

Appendix

1. Direct Observation of Procedural Skills Formative Assessment Form
2. Physician characteristics associated with proximal adenoma detection
3. Physician characteristics associated with distal adenoma detection
4. Physician characteristics associated with distal SSL detection



Formative DOPS Assessment Form

Colonoscopy and Flexible Sigmoidoscopy

Adapted from Joint Advisory Group on GI Endoscopy

Colonoscopist

Trainer / Peer

Date (DD/MM/YYYY)

- Scale and Criteria Key**
- 4 Highly skilled performance
 - 3 Competent and safe throughout procedure, no uncorrected errors
 - 2 Some standards not yet met, aspects to be improved, some errors uncorrected
 - 1 Accepted standards not yet met, frequent errors uncorrected
 - n/a Not applicable
- Major Criteria Minor Criteria

Criteria	Scale	Comments
Assessment, consent, communication <ul style="list-style-type: none"> ■ Obtains informed consent using a structured approach <ul style="list-style-type: none"> ○ Satisfactory procedural information ○ Risk and complications explained ○ Co-morbidity ○ Sedation ○ Opportunity for questions ■ Demonstrates respect for patient's views and dignity during the procedure ■ Communicates clearly with patient, including outcome of procedure with appropriate management and follow up plan. Full endoscopy report. 		
Safety and sedation <ul style="list-style-type: none"> ■ Safe and secure IV access ■ Gives appropriate dose of analgesia and sedation and ensures adequate oxygenation and monitoring of patient ■ Demonstrates good communication with the nursing staff, including dosages and vital signs 		
Endoscopic skills during insertion and procedure <ul style="list-style-type: none"> □ Checks endoscope function before intubation □ Performs PR ■ Maintains luminal view / inserts in luminal direction ■ Demonstrates awareness of patient's consciousness and pain during the procedure and takes appropriate action □ Uses torque steering and control knobs appropriately □ Uses distension, suction and lens washing appropriately ■ Recognises and logically resolves loop formation □ Uses position change and abdominal pressure to aid luminal views □ Completes procedure in reasonable time 		
Diagnostic and therapeutic ability <ul style="list-style-type: none"> ■ Adequate mucosal visualisation ■ Recognises caecal/desc. colon landmarks or incomplete examination ■ Accurate identification and management of pathology ■ Uses diathermy and therapeutic techniques appropriately and safely ■ Recognises and manages complications appropriately 		

Case Difficulty

Extremely easy	Fairly easy	Average	Fairly difficult	Very challenging
1	2	3	4	5

Learning Objectives for Next Cases

Physician characteristics associated with proximal adenoma detection

Variable	OR*	95% CI*	p-value
Male Physician	1.06	0.93-1.20	0.377
Specialty Training			
Gastroenterology	Reference		
General surgery	0.92	0.83-1.02	0.128
Internal medicine	0.76	0.55-1.04	0.084
Year of Medicine Graduation			
< 1980	Reference		
1980 - 1990	1.11	0.93-1.32	0.245
1990 - 2000	1.20	1.02-1.42	0.027
After 2000	1.07	0.91-1.26	0.430
North American Medical School	0.99	0.85-1.15	0.898
Colonoscopy Volume	1.00	0.94-1.07	0.929
DOPS			
Achieved 3 or 4 on all major criteria	Reference		
Achieved a 2 on any major criteria	1.02	0.91-1.15	0.731
Achieved a 1 on any major criteria	0.82	0.61-1.12	0.214
No DOPS	1.00	0.88-1.14	0.978
Patient Age	1.18	1.16-1.19	<0.001
Patient Male Gender	1.52	1.47-1.57	<0.001
First FIT	1.37	1.34-1.39	<0.001
FIT Value			
FIT 10-15 mcg/gram	Reference		
FIT 15-20 mcg/gram	1.25	1.19-1.31	<0.001
FIT 20-40 mcg/gram	1.40	1.34-1.46	<0.001
FIT ≥ 40 mcg/gram	1.69	1.63-1.76	<0.001

*OR = Odds Ratio

*CI = Confidence Interval

Physician characteristics associated with distal adenoma detection

Variable	OR	95% CI*	p-value
Male Physician	1.07	0.93-1.24	0.360
Specialty Training			
Gastroenterology	Reference		
General surgery	0.92	0.82-1.04	0.209
Internal/family medicine	0.70	0.50-0.99	0.042
Year of Medicine Graduation			
< 1980	Reference		
1980 - 1990	1.02	0.84-1.24	0.846
1990 - 2000	1.11	0.92 – 1.34	0.267
After 2000	0.95	0.79 – 1.15	0.612
North American Medical School	0.95	0.80 – 1.12	0.535
Colonoscopy Volume	1.03	0.96 – 1.11	0.402
DOPS			
Achieved 3 or 4 on all major criteria	Reference		
Achieved a 2 on any major criteria	1.03	0.90 – 1.18	0.666
Achieved a 1 on any major criteria	0.85	0.60 – 1.20	0.347
No DOPS	0.97	0.83 – 1.12	0.657
Patient Age	1.20	1.18 – 1.21	<0.001
Patient Male Gender	1.57	1.52 – 1.62	<0.001
First FIT	1.40	1.38-1.42	<0.001
FIT Value			
FIT 10-15 mcg/gram	Reference		
FIT 15-20 mcg/gram	1.23	1.18 – 1.29	<0.001
FIT 20-40 mcg/gram	1.36	1.31 – 1.42	<0.001
FIT ≥ 40 mcg/gram	1.63	1.57 – 1.69	<0.001

*OR = Odds Ratio

*CI = Confidence Interval

Physician characteristics associated with distal SSL detection

Variable	OR*	95% CI*	p-value
Male Physician	0.96	0.79 – 1.16	0.646
Specialty Training			
Gastroenterology	Reference		
General surgery	0.90	0.78 – 1.04	0.155
Internal/family medicine	0.56	0.31 – 1.00	0.050
Year of Medicine Graduation			
< 1980	Reference		
1980 - 1990	0.90	0.70 – 1.17	0.449
1990 - 2000	1.04	0.81 – 1.32	0.767
After 2000	0.92	0.72 – 1.18	0.524
North American Medical School	0.98	0.78 – 1.24	0.882
Colonoscopy Volume	1.00	0.93 – 1.08	0.931
DOPS			
Achieved 3 or 4 on all major criteria	Reference		
Achieved a 2 on any major criteria	1.00	0.85 – 1.18	0.969
Achieved a 1 on any major criteria	0.66	0.36– 1.20	0.170
No DOPS	1.11	0.92– 1.34	0.268
Advanced adenoma	1.81	1.56-2.09	<0.001
Patient Age	1.10	1.03 – 1.17	0.005
Male Patient	1.43	1.25 – 1.63	<0.001
First FIT	1.27	1.15-1.38	<0.001
FIT Value			
FIT 10-15 mcg/gram	Reference		
FIT 15-20 mcg/gram	1.29	1.06 – 1.56	0.012
FIT 20-40 mcg/gram	1.29	1.08 – 1.55	0.006
FIT ≥ 40 mcg/gram	1.49	1.27 – 1.74	<0.001

*OR = Odds Ratio

*CI = Confidence Interval