

Trainee Identification:	Date://
Program:	Evaluator Identification:

# Global Assessment for Abdominal Colectomy, Ileostomy and Hartmann Closure Rectum

Instructions: Please read each action highlighted in grey. Evaluate the performance of each action according to the 1-5 scale listed below the stated action. Then write the corresponding score in the column labeled "score.

E	Exposure	Score
E1	Demonstrates knowledge of optimum skin incision/portal/access	
	1 Does not extend an incision when struggling for access	
	<ul><li>2</li><li>3 Makes an incision clearly too small or too large</li></ul>	
	4	
	5 Verbally states or marks with a pen the anatomical landmarks prior to making the incision. Extends incision if necessary for exposure.	
E2	Achieves an adequate exposure through purposeful dissection in correct tissue planes and identifies all structures correctly	
	<ul> <li>Describes the structure encountered in the dissection in the wrong location. Rough blind palpation of abdominal contents causing damage</li> <li>2</li> </ul>	
	3 Tries to maintain the standard approach despite the fact that access is proving difficult. Forgets to examine some of the abdominal contents	
	<ul> <li>Is able to give a running commentary to the trainer of the structures encountered. Makes a cautious entry through peritoneum. Systematic inspection of contents of abdomen</li> </ul>	
E-T	Total Score for Exposure	
ILH-IT	Abdominal colectomy with ileostomy and Hartmann Intra-operative Technique	Score
ILH-IT1	Sets up appropriate retraction, including bowel packing as appropriate	
	Surgeon switches back and forth between colon segments, needing frequent repositioning of retraction	
	<ul><li>2</li><li>3 Sets up exposure once; never repositions for best visualization</li></ul>	
	4	
	Arranges retraction to expose each segment of colon with minimal adjustment necessary	
ILH-IT2	Mobilizes attachments of R colon including appendix and distal terminal ileum	
	1 Frequently changes location, or plane of mobilization, moves back and	



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	forth along length of R colon  2	
	3 Does not seem to have a plan to find proper plane of dissection	
	4	
	5 Starts the mobilization at one end of R colon, finds the appropriate plane, and proceeds to the other end	
ILH-IT3	Identifies and preserves, R ureter	
	1 Fails to search for or identify ureter	
	2	
	3 Observes general area of ureter, but does not positively identify by observing peristalsis	
	4	
	5 Positively identifies ureter prior to RLQ dissection by observing peristalsis in ureter, and corroborating this with assisting surgeon	
ILH-IT4	Takes down hepatic flexure, noting position of duodenum, and avoiding	
	venous injury. Mobilizes mesentery off duodenum	
	1 Causes bleeding from vessels in hepatocolic area. Mobilizes mesentery, but does not recognize duodenum	
	2	
	3 Fails to identify the duodenum	
	4	
	5 Prevents bleeding while taking down hepatocolic ligaments; carries dissection laterally and down medial to duodenum	
ILH-IT5	Deals with omentum appropriately (depending on whether it will be preserved or not), to distal transverse colon	
	Damages gastroepiploic vessels: fails to enter lesser sac; if removing omentum: encounters excessive bleeding or damages colon	
	2	
	3 Fails to make the decision to preserve or resect omentum prior to hepatic flexure takedown	
	4	
	5 Enters proper plane to preserve omentum or takes blood supply appropriately	
ILH-IT6	Mobilizes sigmoid from lateral peritoneal attachments, staying in proper	
ILITIO	avascular plane	
	1 Mobilizes the sigmoid colon with difficulty, repeatedly causing retroperitoneal and intraperitoneal bleeding	
	2	
	<ul><li>3 Multiple attempts to find the correct avascular plane for mobilization</li><li>4</li></ul>	
	Mobilizes the sigmoid colon skillfully along the avascular plane, with minimal bleeding	
ILH-IT7	Identifies and preserves L ureter	



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	<ul><li>1 Fails to look for or positively identify the left ureter</li><li>2</li></ul>	
	3 Verbalizes that identification of ureter is being/ has been done without positively demonstrating its presence to assistant	
	4	
	5 Identifies left ureter (inter-sigmoidal fossa) by demonstrating its anatomical presence and the presence of visible peristalsis to assistant	
ILH-IT8	Mobilizes splenic flexure from descending colon towards spleen, ensuring no traction on spleen, and from L transverse colon towards spleen, preserving spleen from harm	
	<ul> <li>Damages the spleen or its hilum, or avulses the splenic capsule during splenic flexure mobilization</li> </ul>	
	<ul> <li>Fails to recognize the potential for damage to the spleen during splenic flexure mobilization</li> </ul>	
	<ul> <li>4</li> <li>5 Mobilizes the splenic flexure skillfully, making sure to avoid the spleen and its hilum, and avoiding any traction on the spleen</li> </ul>	
ILH-IT9	Identify appropriate site of transaction of rectosigmoid and does not enter	
	the presacral plane	
	<ul><li>1 Transect the rectum below the level of the sacral promontory</li><li>2</li></ul>	
	<ul><li>3 Carries distal dissection too low and enters the presacral plane</li><li>4</li></ul>	
	5 Transects the rectosigmoid colon at the appropriate location, at/above sacral promontory, without breaching the presacral plane	
ILH-IT10	Divide major vascular pedicles safely, as well as mesentery of colon	
	1 Fails to identify major vascular pedicles and to gain vascular control, resulting in bleeding of the pedicles	
	2	
	3 Unnecessarily ligates excessive number of vascular branches by failing to take major vessels	
	<ul> <li>4</li> <li>5 Accurately and carefully identifies, divides and ligates major vascular pedicles after ensuring vascular control</li> </ul>	
ILH-IT11	Transects rectosigmoid, and distal ileum near cecum	
	1. Divides bowel too far from cecum / too high or low in rectosigmoid	
	2.	
	3.No regard or discussion of where bowel should be divided at either site	
	4.     5. Identifies proper site for transection of bowel in both places	
ILH-IT12	Creates opening for ileostomy at predetermined site, ensuring aperture is correct size	



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	Uses different site without discussion of rationale/creates inappropriate size opening and location	
	2	
	3 Uses chosen site without regard to any changes based on surgery/anatomy	
	4	
	5 Re-evaluates chosen stoma site and uses appropriate size for ileostomy	
ILH-IT13	Delivers distal ileum through ileostomy opening with mesentery correctly oriented	
	<ul><li>1 Twists ileum and mesentery / tears mesentery upon delivery</li><li>2</li></ul>	
	<ul><li>3 Does not check orientation of ileum and mesentery before delivery</li><li>4</li></ul>	
	5 Orients ileum with mesentery correctly and carefully pulls through defect	
ILH-IT14	After wound closure completed, matures stoma in Brooke fashion	
	1 Creates a flat ileostomy	
	<ul><li>2</li><li>3 Everts but does not get adequate length for bud</li></ul>	
	4	
	5 Creates good bud with seromuscular sutures	
ILH-IT-T	Total Score for Abdominal colectomy, lleostomy and Hartmann Intraoperative Technique	
С	Closure	Score
'	Completes a sound wound repair where appropriate	
	1Ties very tight sutures, clearly strangulating soft tissue	
	<del>-</del>	
	3 Leaves too large a gap between sutures so that sutures are not properly opposed	
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Global Rating Scale ILH Competencies Page 4 of 6 Version: IBMT-06.2010



Trainee Identification:	Date://
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	Exposure	ILH Intraoperative Technique	Closure
Total			

# GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE

Domain of Surgical Performance	Notes	UNSAT	GEN SURG	BRD CR SURG	COMP CR SURG	CR Surg
Respect for Tissue	Appropriate handling of tissue, minimizes tissue damage through appropriate use of instruments and appropriate force		V			V
Time and Motion	Efficient and economic movement	V	V	V	V	V
Instrument Handling	Competent use of instruments, fluid movements without stiffness or awkwardness	V	V	V	V	V
Knowledge of Instruments	Familiar with names and uses of instrument required for this procedure, does not ask for wrong instrument or use incorrect names when asking for instruments		V	V		V
Flow of Operation	Demonstrates forward planning; course of operation demonstrated through effortless flow from one move to the next		V			<b>V</b>
Use of Assistant (if applicable)	Strategically used assistants to the best advantage at all times		V	V	V	
Knowledge of Specific Procedure	Demonstrated familiarity with all steps of the operation /procedure		V	V	V	V
Quality of Final Product			V	V	V	V

Global Rating Scale ILH Competencies Page 5 of 6 Version: IBMT-06.2010

A	MERCAN STEP	
OF COLO	ASCRS 1899	

Prog	gram:		Eva	luator	Identification	on:		
ased on the <b>OV</b> erformance, the errent competer	candidate's	Unsatisfactory – Below the level general surgeon.  Gen SURG – Could function as a general surgeon. Basic competent technical skills.  BRD CR SURG – Borderline CR surgeon.  COMP CR SURG – Competent independent CR surgeon. More advanced competence in technical supervision as a colorectal surgeon Could function as an independent practitioner. Professionally sophist At an exemplary level would also in the person is competent enough to a resource to other health care professionals.	as an skills.	<b>√</b>	<b>▼</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
Сог	EXAM	INER STICKER		CANI	DIDATE ST	TICKER		

ILH Competencies Version: IBMT-06.2010 Page 6 of 6 Global Rating Scale



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E-T	Total Score for Exposure	
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	Damages gastroepiploic vessels: fails to enter lesser sac; if removing omentum: encounters excessive bleeding or damages colon	
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ILITIO	avascular plane	
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ILH-IT11	Transects rectosigmoid, and distal ileum near cecum	
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	<ul><li>3 Does not check orientation of ileum and mesentery before delivery</li><li>4</li></ul>	
	5 Orients ileum with mesentery correctly and carefully pulls through defect	
ILH-IT14	After wound closure completed, matures stoma in Brooke fashion	
	1 Creates a flat ileostomy	
	<ul><li>2</li><li>3 Everts but does not get adequate length for bud</li></ul>	
	4	
	5 Creates good bud with seromuscular sutures	
ILH-IT-T	Total Score for Abdominal colectomy, lleostomy and Hartmann Intraoperative Technique	
С	Closure	Score
'	Completes a sound wound repair where appropriate	
	1Ties very tight sutures, clearly strangulating soft tissue	
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	3 Leaves too large a gap between sutures so that sutures are not properly opposed	
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Global Rating Scale ILH Competencies Page 4 of 6 Version: IBMT-06.2010



Trainee Identification:	Date://
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	Exposure	ILH Intraoperative Technique	Closure
Total			

# GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE

Domain of Surgical Performance	Notes	UNSAT	GEN SURG	BRD CR SURG	COMP CR SURG	CR Surg
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Time and Motion	Efficient and economic movement	V	V	V	V	V
Instrument Handling	Competent use of instruments, fluid movements without stiffness or awkwardness	V	V	V	V	V
Knowledge of Instruments	Familiar with names and uses of instrument required for this procedure, does not ask for wrong instrument or use incorrect names when asking for instruments		V	V		V
Flow of Operation	Demonstrates forward planning; course of operation demonstrated through effortless flow from one move to the next		V			<b>V</b>
Use of Assistant (if applicable)	Strategically used assistants to the best advantage at all times		V	V	V	
Knowledge of Specific Procedure	Demonstrated familiarity with all steps of the operation /procedure		V	V	V	V
Quality of Final Product			V	V	V	V

Global Rating Scale ILH Competencies Page 5 of 6 Version: IBMT-06.2010

A	MERCAN STEP	
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Prog	gram:		Eva	luator	Identification	on:		
ased on the <b>OV</b> erformance, the errent competer	candidate's	Unsatisfactory – Below the level general surgeon.  Gen SURG – Could function as a general surgeon. Basic competent technical skills.  BRD CR SURG – Borderline CR surgeon.  COMP CR SURG – Competent independent CR surgeon. More advanced competence in technical supervision as a colorectal surgeon Could function as an independent practitioner. Professionally sophist At an exemplary level would also in the person is competent enough to a resource to other health care professionals.	as an skills.	<b>√</b>	<b>▼</b>	<b>✓</b>	<b>✓</b>	<b>√</b>
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ILH Competencies Version: IBMT-06.2010 Page 6 of 6 Global Rating Scale



#### **Global Assessment LAR**

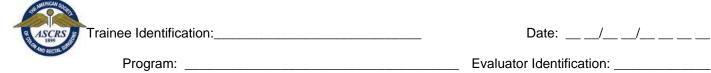
Instructions: Please read each action highlighted in grey. Evaluate the performance of each action according to the 1-5 scale listed below the stated action. Then write the corresponding score in the column labeled "score.

Exposure	Score
Demonstrates knowledge of optimum skin incision/portal/access	
1 Does not extend an incision when struggling for access	
4	
5 Verbally states or marks with a pen the anatomical landmarks prior to making the incision. Extends incision if necessary for exposure.	
Achieves an adequate exposure through purposeful dissection in correct tissue planes and identifies all structures correctly	
1 Describes the structure encountered in the dissection in the wrong location. Rough blind palpation of abdominal contents causing damage	
3 Tries to maintain the standard approach despite the fact that access is proving difficult. Forgets to examine some of the abdominal contents	
<ul> <li>Is able to give a running commentary to the trainer of the structures encountered. Makes a cautious entry through peritoneum. Systematic inspection of contents of abdomen</li> </ul>	
Total Score for Exposure	
LAR Intraoperative Technique	Score
Mobilizes sigmoid/left colon with regard to correct planes; the superior rectal artery and inferior mesenteric vessels are identified, leaving intact the pre-aortic nerves and superior hypogastric plexus	
Fails to mobilize colon safely and fails to identify adjacent structures correctly	
4	
5 Mobilizes colon safely. Identifies adjacent structures carefully. Careful and accurate identification	
Ureters are identified bilaterally	
1 Fails to identify ureters correctly	
	Demonstrates knowledge of optimum skin incision/portal/access  1 Does not extend an incision when struggling for access  2



	and tying the IMA pedicle.	
	4 5 Ureters identified correctly	
	·	
LAR-IT3	Mobilizes the rectum by sharp, anatomic dissection;	
	<ul> <li>1 Fails to establish oncologically sound and safe vascular resection margins causes injury to sidewall and pre-sacral vessels, nerves, and ureters</li> <li>2</li> </ul>	
	<ul> <li>3 Mobilizes by sharp dissection, and causes disruption of less than 20% of the fascia propria envelope.</li> <li>4</li> </ul>	
	5 Establishes oncologically sound and safe vascular resection margins: preserves an intact mesorectal fascial envelope and intact endopelvic fascia; avoids injury to sidewall and pre-sacral vessels, nerves, and ureters	
LAR-IT4	Dissects the rectum in appropriate anterior plane.	
	Makes proctotomy in anterior rectal wall	
	2	
	3 Anatomic planes reasonably well identified, but frequently obscured by intermittent bleeding.	
	4	
	5 Male: identifies prostate/seminal vesicles; makes decisions about anterior plane of dissection with regard to Denonvillers's fascia and location of cancer	
	Female: identifies vagina	
LAR-IT5	Decides on "TME or subtotal mesorectal excision with regard to tumor location: if subtotal, divides across mesorectum without coning, at least 2 cm beyond cancer; if TME, dissects circumferentially to pelvic floor	
	1 Fails to adequately obtain a distal margin, cuts across tumor.	
	<ul> <li>3 Is able to decide on TME vs partial TME based on tumor location, but specimen has mild coning, fascia propria 10-20%defects, or distance on partial mesorectum inadequate.</li> <li>4</li> </ul>	
	5 Able to quickly and accurately decide on TME vs partial TME. For TME, no coning, intact fascia propria, with obvious clearance of lesion. For partial TME, at least 2 cm distal to the tumor on the mucosa and the mesorectum	
LAR-IT6	Divides inferior mesenteric artery at its origin; divides inferior mesenteric vein at inferior border of pancreas; incises bare area of left colon mesentery	
	1 Ligates branches of IMA within mesentery.	
	2	
	3 Ligates the IMA I midway.	
	4	

Global Rating Scale LAR Competencies Page 2 of 6 Version: NNM-06.2010



	5 High ligation of the IMA/IMV bare area of colonic mesentery recognized and incised.	
LAR-IT7	Divides the bowel with regard to minimizing spillage\contamination  1 Resects bowel causing spillage and contamination  2 3 Minimal spillage/contamination  4 5 Makes safe resection without bleeding or spillage	
LAR-IT8	If the double staple technique is used: applies the transverse stapler across the rectum ensuring that the other tissue (e.g. vagina) is not trapped  1 Failure to clearly delineate proximate tissue that may be trapped in the stapler (vagina/seminal vesicles). Stapled tissue thick/substantial mesentery trapped posteriorly in staple line.  2 3 Transverse stapler clear of other tissues, but clearance between staple line and vagina/vesicles small.  4 5 Other tissues well clear of TA device, rectal mesentery cleared posteriorly, at least 1 cm of clearance on the staple line between adjacent structures	
LAR-IT9	Checks specimen for satisfactory margin of clearance, quality of mesorectal dissection  1 Sends specimen off without consideration of margins, quality of fascia propria or inclusion of pathology if appropriate).  2 3 Checks distal margin, but no others.  4 5 Checks specimen for satisfactory margin of clearance, quality of mesorectal dissection.	
LAR-IT10	Mobilizes descending colon and splenic flexure in the correct plane with regard to avoiding splenic, gastric or colonic injury;  1 Fails to mobilize the splenic flexure 2 3 Incomplete mobilization but tension-free mesentery 4 5 Complete flexure mobilization of splenic flexure	
LAR-IT11	If the double staple technique is used: selects correct EEA stapler size; applies purse string suture correctly; passes cartridge atraumatically per anus and brings trocar through or adjacent to rectal staple line; couples the anvil and cartridge atraumatically per anus and bring trocar through or adjacent to rectal staple line; couples the anvil and cartridge with correct orientation of the colon and ensures no tissue trapping as anvil and	

Global Rating Scale LAR Competencies Page 3 of 6
Version: NNM-06.2010



	cartridge are approximated; checks correct firing zone of instrument before firing	
	<ul> <li>Purse string incomplete/with gaps; trocar introduced far from the staple line; indifferent colonic orientation; no consideration of potential tissue trapping.</li> <li>2</li> </ul>	
	<ul> <li>3 Purse string appears intact, but fails to inspect, struggling with trocar introduction, minimal clearance of adjacent tissue/bladder/vagina</li> <li>4</li> </ul>	
	<b>5</b> Careful purse string technique whether with an automatic device or hand sewn; trocar introduced adjacent to/or through the staple line, careful/deliberate closing of the device; no tissue trapping	
LAR-IT12	Establishes a tension-free, well-vascularized, intact anastomosis, with correct orientation of the colon (i.e. no twist in the mesentery)	
	Anastomosis created with tension and/or twists in the mesentery 2	
	3 Some tension, appears well-vascularized. 4	
	5 Intact anastomosis is tension-free, well-vascularized with an adequate lumen	
LAR-IT13	If the double staple technique is used: inspects the tissue donuts and sends these specimens for pathological examination	
	No donut inspection. No pathologic follow up.	
	2	
	3 4	
	<b>5</b> Carefully inspects the donuts, gives feedback on degree of integrity; sends as a path specimen.	
LAR-IT 14	Test the anastomosis with air insufflation and saline filled pelvis	
	1 Fails to test the anastomosis.	
	<ul><li>2</li><li>3 Tests the anastomosis via proctoscopy, incomplete inflation of the proximal colon.</li></ul>	
	<b>4</b>	
	5 Tests the anastomosis via proctoscopy, makes sure there is adequate insufflation with no leak.	
LAR-IT15	Establishes diverting stoma at appropriate site, with adequate aperture, hemostasis correct orientation of afferent/efferent limbs, minimal tension; preop marking if appropriate.	
	<ul><li>1 No preop marking, no consideration to anatomy when siting stoma, inadequate aperature size/width.</li><li>2</li></ul>	
	No preop marking; consideration of anatomy done; some mobilization to relieve tension.	

S ASCRS	Trainee Identification:	
1899		

Trainee Ider	ntification: Date:/				
Progra	am: Evaluator Identification:				
LAR-IT-T	Preop marking and counseling; placement of ostomy in marked spot; mobilization to create minimal tension/ correct orientation of limbs of ostomy.				
	Total Score for LAR Intraoperative Technique				
C	Closure	Score			
	Completes a sound wound repair where appropriate				
	1 Ties very tight sutures, clearly strangulating soft tissue				

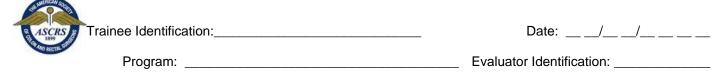
C	Closure	Score
	Completes a sound wound repair where appropriate	
	1 Ties very tight sutures, clearly strangulating soft tissue 2	
C1	Leaves too large a gap between sutures so that sutures are not properly opposed	
	4 5 Closes each layer without tension	
	Protects the wound with dressings, splints and drains where appropriate	
C2	Walks away from the operating table without briefing the assistant or the nurse about required dressing.	
62	3 Fails to specify required dressing	
	4	
	5 Personally supervises the application of the wound dressing	
С-Т	Total score for closure	

	Exposure	LAR Intra-op Technique	Closure
Total			

# GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE

Domain of Surgical Performance	Notes	UNSAT	GEN SURG	BRD CR SURG	COMP CR SURG	CR Surg
Respect for Tissue	Appropriate handling of tissue, minimizes tissue damage through appropriate use of instruments and appropriate force		V			<b>V</b>

LAR Competencies Version: NNM-06.2010 Page 5 of 6 Global Rating Scale



Time and Motion	Efficient and economic movement	V	V	V	V	V
Instrument Handling	Competent use of instruments, fluid movements without stiffness or awkwardness	V	V	V	V	V
Knowledge of Instruments	Familiar with names and uses of instrument required for this procedure, does not ask for wrong instrument or use incorrect names when asking for instruments			<b>V</b>		
Flow of Operation	Demonstrates forward planning; course of operation demonstrated through effortless flow from one move to the next					
Use of Assistant (if applicable)	Strategically used assistants to the best advantage at all times	V	V	V	V	V
Knowledge of Specific Procedure	Demonstrated familiarity with all steps of the operation /procedure	V	V	V	V	V
Quality of Final Product		V	V	V	V	V
Based on the <b>OVERALL</b> performance, the candidate's current competence	Unsatisfactory – Below the level of a general surgeon.  Gen SURG – Could function as a general surgeon. Basic competence in technical skills.  BRD CR SURG – Borderline CR surgeon.  COMP CR SURG – Competent as an independent CR surgeon. More advanced competence in technical skills.  CR SURG – Could practice without supervision as a colorectal surgeon. Could function as an independent practitioner. Professionally sophisticated. At an exemplary level would also imply the person is competent enough to act as a resource to other health care professionals					

Comments		



#### Operative Competency Evaluation

Trainee Identification:	PGY Level	Date://
Program:	Evalua	tor Identification:

# Global Assessment of Endoscopic Skills

Instructions: Please read each action highlighted in grey. Evaluate the performance of each action according to the 1-5 scale listed below the stated action. Then write the corresponding score in the column labeled "score.

C-IT	Colonoscopy Technique	Score
C-IT1	Scope navigation/Safe Advancement	
	Not able to achieve goals despite detailed verbal guidance requiring takeover	
	<ul><li>2.</li><li>3. Requires verbal guidance to completely navigate the lower GI tract</li><li>4.</li></ul>	
	Expertly able to manipulate the scope in the colon autonomously and achieve farthest landmark as appropriate	
C-IT2	Use of strategies for loop reduction/ Advancement (Pull-back, External Pressure, Position Change, use of Pediatric Scope if necessary)	
	<ol> <li>Unable to utilize appropriate strategies for scope advancement despite verbal assistance</li> </ol>	
	<ul><li>2.</li><li>3. Use of some strategies appropriately, but requires moderate verbal guidance</li></ul>	
	<ul><li>4.</li><li>5. Expert use of appropriate strategies for advancement of the scope while optimizing patient comfort without prompting</li></ul>	
C-IT3	Ability to keep a clear endoscopic field	
	<ol> <li>Inability to maintain view despite extensive verbal cues</li> <li>2.</li> </ol>	
	<ol> <li>Requires moderate prompting to maintain clear view</li> <li>4.</li> </ol>	
	<ul><li>5. Used insufflation, suction, and irrigation optimally to maintain clear view of endoscopic field</li></ul>	
C-IT4	Monitoring and management of patient discomfort during procedure	
	Does not quickly recognize discomfort or requires staff prompting to act	
	<ul><li>2.</li><li>3. Recognizes pain but does not address loop or sedation problems in a timely manner</li></ul>	
	<ul><li>4.</li><li>5. Proactive assessment and management of comfort and sedation during procedure</li></ul>	
C-IT5	Landmark Recognition/Localization of Instrument	

	Generally unable to recognize most landmarks	
	2.	
	Recognizes cecum and some landmarks but generally poor perception of Instrument/Pathology location	
	4.	
	5. Able to recognize all landmarks and clear idea of instrument/pathology location in relation to landmarks	
C-IT6	Quality of examination/Visualization of Mucosa during withdrawal	
	Could not perform a satisfactory exam despite verbal and manual assistance requiring takeover of the procedure	
	3. Able to visualize much of the mucosa but requires direction to re-inspect missed areas	
	5. Good visualization around difficult turns/folds and spends appropriate time on withdrawal	
C-IT7	Pathology Identification/interpretation	
	Poor recognition of abnormalities (misses or cannot ID significant pathology)	
	2.	
	3. Recognizes abnormal findings but cannot interpret	
	4.	
	5. Competent ID and assessment of abnormalities	
C-IT8	Therapeutic tool/cautery selection	
	1. Not applicable	
	2. Unsure of possible tool(s) indicated for pathology	
	Able to identify possible appropriate tool choices but not sure which would be ideal	
	4.	
	5. Independently identifies correct tool and settings as applicable	
C-IT9	Ability to perform Therapeutic Maneuver	
	1. Not applicable	
	2. Performed with significant hands-on assistance	
	3. Performed with minor hands-on assistance or coaching	
	4.	
	5. Performed independently without coaching	
C-IT10	Ensures appropriate sedation administered	
	<ul><li>1.Sedated without attention to titration or not assessment of level of sedation before proceeding</li><li>2</li></ul>	
	3.Initial sedation was appropriate but fails to reassess during procedure	

Trainee Identification: \_\_\_\_\_ PGY Level\_\_\_\_ Date: \_\_\_/\_ \_/\_ \_\_\_\_

Traine	ee Identification: F	PGY Level	Date:		
	5.Adequate sedation throughout with the procedure	appropriate moni	toring of vita	ls during	
C-IT-T	Total Score for Colonoscopy Tech	nique			

GA	Global Assessment	Score
GA1	Trainees hands-on skills are equivalent to those of a :	
	<ul> <li>1 Novice (learning basic scope advancement; requires significant assistance and coaching)</li> <li>2 Intermediate</li> <li>3 Advanced</li> </ul>	
	4 Competent to perform routine colonoscopy independently	
GA2	Trainees cognitive skills (situational awareness (SA)/Abnormality interpretation/decision making skills) are:	
	<ol> <li>Novice (needs significant prompting, correction or basic instruction by staff)</li> </ol>	
	2 Intermediate (needs intermittent coaching or correction by staff)	
	<ol> <li>Advanced (trainee has good SA, and interpretation/decision making skills)</li> </ol>	
	4 Competent to make decisions and interpretations independently	
GA-T	Total Score for Global Assessment	

	Colonoscopy Intraoperative Technique	Global Assessment	Total Score
Total			



#### **Operative Competency Evaluation**

Trainee Identification:	Date://
Program:	Evaluator Identification:

### **Global Assessment for Fistulae**

Instructions: Please read each action highlighted in grey. Evaluate the performance of each action according to the 1-5 scale listed below the stated action. Then write the corresponding score in the column labeled "score". There are separate sections below for fistulotomy, insertion of fistula plug and endorectal advancement flap.

FF-IT	Fistulotomy-Fistula Repair	Score
FF-IT1	Assesses sphincter muscle during fistulotomy	
	1 Passes probe and begins fistulotomy without any assessment of sphincter involvement	
	2	
	<ul><li>3 Tries to assess sphincter muscle while performing fistulotomy</li><li>4</li></ul>	
	5 Palpates and assesses sphincter muscle prior to beginning fistulotomy	
FF-IT2	Divides fistula tract over probe	
11-112	<ul><li>1 Divides over probe without respect for tissue involved</li><li>2</li></ul>	
	3 Assesses muscle prior to fistulotomy but fails to reassess for muscle during fistulotomy	
	4.	
	5. Assesses for muscle involvement prior to fistulotomy and continues to reassess muscle during fistulotomy	
FF-IT3	Aborts fistulotomy if more muscle involved than predicted	
	Realizes significant muscle involvement only after fistulotomy is complete	
	<ul> <li>2</li> <li>3 Stops after beginning fistulotomy and plans for alternate therapy</li> <li>4</li> </ul>	
	5 Realizes muscle involvement prior to or very early into fistulotomy, stops and plans for alternate therapy	
FF-IT4	Removes granulation tissue	
	1 Does no debridement	
	2	
	3 Does minimal debridement and leaves some granulation/necrotic tissue in place. Does not send tissue sent to pathology if complex fistula	
	<ul><li>4</li><li>5 Debrides tract completely of granulation and necrotic tissue and sends</li></ul>	
	specimens to pathology for complex fistula	
FF-IT5	Achieves hemostasis	
	1 Makes no attempt to achieve hemostasis	

Traine	e Identification:	Date:	//_	
	<ul> <li>3 Makes some effort at hemostasis with cautery by for bleeding prior to completion of procedure</li> <li>4</li> <li>5 Achieves good hemostasis and rechecks site for completion of procedure.</li> </ul>			
FF-IT-T	Total Score for Fistulotomy			

FP-IT	Fistula Plug- Fistula Repair	Score
	Ensures there is no associated cavity	
	1 Does not assess perianal area for associated abscess cavity	
	2	
FP-IT1	3 Identifies cavity only after beginning to insert plug. Realizes plug not appropriate with fistula associated cavity and converts to seton	
	4	
	5 Carefully assesses perianal tissues for associated abscess cavity and converts to seton placement if cavity present. If no cavity present, continues with plug placement.	
FP-IT2	Adequately hydrates the plug	
	1 Does not hydrate plug prior to placement.	
	2	
	3 Hydrates plug only after prompting by operating room technician.	
	4	
	5 Plans for plug hydration in advance and hydrates plug properly prior to insertion.	
FP-IT3	Places plug with proper orientation	
	Does not understand that plug is created with "internal" and "external" ends and must be properly oriented to insure correct insertion	
	2	
	3 Initially orients plug incorrectly, then realizes orientation important and correctly inserts plug.	
	4	
	5 Understands proper plug orientation and plans for correct placement of internal end smoothly and efficiently.	
	Adequately secures the plug	
FP-IT4	1 Does not plan to secure internal portion of fistula plug.	
	2	
	3 Places plug without stitch to secure internal portion to IAS, realizes plug	

Traine	e Identification: Date://_	
	must be secured and eventually secures plug to IAS	
	4	
	5 Efficiently places securing suture through IAS and then plug resulting in well secured internal portion of fistula plug.	
FP-IT5	Closes the internal opening	
	1 Fails to close internal opening	
	2	
	3 Fails to adequately close the internal opening	
	4	
	5 Effectively closes the internal opening and uses a mini-advancement flap if needed	
	Achieves hemostasis	
	1 Makes no effort to obtain hemostasis in fistula tract.	
	2	
FP-IT6	3 Uses undirected cautery of bleeding tissue	
	4	
	5 Efficiently uses cautery in directed fashion to achieve hemostasis.	
CD IT T	Total Score for Fistula Plug Insertion for Fistula Repair	
FP-IT-T	Total Score for Fistula Flug Insertion for Fistula Repair	
EAF-IT	Endorectal Advancement Flap	Score
		Score
EAF-IT	Endorectal Advancement Flap	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2  3 Creates flap of only mucosa.	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2 3 Creates flap of only mucosa.  4 5 Creates flap of even depth including mucosa, submucosa and circular	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2 3 Creates flap of only mucosa.  4 5 Creates flap of even depth including mucosa, submucosa and circular muscle.	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2 3 Creates flap of only mucosa.  4 5 Creates flap of even depth including mucosa, submucosa and circular muscle.  Creates a flap with an adequate base to preserve viability  1 Creates flap with the width of the base more narrow that the width of the	Score
EAF-IT	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2 3 Creates flap of only mucosa.  4 5 Creates flap of even depth including mucosa, submucosa and circular muscle.  Creates a flap with an adequate base to preserve viability  1 Creates flap with the width of the base more narrow that the width of the apex	Score
EAF-IT1	Endorectal Advancement Flap  Creates flap of mucosa, submucosa and circular muscle  1 Does not understand appropriate depth for formation of flap. Unable to start procedure without direction.  2 3 Creates flap of only mucosa.  4 5 Creates flap of even depth including mucosa, submucosa and circular muscle.  Creates a flap with an adequate base to preserve viability  1 Creates flap with the width of the base more narrow that the width of the apex  2 3 Creates a rectangular shaped flap with the width of the base and the	Score

Traine	ee Identification: Date:/	
	Mobilizes sufficient length of flap to avoid tension	
EAF-IT3	1 Mobilizes only one or two centimeters of flap above the apex	
	Mobilizes flap so that after the fistula opening excised the resulting apex reaches to beyond the internal opening only when under tension.	
	<ul> <li>Mobilizes flap so that after fistula opening excised the resulting apex reaches beyond the internal opening easily without tension for at least one centimeter.</li> </ul>	
	Excises and closes Internal Opening	
	1 Fails to excise or close the internal opening	
	2	
EAF-IT4	3 Realizes after starting to suture the flap in place that internal opening should be excised and closed.	
	4	
	5 Excises the internal opening and then closes the internal opening and checks that opening is securely closed.	
	Achieves hemostasis	
	Leaves base of wound or flap edge bleeding with no attempt to achieve hemostasis.	
	2.	
EAF-IT5	Makes some effort at hemostasis with cautery but does not recheck site for bleeding prior to completion of procedure	
	4.	
	<ol><li>Achieves good hemostasis and rechecks site for bleeding prior to completion of procedure.</li></ol>	
	Sutures the flap to distal mucosa with minimal tissue trauma	
	Handles flap in rough manner resulting in small tears. Places minimal number of sutures with large bites and ties suture tightly enough to risk ischemia of the edges.	
	2	
EAF-IT6	3 Handles flap gently and carefully places appropriate number of sutures. However bites of tissue are large and sutures are tied too tightly.	
	4	
	5 Handles flap gently, places appropriate number of sutures including appropriate amount of tissue. Ties sutures securely but not so tight as to risk ischemia.	
	Ensures the flap is well perfused with no signs of ischemia	
EAF-IT7	Does not inspect flap for adequate perfusion	

EAF-IT-T	Total for Endorectal Advancement Flap		
	5 Inspects flap for adequate perfusion. Addresses any areas of ischemia/hematoma or necrosis in an appropriate manner.		
	4		
	3 Inspects flap but does not address areas of clear ischemia/necrosis		
Traine	e Identification: Date:/	/_	

	Specific Intraoperative Technique
Total	

## GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE

Domain of Surgical Performance	Notes	UNSAT	GEN SURG	BRD CR SURG	COMP CR SURG	CR Surg
Respect for Tissue	Appropriate handling of tissue, minimizes tissue damage through appropriate use of instruments and appropriate force		V		V	<b>V</b>
Time and Motion	Efficient and economic movement		V	V	V	V
Instrument Handling	Competent use of instruments, fluid movements without stiffness or awkwardness	V	V	V	V	V
Knowledge of Instruments	Familiar with names and uses of instrument required for this procedure, does not ask for wrong instrument or use incorrect names when asking for instruments					
Flow of Operation	Demonstrates forward planning; course of operation demonstrated through effortless flow from one move to the next				V	V
Use of Assistant (if applicable)	Strategically used assistants to the best advantage at all times		<b>V</b>	V	<b>\</b>	
Knowledge of Specific Procedure	Demonstrated familiarity with all steps of the operation /procedure		V	V	V	V
Quality of Final Product		V	V	V	V	V

Trainee Identification:			)ate:	/		
	<u>Unsatisfactory</u> – Below the level of a general surgeon.					
	<b>Gen SURG</b> – Could function as a general surgeon. Basic competence in technical skills.					
	BRD CR SURG – Borderline CR surgeon.					
Based on the <b>OVERALL</b> performance, the candidate's current competence	COMP CR SURG – Competent as an independent CR surgeon. More advanced competence in technical skills.	V	V	V	V	
	CR SURG—Could practice without supervision as a colorectal surgeon. Could function as an independent practitioner. Professionally sophisticated. At an exemplary level would also imply the person is competent enough to act as a resource to other health care professionals.					

Comments			



#### **Operative Competency Evaluation**

Trainee Identification:	Date:///
Program:	Evaluator Identification:

Global Assessment for Laparoscopic Sigmoid Colectomy
Instructions: Please read each action highlighted in grey. Evaluate the performance of each action according to the 1-5 scale listed below the stated action. Then write the corresponding score in the column labeled "score". There are separate sections for the medial and lateral approaches; please follow the directions guiding which items to use.

E	Exposure	Score
E1	Demonstrates knowledge of optimum skin incision/portal/access	
	<ul><li>1 Does not extend an incision when struggling for access</li><li>2</li></ul>	
	<ul><li>3 Makes an incision clearly too small or too large</li><li>4</li></ul>	
	<ul><li>5 Verbally states or marks with a pen the anatomical landmarks prior to making the incision Extends incision if necessary for exposure.</li></ul>	
E2	Achieves an adequate exposure through purposeful dissection in correct tissue planes and identifies all structures correctly	
	<ul> <li>Describes the structure encountered in the dissection in the wrong location. Rough blind palpation of abdominal contents causing damage</li> <li>2</li> </ul>	
	<ul> <li>Tries to maintain the standard approach despite the fact that access is proving difficult. Forgets to examine some of the abdominal contents</li> </ul>	
	5 Is able to give a running commentary to the trainer of the structures encountered. Makes a cautious entry through peritoneum. Systematic inspection of contents of abdomen	
E-T	Total Score for Exposure	

Trainee Identification:	Date://
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LSC-IT	Laparoscopic Sigmoid Colectomy	Score
LSC-IT1	Port Placement, Trocar pattern	
	1 Careless placement causing and/or inadequate pattern	
	2 2 Dorto placed with cores dispersed for refer and/or entired pattern	
	<ul><li>3 Parts placed with some disregard for safety and/or optimal pattern.</li><li>4</li></ul>	
	5 Safe Placement without injury to abdominal wall structures	
LSC-IT2	Abdominal exploration	
	1 Fails to adequately identify liver, small bowel, pelvis and colon	
	<ul> <li>Identifies some but not all of the organs or identifies all organs but not in systematic manner</li> </ul>	
	<ul><li>4</li><li>5 Identifies liver, small bowel, pelvis and colon in a systematic manner</li></ul>	
LSC-IT4	Appropriate mesenteric/bowel manipulation	
	Causes mesenteric or bowel injury such as large hematoma and/or significant bleeding	
	<ul><li>2</li><li>3 Suboptimal manipulation without causing injury or causing peritoneal or</li></ul>	
	serosal injury, small hematomas or minimal bleeding.	
	<ul> <li>4</li> <li>5 Gentle precise manipulation of mesentery and bowel without hematomas or bleeding</li> </ul>	
	If using lateral to medial approach, continue. If using medial to lateral approach skip to LSC-IT16	
LSC-IT5	Incision to start the dissection: Lateral to medial (along the left gutter starting at the pelvic inlet)	
	1 Fails to gain exposure and identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
LSC-IT6	Taking down the lateral attachments of the sigmoid and descending colon to the abdominal wall and retroperitoneum	
	1 Fails to incise attachments	
	2	
	3 Incises attachments with difficulty	
	4	

Traine	ee Identification: Date:/	
	5.Easily incises attachments	
LSC-IT7	Identifies left ureter	
	1 Fails to protect the ureter from significant injury	
	2	
	3 Has difficulty protecting the ureter, resulting in minor injury to the ureter	
	4	
	5. Easily protects the ureter	
LSC-IT8	Identifies the hypogastric nerves	
	1 Fails to protect the nerves from significant injury	
	2	
	3 Has difficulty protecting the nerves, resulting in minor injury to the nerves	
	4	
	5.Easily protects the nerves	
LSC-IT9	Release of the lateral attachments of the sigmoid/descending colon:	
	1 Fails to incise attachments	
	2	
	3 Incises attachments with difficulty	
	4	
	5. Easily incises attachments	
LSC-IT10	Dividing the splenocolic ligament, renocolic ligament	
	1 Fails to incise the attachments	
	2	
	3 Incises attachments with difficulty	
	4	
	5. Easily incises the attachments	
LSC-IT11	Separates omental attachments from the transverse colon and flexure	
	1 Fails to incise the attachments	
	2	
	3 Incises attachments with difficulty	
	4	
	5. Easily incises the attachments	
LSC-IT12	Make a window around IMA pedicle	

2

1 Unable to create proximal and distal exposure of the IMA.

	3 Struggles to create a window cephalad to the IMA.	
	4	
	Identifies the IMA pedicle through a window anterior to the aorta.	
LSC-IT13	Isolation of vessels	
	Unable to circumferentially isolate the IMA pedicle.	
	2	
	3 Struggles to isolate the IMA pedicle and places the vessels and nerves in jeopardy.	
	4	
	5. Easily and safely encircles and isolates the IMA.	
LSC-IT14	Divide IMA pedicle.	
	1 Unable to safely divide the IMA pedicle	
	2	
	Struggles to divide the pedicle and requires multiples attempts to complete	
	4	
	5. Safely and quickly divides the IMA pedicle with the chosen method.	
LSC-IT15	Divides IMV if length is needed to reach pelvic anastomosis	
	1 Fails to isolate and divide IMV at its origin or traumatizes the vessel or fails to control the vessel during division.	
	2	
	Isolate IMV with difficulty but without injury and divides the vein with difficulty.	
	4	
	5.Easily isolates and divides the IMV without traumatizing the veins	
	To continue, skip to LSC-IT 28	
	Medial to lateral approach	
LSC-IT16	Incision to start the dissection: Medial to lateral (along the IMA/sigmoidal	
L3C-11 10	artery pedicle)	
	1 Fails to identify IMA/sigmoidal artery pedicle	
	2	
	3 Slow or inadequate identification of IMA/sigmoidal artery pedicle	
	4	
	5 Easily and quickly identifies IMA/sigmoidal artery pedicle	
I CC IT17		

Creates an incision in the rectosigmoid mesentery into the pelvis, below

Date: \_\_\_/\_\_/\_\_\_\_\_

	the IMA	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
LSC-IT18	Develops a plane posterior to the IMA	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
LSC-IT19	Identifies the left hypogastric nerve	
	1 Fails to protect the nerves from significant injury	
	2	
	3 Has difficulty protecting the nerves resulting in minor injury to the nerves	
	4	
	5 Easily protects the nerves	
LSC-IT20	Identifies the left ureter	
	1 Fails to protect the ureter from significant injury	
	2	
	3 Has difficulty protecting the ureter resulting in minor injury to the ureter	
	4	
	5 Easily protects the ureter	
LSC-IT21	Continues dissection in a plane anterior to the retroperitoneal fascia	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
LSC-IT22	Divides IMA pedicle	
	Fails to isolate and divide IMA pedicle or traumatizes the vessel or fails to control the vessel during division.	
	2	
	3 Isolates IMA with difficulty but without injury to the vessels and divides	

the pedicle with difficulty.

Date: \_\_\_/\_\_/\_\_\_\_\_\_

	4		
	5 Easily isolates and divides the IMA without traumatizing the vessels		
LSC-IT23	Continues medial mobilization under left colon mesentery		
	<ol> <li>Fails to dissect left colon from the retroperitoneum or damages retroperitoneum while dissecting.</li> </ol>		
	2		
	3 Dissects left colon from retroperitoneum with difficulty and/or causes minor injury.		
	4		
	5 Easily dissects left colon from retroperitoneum		
LSC-IT24	IT24 Divides IMV if length is needed to reach pelvic anastomosis		
	1. Fails to isolate and divide IMV at its origin or traumatizes the vessel or fails to control the vessel during division.		
	2.		
	<ol><li>Isolates IMV with difficulty but without injury and divides the vein with difficulty.</li></ol>		
	4.		
	5.Easily isolates and divides the IMV without traumatizing the veins		
LSC-IT25	Release of the lateral attachments of the sigmoid/descending colon:		
	1.Fails to incise attachments		
	2.		
	3.Incises attachments with difficulty		
	4.		
	5.Easily incises attachments		
LSC-IT26	Dividing the splenocolic ligament, renocolic ligament		
	1.Fails to incise the attachments		
	2.		
	3.Incises attachments with difficulty		
	4.		
	5 .Easily incises the attachments		
LSC-IT27	Separates omental attachments from the transverse colon and flexure		
	1.Fails to incise the attachments		
	2.		
	3.Incises attachments with difficulty		
	4.		
	5. Easily incises the attachments		

Date: \_\_\_/\_\_/\_\_\_\_\_\_

	Continue below for both approaches	
LSC-IT28	Continues the dissection inferiorly until the rectum is adequately mobilized	
	Fails to dissect the rectum from the sacrum or damages the mesorectum while dissecting or bleeding from the sacrum results	
	2	
	3 Dissects the rectum from the sacrum with difficulty and/ or causes minor injury to the sacrum or mesorectum.	
	4	
	5 Easily dissects the mesorectum from the sacrum	

Date: \_\_\_/\_\_/\_\_\_\_\_\_

Trainee Identification:	 Date:	 

LSC-IT29	Checking the length of the mobilized specimen to ensure it will be of adequate length without tension		
	Unable to provide adequate length to the left colon.		
	2		
	3 Struggles to identify area of fixation, avoid twisting, and maintain blood supply.		
	4		
	5 Able to follow the dissected edge of the colon mesentery to guarantee colon.		
LSC-IT30	Bowel Resection: Creating a mini-laparotomy in the left lower quadrant or Pfannenstiel		
	Unable to select and create a site in the abdominal wall that allows comfortable extraction and anastomosis.		
	2		
	3 Struggles to control bleeding and retract the muscle / fascia to enter the abdomen.		
	4		
	5 Appropriate incision and exposure of the abdominal cavity.		
LSC-IT31	Bowel Resection: Utilizing a wound protector when the end of the proximal colon is delivered through the incision		
	Unable to place appropriate wound protection/ or failure to perform		
	2		
	3 Struggles to place wound protector		
	4		
	5 Appropriate selection of wound protection and easy placement.		
LSC-IT32	Exteriorization, bowel resection and anastomosis: Choice of proximal transaction site appropriate for disease process		
	Chooses a poorly vascularized inappropriate segment.		
	2		
	3 Requires repeat transaction to achieve good anastomotic site.		
	4		
	5 Chooses well vascularized bowel with no complicating features.		
LSC-IT33	Bowel Resection: Dividing the rectum and mesorectum at a right angle to the bowel		
	<ol> <li>Unable to select and divide mesentery appropriate for anastomosis.</li> <li>2.</li> </ol>		
	3. Struggles to expose mesentery to allow right angle division of the mesentery at a point appropriate for resection.		

	4.	
	5. Uses three point traction to expose a line of division along the mesentery at right angles to the colon.	
LSC-IT34	Exteriorization, bowel resection and anastomosis: Alignment of proximal and distal bowel segments for anastomosis	
	Uses twisted colon for anastomosis	
	2	
	3 Struggles to untwist or align colon, with inadequate vision	
	4	
	5 Easily aligns the bowel using handover hand stretching of the proximal colon	
LSC-IT35	Exteriorization, bowel resection and anastomosis: Stapled or handsewn	
	1 Unable to create an anastomosis	
	2	
	3 Struggles to accomplish anastomosis	
	4	
	5 Safely uses sutures or circular stapled to create anastomosis	
LSC-IT36	Exteriorization, bowel resection and anastomosis: Containment /	
	avoidance of spillage	
	Gross spillage of stool with poor containment -	
	2	
	3 Struggles to isolate open bowel	
	4	
	5 Contains stool and isolates anastomosis	
LSC-IT37	Test the anastomosis with air insufflations and saline filled pelvis	
	1.Fails to test the anastomosis	
	2.	
	3.Tests the anastomosis via proctoscopy, incomplete inflation of the proximal colon	
	4.	
	5. Tests the anastomosis via proctoscopy, makes sure there is adequate insufflations with no leak.	
LSC-IT-T	Total score for Laparoscopic Sigmoid Colectomy	
С	Closure	Score

Date: \_\_\_/\_\_\_/\_\_\_\_\_

C1	Completes a sound wound repair where appropriate	
	Ties very tight sutures, clearly strangulating soft tissue	
	2.	
	<ol><li>3.Leaves too large a gap between sutures so that sutures are not properly opposed</li></ol>	
	4.	
	5. Closes each layer without tension	
C2	Protects the wound with dressings, splints and drains where appropriate	
	Walks away from the operating table without briefing the assistant or the nurse about required dressing.	
	2.	
	Fails to specify required dressing     4.	
	5. Personally supervises the application of the wound dressing	
	5. I crashally supervises the application of the wound dressing	
С	Total score for closure	
L CC TC	Language Signated Colortown Intra consenting Taskwind	
LSC-TS	Laparoscopic Sigmoid Colectomy Intra-operative Technical Skills	Score
	Chille	
LSC-TS1		
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes	
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define	
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes	
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes  1. Fails to practice meticulous careful dissection	
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes  1. Fails to practice meticulous careful dissection  2.  3. Dissection accomplished with more blood loss and/or more trauma than	
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes  1. Fails to practice meticulous careful dissection  2.  3. Dissection accomplished with more blood loss and/or more trauma than desired	
LSC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection  2.  3.Dissection accomplished with more blood loss and/or more trauma than desired  4.	
	Dissection techniques to preserve structures, avoid blood loss, define planes  1. Fails to practice meticulous careful dissection  2.  3. Dissection accomplished with more blood loss and/or more trauma than desired  4.  5. Careful meticulous dissection	
	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection  2.  3.Dissection accomplished with more blood loss and/or more trauma than desired  4.  5. Careful meticulous dissection  Traction and counter traction	
	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection 2. 3.Dissection accomplished with more blood loss and/or more trauma than desired 4. 5. Careful meticulous dissection  Traction and counter traction 1.Use of expressive or inadequate force	
	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection  2. 3.Dissection accomplished with more blood loss and/or more trauma than desired  4. 5. Careful meticulous dissection  Traction and counter traction  1.Use of expressive or inadequate force  2. 3. Variably has difficulty maintaining three point traction and counter	
	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection 2. 3.Dissection accomplished with more blood loss and/or more trauma than desired 4. 5. Careful meticulous dissection  Traction and counter traction 1.Use of expressive or inadequate force 2. 3. Variably has difficulty maintaining three point traction and counter traction for exposure	
	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection  2. 3.Dissection accomplished with more blood loss and/or more trauma than desired  4. 5. Careful meticulous dissection  Traction and counter traction  1.Use of expressive or inadequate force  2. 3. Variably has difficulty maintaining three point traction and counter traction for exposure  4.	
LSC-TS2	Dissection techniques to preserve structures, avoid blood loss, define planes  1.Fails to practice meticulous careful dissection 2. 3.Dissection accomplished with more blood loss and/or more trauma than desired 4. 5. Careful meticulous dissection  Traction and counter traction 1.Use of expressive or inadequate force 2. 3. Variably has difficulty maintaining three point traction and counter traction for exposure 4. 5. Applies adequate atraumatic traction and counter traction	

3. Recognizes and manages small vessels that are actively bleeding,

	but fails to anticipate and control vessels that are likely to bleed	
	4.	
	5. Reality recognizes and manages small vessels that are actively bleeding and anticipates and quickly controls vessels that are likely to heal	
LSC-TS4	Instrument exchange	
	1.Fails to recognize the need for an instrument change	
	2.	
	3.Recognizes the need for timing of instrument change	
	4.	
	5. Recognizes the appropriateness of instrument changes and effectively minimizes the number of required changes.	
LSC-TS5	Tissue hand to hand transfer	
	1.Fails to perform hand to hand transfer	
	2.	
	3.Intermittently performs hand to hand transfer	
	4.	
	5. Consistently performs hand to hand transfer	
LSC-TS6	Use of eletrocautery	
LSC-TS6	Use of eletrocautery  1.Unsafe use of electrocautery resulting in significant risk for causing damage	
LSC-TS6	1.Unsafe use of electrocautery resulting in significant risk for causing	
LSC-TS6	1.Unsafe use of electrocautery resulting in significant risk for causing damage	
LSC-TS6	1.Unsafe use of electrocautery resulting in significant risk for causing damage     2.      3.Intermittent unsafe use of electrocautery introducing minimal risk for	
LSC-TS6	1.Unsafe use of electrocautery resulting in significant risk for causing damage     2.     3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding	
LSC-TS7	1.Unsafe use of electrocautery resulting in significant risk for causing damage     2.     3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding     4.	
	1.Unsafe use of electrocautery resulting in significant risk for causing damage  2.  3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding  4.  5.Safe use of electrocautery with no risk for damage or bleeding	
	1.Unsafe use of electrocautery resulting in significant risk for causing damage  2.  3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding  4.  5.Safe use of electrocautery with no risk for damage or bleeding  Use bipolar or ultrasonic devices  1.Unsafe use of bipolar or ultrasonic devices too close to healthy tissue or	
	1.Unsafe use of electrocautery resulting in significant risk for causing damage  2.  3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding  4.  5.Safe use of electrocautery with no risk for damage or bleeding  Use bipolar or ultrasonic devices  1.Unsafe use of bipolar or ultrasonic devices too close to healthy tissue or with too much tissue introducing significant risk for or causing damage	
	1.Unsafe use of electrocautery resulting in significant risk for causing damage  2. 3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding  4. 5.Safe use of electrocautery with no risk for damage or bleeding  Use bipolar or ultrasonic devices  1.Unsafe use of bipolar or ultrasonic devices too close to healthy tissue or with too much tissue introducing significant risk for or causing damage  2. 3.Intermittent unsafe use of bipolar or ultrasonic devices introducing	
	1.Unsafe use of electrocautery resulting in significant risk for causing damage  2. 3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding  4. 5.Safe use of electrocautery with no risk for damage or bleeding  Use bipolar or ultrasonic devices  1.Unsafe use of bipolar or ultrasonic devices too close to healthy tissue or with too much tissue introducing significant risk for or causing damage  2. 3.Intermittent unsafe use of bipolar or ultrasonic devices introducing minimal risk for damage or bleeding	
	1.Unsafe use of electrocautery resulting in significant risk for causing damage  2. 3.Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding  4. 5.Safe use of electrocautery with no risk for damage or bleeding  Use bipolar or ultrasonic devices  1.Unsafe use of bipolar or ultrasonic devices too close to healthy tissue or with too much tissue introducing significant risk for or causing damage  2. 3.Intermittent unsafe use of bipolar or ultrasonic devices introducing minimal risk for damage or bleeding  4. 5.Safe use of bipolar or ultrasonic devices with no risk of damage or	

		Trainee Identific	cation:	
	Exposure	LSC Intraop Technique	Closure	LSC-TS
otal			-	_

## GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE

Domain of Surgical Performance	Notes	UNSAT	GEN SURG	BRD CR SURG	COMP CR SURG	CR Surg
Respect for Tissue	Appropriate handling of tissue, minimizes tissue damage through appropriate use of instruments and appropriate force					V
Time and Motion	Efficient and economic movement		V	V		
Instrument Handling	Competent use of instruments, fluid movements without stiffness or awkwardness	V	V	V	V	V
Knowledge of Instruments	Familiar with names and uses of instrument required for this procedure, does not ask for wrong instrument or use incorrect names when asking for instruments	V	V	V	V	V
Flow of Operation	Demonstrates forward planning; course of operation demonstrated through effortless flow from one move to the next					
Use of Assistant (if applicable)	Strategically used assistants to the best advantage at all times		V	V	V	
Knowledge of Specific Procedure	Demonstrated familiarity with all steps of the operation /procedure	V	V	V	V	
Quality of Final Product			V	V	V	

Trainee Identification:			Date:		
Based on the OVERALL performance, the candidate's current competence	Unsatisfactory – Below the level of a general surgeon.  Gen SURG – Could function as a general surgeon. Basic competence in technical skills.  BRD CR SURG – Borderline CR surgeon.  COMP CR SURG – Competent as an independent CR surgeon. More advanced competence in technical skills.  CR SURG – Could practice without supervision as a colorectal surgeon. Could function as an independent practitioner. Professionally sophisticated At an exemplary level would also imply the person is competent enough to act a a resource to other health care professionals.				
C	NER STICKER	CANI	DIDATE ST	TICKER	



## **Operative Competency Evaluation**

Trainee Identification:	Date://
Program:	Evaluator Identification:

## Global Assessment for Laparoscopic Right Hemicolectomy

Instructions: Please read each action highlighted in grey. Evaluate the performance of each action according to the 1-5 scale listed below the stated action. Then write the corresponding score in the column labeled "score". Please review the form before utilizing, as certain sections apply only to specific approaches used.

E	Exposure	Score
E1	Demonstrates knowledge of optimum skin incision/portal/access	
	1 Does not extend an incision when struggling for access 2	
	3 Makes an incision clearly too small or too large 4	
	<ul><li>5 Verbally states or marks with a pen the anatomical landmarks prior to making the incision Extends incision if necessary for exposure.</li></ul>	
E2	Achieves an adequate exposure through purposeful dissection in correct tissue planes and identifies all structures correctly	
	Describes the structure encountered in the dissection in the wrong location. Rough blind palpation of abdominal contents causing damage	
	<ul> <li>Tries to maintain the standard approach despite the fact that access is proving difficult. Forgets to examine some of the abdominal contents</li> </ul>	
	5 Is able to give a running commentary to the trainer of the structures encountered. Makes a cautious entry through peritoneum. Systematic inspection of contents of abdomen	
E-T	Total Score for Exposure	

Trainee Identification:	Date: /	/

LRHC-IT	Laparoscopic Right Hemicolectomy	Score
RHC-IT1	Port Placement, Trocar pattern	
	Careless placement causing damage and/or inadequate pattern	
	<ul><li>2</li><li>3 Ports placed with some disregard for safety and/or suboptimal pattern</li></ul>	
	<ul> <li>Safe placement without injury to abdominal wall structures and allowing for ergonometrically optimal pattern with alignment of the surgeon camera and monitor</li> </ul>	
RHC-IT2	Abdominal exploration	
	<ul><li>1 Fails to adequately identify liver, small bowel, pelvis and colon</li><li>2</li></ul>	
	Identifies some but not all of the organs or identifies all organs but not in systematic manner	
	<ul> <li>4</li> <li>5 Identifies liver, small bowel, pelvis and colon in a systematic manner</li> </ul>	
RHC-IT3	Appropriate mesenteric/bowel manipulation	
	<ul> <li>1 Causes mesenteric or bowel injury such as large hematoma and/or significant bleeding and/or enterotomy</li> <li>2</li> </ul>	
	<ul> <li>3 Suboptimal manipulation without causing injury or with causing serosal or peritoneal injury, small hematomas or minimal bleeding</li> <li>4</li> </ul>	
	Gentle precise manipulation of mesentery and bowel without hematoma, bleeding or injury	
	If using lateral to medial approach, continue. If using medial to lateral approach, skip to question RHC-IT19. If using the inferior/posterior approach, skip to question RHC-IT	
RHC-IT8	Lateral to medial (along the right gutter starting at the cecum): Gains exposure, identifies planes and incises lateral peritoneal attachments	
	1 Fails to gain exposure or identify appropriate plane	
	2	
	3 Exposes with difficulty, Slow or inadequate identification of appropriate plane, incises attachments with difficulty	
	<ul> <li>5 Easily and quickly gains exposure and identifies appropriate plane, incises attachments easily</li> </ul>	

Trainee Identification:	Date:/	

RHC-IT9	Dissection of the right colon from the retroperitoneum while pulling the colon toward the midline	
	1 Fails to dissect right colon from retroperitoneum or damages retroperitoneum while dissecting	
	2	
	3 Dissect right colon from retroperitoneum with difficulty and/or sustains minor injury	
	4	
	5 Easily dissects right colon from retroperitoneum	
RHC-IT10	Protects the ureter, gonadal vessels and retroperitoneal structures	
	1 Fails to protect one or more of these structures from significant injury	
	2	
	3 Has difficulty protecting structures resulting in minor injury to one or more structures	
	4	
	5 Protects all of these structures	
RHC-IT11	Releases the mesocolon from the anterior surface of the duodenum (1st and 2nd)	
	1 Fails to release mesocolon or causes damage while releasing duodenum or pancreas	
	2	
	3 Incompletely or only with difficulty releases mesocolon	
	4	
	5 Easily and completely releases mesocolon	
RHC-IT12	Mobilization of hepatic flexure: Position of patient in reverse Trendelenburg	
	Fails to utilize appropriate patient position to facilitate hepatic flexure mobilization	
	2	
	3 Inadequate use of appropriate patient position to facilitate hepatic flexure mobilization	
	4	
	5 Routinely utilizes appropriate patient position to facilitate hepatic flexure mobilization	
RHC-IT13	Mobilization of hepatic flexure: Omental attachments division	
	Fails to divide the omental attachments as dictated by oncologic principles or clinical scenario	
	2	

	3 Safely but insufficiently divides the omental attachments as dictated by oncologic principles clinical scenario	
	4	
	5 Safely and efficiently divides the omental attachments as dictated by oncologic principles and clinical scenario	
RHC-IT14	Mobilization of hepatic flexure: Entry to lesser sac	
	1 Fails to enter the lesser sac at a point distal to the fusion of the omentum and mesocolon	
	2	
	3 Safely but inefficiently enters the lesser sac at a point distal to the fusion of the omentum and mesocolon	
	4	
	5 Safely and efficiently enters the lesser sac at a point distal to the fusion of the omentum and mesocolon	
RHC-IT15	Mobilization of hepatic flexure: Identifies duodenum (1st and 2nd)	
	1 Fails to identify duodenum and/or causes duodenal injury	
	2	
	3 Identifies duodenum with difficulty or fails to anticipate its	
	location	
	4	
	5 Correctly and easily identifies duodenum without injury	
RHC-IT16	Identification of Ileocolic vessels: Cecal traction to identify ileocolic vascular pedicle	
	Fails to identify ileocolic pedicle or traumatizes the bowel	
	2	
	3 Appropriately identifies ileocolic pedicle without traumatizing the bowel, but fails to apply appropriate degree and direction of traction	
	4	
	5 Appropriately identifies ileocolic pedicle and applies appropriate degree and direction of traction without traumatizing the bowel	
RHC-IT17	Identifies the avascular planes through the windows on each side of ileocolic vessels	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	

5 Easily and quickly identifies appropriate plane

RHC-IT18	Division of vessels	
	Fails to ligate vessels securely by any method, resulting in pulsatile bleeding	
	2.	
	<ol> <li>Ligates vessels, but fails to perform a high ligation, or ligation results in nonexpanding hematoma.</li> </ol>	
	4.	
	5. Performs a secure high ligation by any method with no hematoma in one attempt.	
	If doing lateral to medial approach, skip to RHC-IT39	
	Start of medial to lateral approach	
RHC-IT19	Medial to lateral (along the mesenteric artery): Gains exposure and identifies ileocolic pedicle	
	Fails to gain exposure and cannot identify pedicle correctly or traumatizes the bowel	
	2	
	3 Exposure gained with difficulty, slow or inadequate identification of ileocolic pedicle, or fails to apply appropriate degree and direction of traction	
	4	
	5 Easily and quickly gains exposure and identifies ileocolic pedicle and applies appropriate degree and direction of traction without traumatizing the bowel	
RHC-IT20	Identifies the avascular planes through the windows on each side of ileocolic vessels	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
RHC-IT21	Division of vessels (one from each group: none listed?	
	Fails to ligate vessels securely by any method, resulting in pulsatile bleeding	
	2.	
	<ol><li>Ligates vessels, but fails to perform a high ligation, or ligation results in nonexpanding hematoma.</li></ol>	
	4.	
	5. Performs a secure high ligation by any method with no	

	hematoma in one attempt.	
RHC-IT22	Mobilizes the right colon mesocolon to release the colon and mesentery from the retroperitoneum and duodenum safely	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
RHC-IT23	Protects the ureter, gonadal vessels and retroperitoneal structures	
	Fails to protect one or more of these structures from significant injury	
	2	
	Has difficulty protecting structures resulting in minor injury to one or more structures	
	4	
	5 Protects all of these structures	
RHC-IT24	Identifies plane and incises lateral peritoneal attachments to hepatic flexure	
	1 Fails to identify plane or incise attachments	
	2	
	3 Identifies plane or incises attachments with difficulty	
	4	
	5 Easily identifies plane and incises attachments	
RHC-IT25	Mobilization of hepatic flexure: Position of patient in reverse Trendelenburg	
	Fails to utilize appropriate patient position to facilitate hepatic flexure mobilization	
	2	
	3 Inadequate use of appropriate patient position to facilitate hepatic flexure mobilization	
	4	
	<b>5</b> Routinely utilizes appropriate patient position to facilitate hepatic flexure mobilization	
RHC-IT26	Mobilization of hepatic flexure: Omental attachments division	
	Fails to divide the omental attachments as dictated by oncologic principles or clinical scenario	
	2	

3 Safely but insufficiently divides the omental attachments as

	dictated by oncologic principles clinical scenario 4	
	5 Safely and efficiently divides the omental attachments as dictated by oncologic principles and clinical scenario	
RHC-IT27	Mobilization of hepatic flexure: Entry to lesser sac	
	1Fails to enter the lesser sac at a point distal to the fusion of the omentum and mesocolon	
	2	
	3 Safely but inefficiently enters the lesser sac at a point distal to the fusion of the omentum and mesocolon	
	4	
	5 Safely and efficiently enters the lesser sac at a point distal to the fusion of the omentum and mesocolon	
RHC-IT28	Mobilization of hepatic flexure: Identifies duodenum (1st and 2nd)	
	1 Fails to identify duodenum and/or causes duodenal injury	
	2	
	3 Identifies duodenum with difficulty or fails to anticipate its location	
	4	
	5 Correctly and easily identifies duodenum without injury	
	o correctly and odony lacritimes adoderiam without injury	
	If doing medial to lateral, skip to question RHC-IT39	
RHC-IT29		
RHC-IT29	If doing medial to lateral, skip to question RHC-IT39  Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure,	
RHC-IT29	If doing medial to lateral, skip to question RHC-IT39  Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure, identifies planes and incises terminal ileal mesenteric attachments  1. Fails to gain exposure and cannot identify terminal ileal	
RHC-IT29	Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure, identifies planes and incises terminal ileal mesenteric attachments  1. Fails to gain exposure and cannot identify terminal ileal mesentery or traumatizes the bowel	
RHC-IT29	Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure, identifies planes and incises terminal ileal mesenteric attachments  1. Fails to gain exposure and cannot identify terminal ileal mesentery or traumatizes the bowel  2.  3. Exposure gained with difficulty, slow or inadequate identification of terminal ileal mesentery, or fails to apply appropriate degree	
RHC-IT29	Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure, identifies planes and incises terminal ileal mesenteric attachments  1. Fails to gain exposure and cannot identify terminal ileal mesentery or traumatizes the bowel  2.  3. Exposure gained with difficulty, slow or inadequate identification of terminal ileal mesentery, or fails to apply appropriate degree and direction of traction	
RHC-IT29	Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure, identifies planes and incises terminal ileal mesenteric attachments  1. Fails to gain exposure and cannot identify terminal ileal mesentery or traumatizes the bowel  2.  3. Exposure gained with difficulty, slow or inadequate identification of terminal ileal mesentery, or fails to apply appropriate degree and direction of traction  4.  5 Easily and quickly gains exposure and identifies terminal ileal mesentery and applies appropriate degree and direction of traction	
RHC-IT29	Inferior/posterior approach: (small bowel mesentery attached to retroperitoneum along right common iliac artery): Gains exposure, identifies planes and incises terminal ileal mesenteric attachments  1. Fails to gain exposure and cannot identify terminal ileal mesentery or traumatizes the bowel  2.  3. Exposure gained with difficulty, slow or inadequate identification of terminal ileal mesentery, or fails to apply appropriate degree and direction of traction  4.  5 Easily and quickly gains exposure and identifies terminal ileal mesentery and applies appropriate degree and direction of traction	

	3. Dissects right colon from retroperitoneum with difficulty and/or sustains minor injury	
	4	
	5. Easily dissects right colon from retroperitoneum	
RHC-IT31	Protects the ureter, kidneys, gonadal vessels and duodenum	
	Fails to protect one or more of theses structures from significant injury	
	2.	
	Has difficulty protecting structures resulting in minor injury to one or more structures	
	4.	
	5. Protects all of these structures.	
RHC-IT32	Releases the mesocolon from the anterior surface of the duodenum (1st and 2nd)	
	1Fails to release mesocolon or causes damage while releasing duodenum or pancreas	
	2	
	3Incompletely or only with difficulty releases mesocolon	
	4	
	5 Easily and completely releases mesocolon	
RHC-IT33	Mobilization of hepatic flexure: Position of patient in reverse Trendelenburg	
	1Fails to utilize appropriate patient position to facilitate hepatic flexure mobilization	
	2	
	3 Inadequate use of appropriate patient position to facilitate hepatic flexure mobilization	
	4	
	5 Routinely utilizes appropriate patient position to facilitate hepatic flexure mobilization	
RHC-IT34	Mobilization of hepatic flexure: Omental attachments division	
	Fails to divide the omental attachments as dictated by oncologic principles or clinical scenario	
	2	

3 Safely but insufficiently divides the omental attachments as

	dictated by oncologic principles clinical scenario	
	4	
	5 Safely and efficiently divides the omental attachments as dictated by oncologic principles and clinical scenario	
RHC-IT35	Mobilization of hepatic flexure: Entry to lesser sac	
	1Fails to enter the lesser sac at a point distal to the fusion of the omentum and mesocolon	
	2	
	3 Safely but inefficiently enters the lesser sac at a point distal to the fusion of the omentum and mesocolon	
	4	
	5 Safely and efficiently enters the lesser sac at a point distal to the fusion of the omentum and mesocolon	
RHC-IT36	Identification of Ileocolic vessels: Cecal traction to identify ileocolic vascular pedicle	
	1 Fails to identify ileocolic pedicle or traumatizes the bowel	
	2	
	3 Appropriately identifies ileocolic pedicle without traumatizing the bowel, but fails to apply appropriate degree and direction of traction	
	4	
	5 Appropriately identifies ileocolic pedicle and applies appropriate degree and direction of traction without traumatizing the bowel	
RHC-IT37	Identifies the avascular planes through the windows on each side of ileocolic vessels	
	1 Fails to identify appropriate plane	
	2	
	3 Slow or inadequate identification of appropriate plane	
	4	
	5 Easily and quickly identifies appropriate plane	
RHC-IT38	Division of vessels	
	1 Fails to ligate vessels securely by any method, resulting in pulsatile bleeding	
	2.	
	<ol><li>Ligates vessels, but fails to perform a high ligation, or ligation results in nonexpanding hematoma.</li></ol>	
	4.	
	5. Performs a secure high ligation by any method with no hematoma in one attempt.	

Trainee Identification:	Γ	Date:	,	/	/		

	Continue below for all three approaches	
RHC-IT39	Exteriorization, bowel resection and anastomosis: Protection of extraction wound	
	1 Fails to employ a wound protector	
	2	
	3 Employs an appropriately sized wound protector with difficulty or selects incorrect sized wound protector	
	4	
	5 Easily employs a wound protector	
RHC-IT40	Exteriorization, bowel resection and anastomosis: Choice of transection site appropriate for disease process	
	1 Fails to appropriately choose and identify transection site of small and large bowel based upon disease process (e.g., inflammatory bowel disease, ischemia, neoplasia)	
	2	
	3 Appropriately chooses transection site of small and large bowel based upon disease process (e.g., inflammatory bowel disease, ischemia, neoplasia), but fails to accurately identify site	
	4	
	<b>5</b> Appropriately selects transaction site of small and large bowel based upon disease process (e.g., inflammatory bowel disease, ischemia, neoplasia)	
RHC-IT41	Exteriorization, bowel resection and anastomosis: Transection of bowel to ensure blood supply	
	Fails to transect bowel area at well vascularized area	
	2	
	3 Appropriately transects bowel to optimize blood supply, but fails to ensure adequate supply identifier ischemia bowel but recognizes problem	
	4	
	<b>5</b> Appropriately transects bowel to optimize and assure blood supply	
RHC-IT42	Exteriorization, bowel resection and anastomosis: Alignment of proximal and distal bowel segments for anastomosis	
	1 Fails to align and orient bowel	
	2	
	3 Appropriately aligns and orients bowel but with difficulty	
	4	
	5 Appropriately and easily aligns and orients bowel	

Trainee Identification:	Date:	/	/		

RHC-IT43	Exteriorization, bowel resection and anastomosis: Construction of patent anastomosis	
	Fails to construct a widely patent anastomosis	
	2	
	3 Constructs a widely patent anastomosis, with difficulty	
	4	
	5 Routinely and easily constructs and verifies a widely patent anastomosis	
RHC-IT44	Exteriorization, bowel resection and anastomosis: Containment / avoidance of spillage	
	Major contamination or spillage	
	2	
	3 Minor contamination or spillage	
	4	
	5 No contamination or spillage	
	Closure	Score
C1	Completes a sound wound repair where appropriate	
	1. Ties very tight sutures, clearly strangulating soft tissue	
	2	
	-	
	3 Leaves too large a gap between sutures so that sutures are not properly opposed	
	3 Leaves too large a gap between sutures so that sutures are not	
	3 Leaves too large a gap between sutures so that sutures are not properly opposed	
C2	3 Leaves too large a gap between sutures so that sutures are not properly opposed 4.	
C2	3 Leaves too large a gap between sutures so that sutures are not properly opposed 4. 5 Closes each layer without tension  Protects the wound with dressings, splints and drains where	
C2	3 Leaves too large a gap between sutures so that sutures are not properly opposed 4. 5 Closes each layer without tension  Protects the wound with dressings, splints and drains where appropriate  1 Walks away from the operating table without briefing the assistant	
C2	3 Leaves too large a gap between sutures so that sutures are not properly opposed 4. 5 Closes each layer without tension  Protects the wound with dressings, splints and drains where appropriate  1 Walks away from the operating table without briefing the assistant or the nurse about required dressing	
C2	3 Leaves too large a gap between sutures so that sutures are not properly opposed  4.  5 Closes each layer without tension  Protects the wound with dressings, splints and drains where appropriate  1 Walks away from the operating table without briefing the assistant or the nurse about required dressing  2	
C2	3 Leaves too large a gap between sutures so that sutures are not properly opposed  4.  5 Closes each layer without tension  Protects the wound with dressings, splints and drains where appropriate  1 Walks away from the operating table without briefing the assistant or the nurse about required dressing  2  3 Fails to specify required dressing	

RHC-TS	Laparoscopic right hemi-colectomy technical skills	Score
RHC-TS1	Dissection techniques to preserve structures, avoid blood loss, define planes: Sharp dissection	
	1 Fails to practice meticulous careful dissection	
	2	
	Dissection accomplished with more blood loss and/or more trauma than desired	
	4	
	5 Careful meticulous dissection	
RHC-TS2	Dissection techniques to preserve structures, avoid blood loss, define planes: Blunt dissection	
	1 Fails to practice meticulous careful dissection	
	2	
	Dissection accomplished with more blood loss and/or more trauma than desired	
	4	
	5 Careful meticulous dissection	
RHC-TS3	Traction and counter traction	
	1 Use of excessive or inadequate force	
	2	
	3 Variably has difficulty maintaining three point traction and counter traction for exposure	
	4	
	5 Applies adequate atraumatic traction and counter traction	
RHC-TS4	Identification of planes	
	Consistently fails to identify proper planes	
	2	
	3 Inconsistent recognition of proper planes	
	4	
	5 Consistently and easily identifies proper planes	
RHC-TS5	Selection of appropriate instruments	
	Demonstrates little knowledge of or regard for appropriate type and number of instruments	
	2	
	3 Requires some guidance to the appropriate type or number of instruments	

	<ul><li>4</li><li>5 Readily uses appropriate type and number of instruments</li></ul>	
RHC-TS6	Reduction of blood loss/management of small vessels	
	Fails to recognize or manage small vessels that are actively bleeding	
	2	
	3 Recognizes and manages small vessels that are actively bleeding, but fails to anticipate and control vessels that are likely to bleed	
	4	
	5 Readily recognizes and manages small vessels that are actively bleeding, and anticipates and controls vessels that are likely to bleed and quickly	
RHC-TS7	Instrument change	
	1 Fails to recognize the need for an instrument change	
	2 Recognizes the need for and timing of instrument changes, but fails to minimize the number of required instrument changes	
	Recognizes the appropriateness of instrument changes, and effectively minimizes the number of required changes	
RHC-TS8	Instrument change	
	Fails to perform hand to hand transfer	
	2	
	3 Intermittently performs hand to hand transfer	
	4	
	5 Consistently performs hand to hand transfer	
RHC-TS9	Hand Movements	
	1 Fails to consistently demonstrate quick, error-free, or economical movement with either hand	
	2	
	Inconsistently demonstrates quick, error-free, and/or economical movement only with dominant hand	
	4	
	5 Always demonstrates quick, error-free, and economical	

movement with both hands

Trainee Identification:	Date:/	'	
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RHC-TS10	Use of electrocautery	
	Unsafe use of electrocautery resulting in significant risk for or causing damage	
	2	
	Intermittent unsafe use of electrocautery introducing minimal risk for damage or bleeding	
	4	
	5 Safe use of electrocautery with no risk for damage or bleeding	
RHC-TS11	Use of bipolar or ultrasonic devices	
	Unsafe use of bipolar or ultrasonic devices too close to healthy tissue or with too much tissue introducing significant risk for or causing damage	
	2	
	Intermittent unsafe use of bipolar or ultrasonic devices introducing minimal risk for damage or bleeding	
	4	
	5 Safe use of bipolar or ultrasonic devices with no risk for damage or bleeding	

RHC-IT-T  Total for Laparoscopic Right Hemicolectomy Intraoperative Technique	
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	Exposure	RHC Intra-op Technique	Closure	RHC Technical Skills	
Total					

## GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE

Domain of Surgical Performance	Notes	UNSAT	GEN SURG	BRD CR SURG	COMP CR SURG	CR Surg
Respect for Tissue	Appropriate handling of tissue, minimizes tissue damage through appropriate use of instruments and appropriate force		V	V		V
Time and Motion	Efficient and economic movement	V	V	V	V	V
Instrument Handling	Competent use of instruments, fluid movements without stiffness or awkwardness	V	V	V	V	V

Trainee Identification:		С	oate:	//		
Knowledge of Instruments	Familiar with names and uses of instrument required for this procedure, does not ask for wrong instrument or use incorrect names when asking for instruments	V	V	V	V	<b>V</b>
Flow of Operation	Demonstrates forward planning; course of operation demonstrated through effortless flow from one move to the next	<b>V</b>				
Use of Assistant (if applicable)	Strategically used assistants to the best advantage at all times	V	V	V	V	
Knowledge of Specific Procedure	Demonstrated familiarity with all steps of the operation /procedure	V	V	V	V	V
Quality of Final Product		V	V	V	V	V
Based on the <b>OVERALL</b> performance, the candidate's current competence	Unsatisfactory – Below the level of a general surgeon.  Gen SURG – Could function as a general surgeon. Basic competence in technical skills.  BRD CR SURG – Borderline CR surgeon.  COMP CR SURG – Competent as an independent CR surgeon. More advanced competence in technical skills.  CR SURG – Could practice without supervision as a colorectal surgeon. Could function as an independent practitioner. Professionally sophisticated. At an exemplary level would also imply the person is competent enough to act as a resource to other health care professionals.			<b>✓</b>		
Comments						