the patient is at the centre of the procedure, emphasising safety and comfort • Clear communication of results and management plan with patient and/or carers
Situation awareness	<ul style="list-style-type: none"> • Ensure procedure is carried out with full respect for privacy and dignity • Maintains continuous evaluation of the patient's condition • Ensures lack of distractions and maintains concentration, particularly during difficult situations • Intra-procedural changes to scope set-up monitored and rechecked
Leadership	<ul style="list-style-type: none"> • Provides emotional and cognitive support to team members by tailoring leadership and teaching style appropriately • Supports safety and quality by adhering to current protocols and codes of clinical practice • Adopts a calm and controlled demeanor when under pressure, utilising all resources to maintain control of the situation and taking responsibility for patient outcome
Judgement and decision making	<ul style="list-style-type: none"> • Considers options and possible courses of action to solve an issue or problem, including assessment of risk and benefit • Communicates decisions and actions to team members prior to implementation • Reviews outcomes of procedure or options for dealing with problems • Reflects on issues and institutes changes to improve practice

Appendix 7 Certification (summative) DOPS for colonoscopy and flexible sigmoidoscopy

Date of Procedure			
Trainee Name		IMC Registration No.	
Assessor Name		IMC Registration No.	
Outline of case			
Difficulty of case Please tick (✓)	Easy <input type="checkbox"/>	Moderate <input type="checkbox"/>	Complicated <input type="checkbox"/>

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
PRE-PROCEDURE		
Indication		
Risk		
Confirms Consent		
Preparation/PPE		
Equipment check		
Sedation		
Monitoring		
Comments		

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
PROCEDURE		
Scope handling		
Tip control		
Air management		
Proactive problem solving		
Loop management		
Patient comfort		
Pace and progress		
Visualisation		
Comments		
MANAGEMENT OF FINDINGS		
Recognition		
Management		
Complications		
Comments		

Complete DOPS form by ticking box to indicate whether trainee is competent for independent practice	Not competent for independent practice supervision required	Competent for independent practice no supervision required
POST-PROCEDURE		
Report writing		
Management plan		
Comments		
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)		
Communication and teamwork		
Situation awareness		
Leadership		
Judgement and decision making		
Comments		
RECOMMENDED AREAS FOR FUTURE DEVELOPMENT		
1.		
2.		
3.		

Overall Degree of Supervision required	Not competent for independent practice supervision required	Competent for independent practice no supervision required	
Please tick (✓) appropriate box			
Assessor name			IMC Registration No.
Assessor signature			

DOPS form descriptors

PRE PROCEDURE	
Indication	<ul style="list-style-type: none"> Assesses the appropriateness of the procedure and considers possible alternatives
Risk assessment	<ul style="list-style-type: none"> Assesses co-morbidity including drug history Assesses any procedure related risks relevant to patient Takes appropriate action to minimise any risks
Confirms Consent	<ul style="list-style-type: none"> Early in training the consent process should be witnessed by the trainer, once competent it is acceptable for the trainee to confirm that valid consent has been gained by another trained member of staff. During the summative DOPS the process of obtaining consent should be witnessed and assessed Complete and full explanation of the procedure including proportionate risks and consequences without any significant omissions and individualised to the patient Avoids the use of jargon Does not raise any concerns unduly Gives an opportunity for patient to ask questions by adopting appropriate verbal and non-verbal behaviours Develops rapport with the patient Respects the patient's own views, concerns and perceptions
Preparation	<ul style="list-style-type: none"> Ensures appropriate pre-procedure checks and PPE use are performed as per local policies Ensures that all assisting staff are fully apprised of the current case Ensures that all medications and accessories likely to be required for this case are available
Equipment Check	<ul style="list-style-type: none"> Ensures the available scope is appropriate for the current patient and indication Ensures the endoscope is functioning normally before attempting insertion
Monitoring	<ul style="list-style-type: none"> Ensures appropriate monitoring of oxygen saturation and vital signs pre- procedure Ensures appropriate action taken if readings are sub-optimal Demonstrates awareness of clinical monitoring throughout procedure
Sedation	<ul style="list-style-type: none"> When indicated inserts and secures IV access and uses appropriate topical anaesthesia Uses sedation and/or analgesic doses in keeping with current guidelines and in the context of the physiology of the patient Drug doses checked and confirmed with the assisting staff Uses Nitrous Oxide (Entonox) appropriately*
PROCEDURE	
Scope handling	<ul style="list-style-type: none"> Exhibits good control of head and shaft of colonoscope at all times Angulation controls manipulated using the left hand during the procedure Demonstrates ability to use all scope functions (buttons/biopsy channel) whilst maintaining stable hold on colonoscope Minimises external looping in shaft of instrument
Tip control	<ul style="list-style-type: none"> Integrated technique: Combines tip and torque steering to accurately control the tip of colonoscope and manoeuvre the tip in the correct direction. Individual components: Tip steering: Avoids unnecessary mucosal contact and maintains luminal view, avoiding need for blind negotiation of flexures and 'slide-by' where possible Torque steering: Demonstrates controlled torque steering using right hand/fingers to rotate shaft of colonoscope Luminal awareness: Correctly identifies luminal direction using all available visual clues, and avoids red outs

DOPS form descriptors

Air management	<ul style="list-style-type: none"> • Appropriate insufflation and suction of air to minimise over-distension of bowel while maintaining adequate views
Pro-active problem solving	<ul style="list-style-type: none"> • Anticipates challenges and problems (e.g. flexures and loops) • Uses appropriate techniques and strategies to prevent problems and minimise difficulties and patient discomfort • Recognition: Early recognition of technical challenges and difficulties preventing progression (e.g. loops, fixed pelvis) • Management: Can articulate and demonstrate a logical approach to resolving technical challenges, including early change in strategy when progress not being made
Loop management	<ul style="list-style-type: none"> • Uses appropriate techniques (tip and torque steering, withdrawal, position change) to minimise and prevent loop formation • Early recognition of when loop is forming or has formed • Understands and can articulate techniques for resolution of loops • Resolves loops as soon as technically possible, to minimise patient discomfort and any compromise to scope function • Recognises when loop resolution not possible and safely inserts colonoscope with loop, with awareness and management of any associated patient discomfort
Pace and progress	<ul style="list-style-type: none"> • Takes sufficient time to maximise mucosal views • Insertion of colonoscope speed adjusted to minimise looping, prevent problems and manage difficulties • Able to complete both insertion and withdrawal at pace consistent with normal service lists, adjusted, depending on difficulty of procedure • Extent of examination is appropriate to the indication
Patient comfort	<ul style="list-style-type: none"> • Conscious awareness of patient discomfort and potential causes at all times • Applies logical strategy to minimise any potential or induced discomfort, including anticipation of problems and reducing patient anxiety • Able to utilise effective colonoscopy techniques to resolve the majority of pain-related problems without the need for increased analgesia • Appropriate escalation of analgesic use if technical strategies unsuccessful in managing patient discomfort
Visualisation	<ul style="list-style-type: none"> • Visually and digitally examines the rectum and perineum (or stoma) area to ensure no obstruction or contraindication to insertion of instrument • Well-judged and timely use of screen washes and water irrigation to ensure clear views • Utilises positional changes to maximise mucosal views • Ensures optimal luminal views throughout the examination • Uses mucosal washing and suction of fluid to ensure optimal visualisation of mucosa, particularly at potential blind spots (caecal pole, flexures, recto-sigmoid). • Retroversion in the rectum should be performed to fully visualise the lower rectum and dentate line. If rectal retroversion is not possible, the reason should be indicated. • Recognises and identifies landmarks of complete examination (appendix orifice, ileo-caecal valve, tri-radiate fold or anastomosis/neo-terminal ileum) • There is photo-documentation (or video) of significant findings and landmarks of completion

DOPS form descriptors

MANAGEMENT OF FINDINGS	
Pathology recognition	<ul style="list-style-type: none"> • Accurate determination of normal and abnormal findings • Appropriate use of mucosal enhancement techniques
Pathology	<ul style="list-style-type: none"> • Takes appropriate specimens as indicated by the pathology and clinical context
Management	<ul style="list-style-type: none"> • Performs relevant therapy or interventions if appropriate in clinical context (includes taking no action) • For management of polyps please use DOPyS.
Complications	<ul style="list-style-type: none"> • Ensures risk of complications is minimised • Rapid recognition of complications both during and after the procedure • Manages any complications appropriately and safely
POST PROCEDURE	
Report writing	<ul style="list-style-type: none"> • Records a full and accurate description of procedure and findings • Extent of the procedure is recorded in the report and supported by image/video recording • Uses appropriate endoscopy scoring system
Management plan	<ul style="list-style-type: none"> • Records an appropriate management plan (including medication, further investigation and responsibility for follow-up).
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)	
Communication and teamwork	<ul style="list-style-type: none"> • Maintains clear communication with assisting staff • Gives and receives knowledge and information in a clear and timely fashion • Ensures that both the team and the endoscopist are working together, using the same core information and understand the 'big picture' of the case • Ensures that the patient is at the centre of the procedure, emphasising safety and comfort • Clear communication of results and management plan with patient and/or carers
Situation awareness	<ul style="list-style-type: none"> • Ensure procedure is carried out with full respect for privacy and dignity • Maintains continuous evaluation of the patient's condition • Ensures lack of distractions and maintains concentration, particularly during difficult situations • Intra-procedural changes to scope set-up monitored and rechecked
Leadership	<ul style="list-style-type: none"> • Provides emotional and cognitive support to team members by tailoring leadership and teaching style appropriately • Supports safety and quality by adhering to current protocols and codes of clinical practice • Adopts a calm and controlled demeanour when under pressure, utilising all resources to maintain control of the situation and taking responsibility for patient outcome
Judgement and decision making	<ul style="list-style-type: none"> • Considers options and possible courses of action to solve an issue or problem, including assessment of risk and benefit • Communicates decisions and actions to team members prior to implementation • Reviews outcomes of procedure or options for dealing with problems • Reflects on issues and institutes changes to improve practice

Appendix 8 DOPyS polypectomy for colonoscopy and sigmoidoscopy

Date of Procedure			
Trainee Name		IMC Registration No.	
Trainer Name		IMC Registration No.	
Polyp type Please tick (✓)	Stalked <input type="checkbox"/> Small sessile lesion/EMR <input type="checkbox"/>		
Polyp Site		Polyp size (mm)	
Difficulty of case Please tick (✓)	Easy <input type="checkbox"/> Moderate <input type="checkbox"/> Complicated <input type="checkbox"/>		

Level of supervision Complete DOPyS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
OPTIMISING VIEW OF / ACCESS TO THE POLYP					
Achieves optimal polyp views and position					
Determines full extent of lesion					
Adjusts/stabilises scope position					
Chooses appropriate polypectomy technique					
Checks equipment and snare closure prior to insertion					
Checks appropriate diathermy settings					
Uses appropriate polypectomy technique					
Photo-documents pre and post polypectomy					

Level of supervision	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
Comments					
STALKED POLYPS					
Selects appropriate snare size					
Directs snare accurately over polyp head					
Correctly selects en-bloc or piecemeal removal					
Advances snare sheath towards stalk as snare closed					
Places snare at appropriate position on the stalk					
Mobilises polyp and applies appropriate degree of diathermy					
Comments					
SMALL SESSILE LESIONS / ENDOSCOPIC MUCOSAL RESECTION					
Adequate sub mucosal injection					
Checks lesion lifts adequately					
Selects appropriate snare size					
Directs snare accurately over the lesion					

Level of supervision	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
Correctly selects en-bloc or piecemeal removal depending on size					
Appropriate positioning of snare over lesion as snare closed					
Tents lesion gently away from the mucosa					
Uses cold snare technique or applies appropriate diathermy					
Ensures adequate haemostasis prior to further resection					
Comments					
POST POLYPECTOMY					
Examines remnant stalk/polyp base					
Identifies and appropriately treats residual polyp					
Identifies bleeding and performs adequate endoscopic hemostasis if appropriate					
Retrieves, or attempts retrieval of polyp					
Places tattoo competently, where appropriate					
Comments					

Level of supervision Please tick (✓)	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)					
Communication and teamwork					
Situation awareness					
Leadership					
Judgement and decision making					
Comments					
LEARNING OBJECTIVES FOR THE NEXT CASE					
The objectives should be added to the trainee's personal development plan (PDP) once DOPS is completed					
1.					
2.					
3.					
Overall Degree of Supervision required Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
Please tick (✓) appropriate box					

DOPS form descriptors

OPTIMISING VIEW OF / ACCESS TO THE POLYP	
Achieves optimal polyp views and position	<ul style="list-style-type: none"> Ensures clear views by aspiration/insufflation/wash and maintains optimal polyp position (5-6'0'clock). Takes appropriate action for position correction and clear views throughout the procedure.
Determines full extent of lesion	<ul style="list-style-type: none"> Demonstrates assessing and determining full extent of the lesion using adjunctive measures (e.g. bubble breaker, NBI, dye spray etc.) as appropriate
Adjusts/stabilises scope position	<ul style="list-style-type: none"> Ensures the scope is maintained in a stable position if needed involving an assistant to hold the scope for stable platform before polypectomy
Chooses appropriate polypectomy technique	<ul style="list-style-type: none"> Chooses appropriate polypectomy technique safely without errors taking into account size, morphology, site and access (SMSA concept)
Checks equipment and snare closure prior to insertion	<ul style="list-style-type: none"> Ensures the appropriate equipment (e.g. injection, forceps, snare, clips, rothnet etc.) are available and functioning. Ensures the snare is marked appropriately in the handle before attempting insertion.
Checks appropriate diathermy settings	<ul style="list-style-type: none"> Ensures the diathermy settings are appropriate for the techniques used and no contraindication for diathermy. Ensures the diathermy is available and functioning. Ensures pads are attached and foot pedal accessible.
Photo-documents pre and post polypectomy	<ul style="list-style-type: none"> Ensures accurate photo-documentation pre and post polypectomy
STALKED POLYPS	
Selects appropriate snare size	<ul style="list-style-type: none"> Demonstrates ability to always choose correct snare size appropriate to the polyp.
Directs snare accurately over polyp head	<ul style="list-style-type: none"> Demonstrates ability to use angulation controls, torque to steer snare over polyp head accurately and appropriately.
Correctly selects en-bloc or piecemeal removal depending on size	<ul style="list-style-type: none"> Demonstrates ability to judge and correctly select en-bloc or piecemeal removal of the polyp depending on its size
Advances snare sheath towards stalk as snare closed	<ul style="list-style-type: none"> Ensures that snare sheath is advances slowly and in a controlled fashion towards the stalk as the snare is closed
Places snare at appropriate position on the stalk	<ul style="list-style-type: none"> Ensures that snare is appropriately placed midway between polyp head and stalk base
Mobilises polyp and applies appropriate degree of diathermy	<ul style="list-style-type: none"> Ensures that appropriate amount of tissue is snared and the polyp stalk is mobile. Ensures that the polyp stalk tents away from mucosa towards the contralateral wall. Demonstrates application of appropriate degree of diathermy with no evidence of contra-lateral burns or cutting through too quickly causing bleeding.

DOPS form descriptors

SMALL SESSILE LESIONS / ENDOSCOPIC MUCOSAL RESECTION	
Adequate sub mucosal injection	<ul style="list-style-type: none"> • Demonstrates accurate injection(injection at 45 degree and gradual withdrawal as lesion lifts) of the submucosa maintaining excellent views of the lesion
Checks lesion lifts adequately	<ul style="list-style-type: none"> • Ensures and checks that lesion is lifting adequately and only proceeds if lesion lifts adequately.
Selects appropriate snare size	<ul style="list-style-type: none"> • Demonstrates ability to always choose correct snare size appropriate to the polyp.
Directs snare accurately over the lesion	<ul style="list-style-type: none"> • Demonstrates ability to use angulation controls, torque to steer snare over lesion accurately and appropriately.
Correctly selects en-bloc or piecemeal removal depending on size	<ul style="list-style-type: none"> • Demonstrates ability to judge and correctly select en-bloc or piecemeal removal of the polyp depending on its size.
Appropriate positioning of snare over lesion as snare closed	<ul style="list-style-type: none"> • Demonstrates ability to position snare appropriately over lesion as snare is closed.
Tents lesion gently away from the mucosa	<ul style="list-style-type: none"> • Ensures no additional tissue is trapped within snare by checking snare marking and tenting lesion away from mucosa mobilising the snare
Uses cold snare technique or applies appropriate diathermy	<ul style="list-style-type: none"> • Demonstrates ability to judge and use cold snare technique or Demonstrates application of appropriate degree of diathermy with no evidence of contra-lateral burns or cutting through too quickly causing bleeding.
Ensures adequate haemostasis prior to further resection	<ul style="list-style-type: none"> • Demonstrates checking for bleeding and always ensures adequate haemostasis is achieved before further resection
POST POLYPECTOMY	
Examines remnant stalk/ polyp base	<ul style="list-style-type: none"> • Demonstrates examining remnant stalk/polyp base thoroughly to check for bleeding and any residual polyp tissue
Identifies and appropriately treats residual polyp	<ul style="list-style-type: none"> • Ensures that any residual polyp is identified and appropriately resected or treated (e.g. APC)
Identifies bleeding and performs adequate endoscopic hemostasis if appropriate	<ul style="list-style-type: none"> • Demonstrates identification of bleeding and ensures appropriate treatment method (e.g. clips, APC etc.) are applied adequately to ensure endoscopic haemostasis.
Retrieves, or attempts retrieval of polyp	<ul style="list-style-type: none"> • Ensures polyp retrieval using appropriate method (e.g. forceps, snare, rothnet etc.) according to size of polyp. Demonstrates checking for complete removal of polyp tissue and confirms retrieval with endoscopy staff
Places tattoo competently, where appropriate	<ul style="list-style-type: none"> • Demonstrates ability to use tattoo in appropriate setting. Ensures raised bleb before switching to appropriate ink and places appropriate number of tattoos

DOPS form descriptors

ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)	
Communication and teamwork	<ul style="list-style-type: none"> • Gives and receives knowledge and information in a clear and timely fashion. Ensures that both the team and the endoscopist are working together from the same information and understand the 'big picture' of the case. • Ensures that the patient is at the centre of the procedure, emphasising safety, comfort and giving information in a clear and understandable fashion
Situation awareness	<ul style="list-style-type: none"> • Maintains continuous evaluation of the patient's condition. • Ensures lack of distractions and maintains concentration, particularly during difficult situations.
Leadership	<ul style="list-style-type: none"> • Provides emotional and cognitive support to team members by tailoring leadership and teaching style appropriately. • Supports safety and quality by adhering to current protocols and codes of clinical practice. • Adopts a calm and controlled demeanour when under pressure. Utilising all resources to maintain control of the situation and taking responsibility for patient outcome..
Judgement and decision making	<ul style="list-style-type: none"> • Considers options and possible courses of action to solve an issue or problem, including assessment of risk and benefit. • Chooses a solution to a problem, communicates this to team members and implements it • Reviews outcomes of procedure or options for dealing with problems. Reflects on issues and institutes changes to improve practice

Appendix 9 DOPS for upper GI bleeding

Date of Procedure			
Trainee Name		IMC Registration No.	
Trainer Name		IMC Registration No.	
Outline of case			
Difficulty of case Please tick (✓)	Easy <input type="checkbox"/>	Moderate <input type="checkbox"/>	Complicated <input type="checkbox"/>

Level of supervision Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each criteria	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
PRE-PROCEDURE					
Prioritisation					
Setting & resources					
Safe airway					
Iv access					
Consent					
Monitoring					
Sedation					
Comments					

Level of supervision	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
INTUBATION AND ASSESSMENT OF LESION					
Intubation					
Visualisation of lesion • Suction • Flush • Clot removal					
Characterisation of lesion					
Comments					
MANAGEMENT OF BLEEDING LESIONS					
Treatment decision re: therapy					
Adrenaline injection: • Needle handling • Dose/volume					
Clips: • Check functioning • Deployment					
Banding: • Kit set up • Deployment					
Thermal therapy: • Setting • Use					
Other endotherapy					
Maximal haemostasis achieved					
POST ENDOSCOPY MANAGEMENT					
Documentation of case					
Post endoscopy management					
Comments					

Level of supervision	Maximal supervision	Significant supervision	Minimal supervision	Competent for independent practice	Not applicable
ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)					
Communication and teamwork					
Situation awareness					
Leadership					
Judgement and decision making					
Comments					
LEARNING OBJECTIVES FOR THE NEXT CASE					
The objectives should be added to the trainee's personal development plan (PDP) once DOPS is completed					
1.					
2.					
3.					
Overall Degree of Supervision required Complete DOPS form by ticking box to indicate the appropriate level of supervision required for each item below. Constructive feedback is key to this tool assisting in skill development.	Maximal supervision Supervisor undertakes the majority of the tasks/decisions & delivers constant verbal prompts	Significant supervision Trainee undertakes tasks requiring frequent supervisor input and verbal prompts	Minimal supervision Trainee undertakes tasks requiring occasional supervisor input and verbal prompts	Competent for independent practice No supervision required	Not applicable
Please tick (✓) appropriate box					

DOPS form descriptors

PRE PROCEDURE	
Prioritisation	<ul style="list-style-type: none"> • Procedure prioritized and undertaken at appropriate time of day (in/out of hours) • Patient stability & safety of the procedure has been assessed
Setting & preparation	<ul style="list-style-type: none"> • Appropriate for case: Theatres/Endoscopy Unit/ITU • Appropriately trained staff present • Appropriate pre-procedure checks are performed as per local policies • Appropriate endotherapy equipment available • All assisting staff are fully apprised of the current case • All medications and accessories likely to be required for this case are available
Safe airway	<ul style="list-style-type: none"> • Intubated if appropriate • Suction & positioning
Iv access	<ul style="list-style-type: none"> • 2 x large bore IV cannula
Informed consent	<ul style="list-style-type: none"> • Purpose of endoscopy/alternatives • Risks specific to bleeding e.g. aspiration and failure to cessate • Discussion with colleagues & relatives if patient lacks capacity
Monitoring	<ul style="list-style-type: none"> • Oxygen saturations, pulse, BP and cardiac monitor
Sedation	<ul style="list-style-type: none"> • Appropriate dose
INTUBATION AND ASSESSMENT OF LESION	
Intubation	<ul style="list-style-type: none"> • Maintains luminal view
Visualisation of lesion	<ul style="list-style-type: none"> • Inspects all areas thoroughly
- Suction	<ul style="list-style-type: none"> • Correct channel positioning • Enables good views • Decreases aspiration risk
- Flush	<ul style="list-style-type: none"> • Adequate flush used • Scope handling
- Clot removal	<ul style="list-style-type: none"> • Appropriate method used • Injection 1st if appropriate
Characterisation of lesion	<ul style="list-style-type: none"> • Correct description of lesion • Identifies stigmata of recent haemorrhage • Identifies stigmata associated with re bleeding risk • Correct description of location (+ photo)
MANAGEMENT OF BLEEDING LESIONS	
Treatment decision re: therapy	<ul style="list-style-type: none"> • Chooses appropriate therapy <ul style="list-style-type: none"> - For lesion & setting - For level of experience

DOPS form descriptors

MANAGEMENT OF BLEEDING LESIONS	
Treatment decision re: therapy	<ul style="list-style-type: none"> • Chooses appropriate therapy <ul style="list-style-type: none"> - For lesion & setting - For level of experience
ADRENALINE INJECTION: Needle handling - Dose/Volume	<ul style="list-style-type: none"> • Clear instructions to assistant • Appropriate area/depth injected • Appropriate dose injected • Correct concentration of adrenaline used
CLIPS: Check functioning Deployment	<ul style="list-style-type: none"> • Knowledge of clips used • Clip function checked, clear instructions • Correct targeted placement • Correct & timely deployment • Appropriate number of clips used
BANDING: Kit set up Deployment	<ul style="list-style-type: none"> • Correct scope/kit set up • Safe re intubation • Appropriate selection of 1st varix • Distal suction positioning • Red out obtained • Band deployed accurately/smoothly • Repeat banding as appropriate
THERMAL THERAPY: Setting Use	Heater Probe, APC <ul style="list-style-type: none"> • Knowledge of local equipment available • Safety considered/grounding pad attached • Correct probe selected • Appropriate settings selected • Clear instructions to assistant • Correct targeted placement
OTHER ENDOTHERAPY:	List details in comments box <ul style="list-style-type: none"> • Variceal Glue Injection • Haemospray • Sclerotherapy
MAXIMAL HAEMOSTASIS ACHIEVED	<ul style="list-style-type: none"> • Haemostasis achieved if possible • Combination haemostasis used

MANAGEMENT OF BLEEDING LESIONS	
DOCUMENTATION OF CASE	<ul style="list-style-type: none"> • Indications and pre procedure risk scoring • Accurate description of lesions identified • Location documented with photographs • Description of re bleeding stigmata • Description of endotherapy used • Problems encountered • Post endoscopy management plan (below)
POST ENDOSCOPY MANAGEMENT PLAN	<ul style="list-style-type: none"> • Re bleeding risk • Specific treatments to be initiated • Plan for refractory bleeding • Repeat OGD instructions • Verbal handover to nursing & medical staff • Re assesses patient stability before movement for ongoing care.

DOPS form descriptors

ENTS (ENDOSCOPIC NON-TECHNICAL SKILLS)	
Communication and teamwork	<ul style="list-style-type: none"> • Maintains clear communication with assisting staff • Gives and receives knowledge and information in a clear and timely fashion • Ensures that both the team and the endoscopist are working together, using the same core information and understand the 'big picture' of the case • Ensures that the patient is at the centre of the procedure, emphasising safety and comfort • Clear communication of results and management plan with patient and/or carers
Situation awareness	<ul style="list-style-type: none"> • Ensure procedure is carried out with full respect for privacy and dignity • Maintains continuous evaluation of the patient's condition • Ensures lack of distractions and maintains concentration, particularly during difficult situations • Intra-procedural changes to scope set-up monitored and rechecked
Leadership	<ul style="list-style-type: none"> • Provides emotional and cognitive support to team members by tailoring leadership and teaching style appropriately • Supports safety and quality by adhering to current protocols and codes of clinical practice • Adopts a calm and controlled demeanour when under pressure, utilising all resources to maintain control of the situation and taking responsibility for patient outcome
Judgement and decision making	<ul style="list-style-type: none"> • Considers options and possible courses of action to solve an issue or problem, including assessment of risk and benefit • Communicates decisions and actions to team members prior to implementation • Reviews outcomes of procedure or options for dealing with problems • Reflects on issues and institutes changes to improve practice

Appendix 10 Curriculum for HST in Gastroenterology

The Gastroenterology HST curriculum can be downloaded at <https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2018/09/HST-Gastroenterology-Curriculum-Printable.pdf>

This information is correct as of July 2021.

If you have any queries please contact the RCPI Helpdesk helpdesk@rcpi.ie or +353 1 8639721

Appendix 11 Curriculum for HST in General Surgery

The General Surgery curriculum can be downloaded at <https://www.iscp.ac.uk/media/1103/general-surgery-curriculum-aug-2021-approved-oct-20v3.pdf>

This information is correct as of July 2021.

If you have any queries please contact Surgical Affairs surgicalaffairs@rcsi.com or +353 1 4022100

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