

Anastomosis (Core)

The approach for this may be open or laparoscopic.

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Understands and completes consent in accordance with the primary operation, including alternatives and non-operative treatment• Discusses general complications (anaesthetic, bleeding, infection)• Discusses specific complications (e.g. leak, and consequences of this)• Discusses expected postoperative course and recovery• Explains post-operative course. Asks for questions, checks for understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Reviews referral data (patient history, comorbidities, medications, relevant results) and assesses the clinical indication for the procedure• Considers stoma positioning/marking (if required)• Considers bowel preparation (oral, enemas)• Considers other factors that may influence anastomosis (systemic vs local)• Is aware of clinical indications• Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes• Knows relevant results• Has reviewed relevant imaging
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Actively participates in the WHO Safety Check and Team Time Out• Ensures specialised equipment is available as required• Patient is positioned appropriately• Prepares and drapes appropriately
IV. Exposure and closure	
	<ul style="list-style-type: none">• N/A
V. Intra-operative Technique: Global and Task-specific	
	<ul style="list-style-type: none">• Correct decision-making regarding type of anastomosis• Adequate control of bowel/exposure and preparation of ends• Care regarding tension and blood supply• Stapling - correct staple choice with appropriate application• Suture - correct choice of needle, size and type, appropriate spacing and tension• Mesenteric space closure if appropriate• Careful and precise handling of tissues• Adequate haemostasis using appropriate techniques• Good use of lighting, retraction and assistance• Deals with unexpected problems calmly and efficiently
VI. Post-operative Management	
	<ul style="list-style-type: none">• Ensures procedural notes and post-procedural plans are clearly communicated• Understands and can describe post-procedural care for patient

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses general complications (anaesthetic, infection, bleeding)• Discusses potential for open conversion (for laparoscopic)• Discusses intraoperative decisions unexpected findings / normal appendix• Explains post-operative course. Asks for questions, checks for understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Ensures all paperwork/organisation for theatre is arranged and site is marked correctly• Understands correct timing/prioritisation of the case• Reviews referral information (patient history, comorbidities, medications)• Reviews relevant data (observations, blood tests, urine analysis, pregnancy test, etc)• Reviews relevant imaging• Is aware of clinical indication for the procedure• Examines the patient
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Checks bladder void time (+/- requests in/out urinary catheter)• Actively participates in the WHO Safety Check and Team Time Out• Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure• Ensures specialised equipment is available as required• Positions patient appropriately (eg left arm tucked in for laparoscopic approach)• Prepares and drapes appropriately
IV. Exposure and Closure	
	<ul style="list-style-type: none">• Demonstrates safe access technique to enter peritoneum• Adjusts table positioning for optimal exposure and safety• Wound closure: closes umbilical fascia securely (laparoscopic) / repairs open incision in layers (open RLQ) / closes fascia with optimal tension and spacing (open midline)
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Places secondary ports under vision safely (laparoscopic) / uses retractors effectively (open) (G)• Chooses appropriate graspers / instruments for tissue handling (G)• Expose and grasps appendix (T)• Completes diagnostic surgery including pelvic organs (laparoscopically) and small intestine when appendix is normal (G)• Controls the mesoappendix to secure haemostasis (T)• Secures appendix base: Applies endoloops (laparoscopic) / ligatures (open) at correct site and controls tension (T)• Decides on an appendix retrieval strategy which minimises contamination (laparoscopic)(T)• Justifies need for lavage (ie whether required, and which areas/quadrants)• Manages unexpected findings appropriately (G)• Manages bleeding calmly and effectively (G)
VI. Post-operative Management	
	<ul style="list-style-type: none">• Writes operative notes and postoperative plans clearly• Understands and can justify postoperative care for patient• Good communication with staff, patient and family• Uses postoperative antibiotics only when required

Axillary Node Dissection (Principal)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses general complications (anaesthetic, bleeding, infection)• Discusses expected postoperative course (including drain management)• Discusses specific risks / complications (pain, arm mobility, lymphoedema, numbness , seroma etc.)• Asks for questions, checks understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Ensures all paperwork is completed and site is marked correctly• Is aware of clinical indications (Is able to discuss role of alternatives, including non-operative management)• Reviews relevant data (patient history, medications, etc) to foresee any risks or contraindications – such as coagulopathy, diabetes• Reviews relevant imaging and pathology results and decides on extent (level) of axillary dissection required.
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Actively participates in the WHO Safety Check and Team Time Out• Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure• Ensures specialised equipment is available as required• Ensures patient is positioned appropriately (e.g. positions arm to optimise access to axilla)• Prepares and drapes appropriately (eg arm free draped)
IV. Exposure and Closure	
	<ul style="list-style-type: none">• Makes axillary incision, of a length and position that allow safe view and access to perform a complete dissection• Closes wound – with subcutaneous sutures and subcuticular sutures to skin
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Defines the walls / borders of the axilla to expose the axillary contents (T)• Demonstrates a proficiency of axillary anatomy (T)• Identifies and acts to preserve the axillary vein, long thoracic nerve, thoracodorsal bundle and medial pectoral bundle (T)• Performs appropriate level clearance, depending on indication (T)• Defines the apex and the inferior extent of the dissection correctly and completely• Preserves or sacrifices intercostobrachial nerves, as indicated (T)

- Inserts a drain and secures it effectively
- Demonstrates careful and precise tissue handling (G)
- Secures haemostasis using specific techniques safely and effectively (eg clips, ties or energy device) (G)
- Utilises assistance, retraction and lighting appropriately (G)

VI. Post-operative Management

- Makes a plan for management of possible post operative haematoma/seroma
- Makes a follow-up plan (for histology check, wound/drain care, etc)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses indications for procedure, including potential findings, alternatives and possible outcomes
II. Pre Procedure Planning	
	<ul style="list-style-type: none">• Reviews referral data (patient history, comorbidities, medications, relevant results) and assesses the clinical indication for the procedure• Assesses the patient to identify significant comorbidities and foresee risks or contraindications• Identifies and ensures appropriate management of anticoagulation pre-procedure, where required• Demonstrates leadership and teamwork within the endoscopy unit
III. Pre Procedure Preparation	
	<ul style="list-style-type: none">• Ensures appropriate monitoring is in place, and is able to describe the principles of monitoring• Ensures all equipment and the endoscopy room are set up correctly• Checks endoscope function, identifies and corrects problems prior to the procedure• Actively participates in the WHO Safety Check and Team Time Out or equivalent, according to local protocols
IV. Exposure and Positioning	
	<ul style="list-style-type: none">• Positions patient in the left lateral position, with the bed positioned at a comfortable height• Administers (or supervises) appropriate sedation, and is able to demonstrate understanding of the principles of safe sedation and potential risks• Monitors and maintains patient dignity and comfort throughout procedure
V. Intra-procedure Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Performs a rectal examination and notes the findings (T)• Demonstrates appropriate insertion technique, maintaining luminal views (T)• Demonstrates good tip control, is able to deliberately and reliably direct view of the scope using the control wheels and torque (T)• Negotiates the sigmoid safely using torque steering (T)• Identifies and manages loops, works to prevent loop formation and reducing them when they occur (T)• Appropriately uses insufflation, irrigation/flushing, suction and lens washing (luminal adjunct skills) (T)• Appropriately uses abdominal pressure, position change and scope stiffener (external adjunct skills) (T)• Withdrawal technique is thorough and effective to adequately visualise the mucosa and correctly identify pathology (T)

- Inspects the mucosa and photo-documents the pathology encountered plus important landmarks (e.g. TI, appendix orifice, IC valve, retroflexion in rectum) (T)
- Pathology encountered is correctly identified and managed (T)
- Intervention techniques (including biopsies and polypectomy) are appropriate and competently performed (T)
- Optimises technique to maintain comfort, with additional reassurance, analgesia, and sedation given when required (G)
- Communication with the patient and staff is effective and respectful throughout procedure (G)
- Judgement and decision making is sound and reasoned throughout procedure (G)

VI. Post procedure Management

- Completes an accurate and appropriately detailed report in a timely manner, including comfort score and bowel preparation score
- Arranges appropriate follow-up based on patient presentation, endoscopic findings and local protocols
- Ensures an appropriate post-procedure anticoagulation management plan is made and documented in the report, where required
- Discusses the report and findings with patient, or delegates this appropriately
- Is able to demonstrate an understanding of the principles of identifying and managing complications, and performs this where required
- Is able to discuss the management of common histological findings that may be relevant to the patient

Examination under Anaesthesia – Incision and Drainage of Perianal Abscess (Core)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses general complications (e.g. infection, bleeding)• Discusses potential intra-operative decision making (e.g. seton use)• Explains likely post-operative course• Asks for questions and checks for understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Reviews case details (e.g. patient history, comorbidities, medications, results) and assesses the clinical indication for the procedure• Uses case details to mitigate risks (e.g. coagulopathy, diabetes)• Reviews relevant imaging (if available)
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Ensures that the patient is positioned optimally and safely (e.g. lithotomy position)• Actively participates in the WHO Safety Check and Team Time Out• Ensures that effective anticoagulation and antibiotic prophylaxis are used• Ensures specialised equipment is available as required• Effectively prepares and drapes the operative field
IV. Exposure and Closure	
	<ul style="list-style-type: none">• Selects the optimal strategy for wound management – packing vs drain vs closure
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Performs effective rectal examination under anaesthesia (T)• Uses proctoscope to examine for other pathologies (e.g. fistulae in ano) (T)• Assesses anus to identify fluctuant area (T)• Considers size and direction of incision over abscess (T)• Considers microbiological sampling to drive antibiotic treatment (as required) (T)• Effectively explores the wound with a combination of sharp and blunt dissection (e.g. to break up loculations) (T)• Performs an effective wound washout (e.g. saline, hydrogen peroxide, betadine) (G)
VI. Post-operative Management	
	<ul style="list-style-type: none">• Ensures procedural notes and post-procedural plans are clearly communicated• Understands and can describe post-procedural care for patient• Communicates effectively with staff, patient and family/Whānau• Arranges follow-up (if required)

Hartmann's Procedure or Acute Left Colectomy (Principal)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Explains general complications (anaesthetic/bleeding/infection)• Knowledge of indications for stoma formation in acute/elective setting• Knowledge of implications of stoma management for patient• Explains likely post-operative course• Asks for questions and checks for understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Good communication with stoma therapists regarding type of stoma/duration• Site is marked• Is aware of clinical indications• Reviews relevant data (patient history, medications, pathology results) to balance risks and benefits of a stoma• Has reviewed relevant results & imaging
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Actively participates in the WHO Safety Check and Team Time Out• Ensures specialised equipment is available as required• Ensures patient is positioned appropriately• Prepares and drapes appropriately
IV. Exposure and Closure	
	<ul style="list-style-type: none">• N/A
V. Intra-operative Technique: Global and Task-specific	
	<ul style="list-style-type: none">• Appropriate entry into abdominal cavity• Appropriate mobilisation of left colon• Identification and protection of the left ureter• Appropriate management of the trunk vessels• Appropriate proximal transection level• Appropriate distal transection level• Appropriate use of drains• Appropriate dissection through abdominal wall to create stoma• Dimensions of fascial defect are appropriate for the type of stoma• Appropriate closure of laparotomy prior to stoma formation• Appropriate choice of suture for stoma formation• Stoma formed with good blood supply and appropriate pouting from skin surface
VI. Post-operative Management	
	<ul style="list-style-type: none">• Ensures procedural notes and post-procedural plans are clearly communicated• Understands and can describe post-procedural care for patient• Communicates effectively with staff, patient and family/Whānau• Arranges follow-up (if required)

Competencies and Definitions

I. Consent

- Discusses rationale for surgical treatment (e.g. non-resolving SBO, features of ischaemia)
- Discusses general complications (e.g. infection, bleeding)
- Discusses potential intra-operative decision making (e.g. need for bowel resection)
- Discusses procedure specific complications (e.g. iatrogenic bowel injury, wound dehiscence)
- Explains likely post-operative course (laparoscopic versus open)
- Asks for questions and checks for understanding

II. Pre Operation Planning

- Reviews case details (e.g. patient history, comorbidities, medications, results) and assesses the clinical indication for the procedure
- Demonstrates awareness of the clinical urgency of the case
- Uses case details to mitigate risks (e.g. coagulopathy, diabetes)
- Reviews relevant imaging

III. Pre-operative Preparation

- Ensures that the patient is positioned optimally and safely
- Actively participates in the WHO Safety Check and Team Time Out
- Ensures that effective anticoagulation and antibiotic prophylaxis are used
- Ensures specialised equipment is available as required
- Effectively prepares and drapes the operative field

IV. Exposure and Closure

- Plans and makes a careful incision (e.g. uses non-operated region to enter abdomen)
- Selects suture for fascial and skin closure and appropriate dressings

V. Intra-operative Technique: Global (G) and Task-specific (T)

- Uses techniques to enter the peritoneal cavity which minimise iatrogenic injury (T)
- Handles bowel with care (G/T)
- Examines bowel for evidence of ischaemia (reversible/non reversible) (T)
- Inspects for secondary injury or unrelated pathology (G)
- Checks continuity of intestinal flow once obstruction is cleared (T)
- Considers physiological impact of pathology encountered (e.g. reperfusion of ischaemic segment of bowel) (G/T)
- Protects the bowel while closing the abdomen (G)

VI. Post-operative Management

- Ensures procedural notes and post-procedural plans are clearly communicated
- Understands and can describe post-procedural care plan for patient Identifiers that should prompt early review
- Communicates effectively with staff, patient and family/Whānau

Competencies and Definitions

I. Consent

- Understands and completes consent in accordance with the primary operation, including alternatives and non-operative management.
- Discusses general complications (Wound infections, bleeding, anaesthetic)
- Discusses specific complications (Recurrence, groin pain, testicular ischaemia, vascular injury, orchidectomy, haematoma, bowel / bladder injury, convert to open.)
- Discusses expected post operative course and recovery
- Asks for questions, and checks for understanding.

II. Pre Operation Planning

- Reviews referral data (patient history, comorbidities, medications, relevant results) and assesses the clinical indication for the procedure
- Accurately identifies any complicating factors e.g. obesity, previous repair, loss of domain
- Correctly identifies and marks side
- Is aware of clinical indications
- Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes
- Knows relevant results
- Has reviewed relevant imaging

III. Pre-operative Preparation

- Ensures preoperative briefing
- Ensure the patient is positioned appropriately
- Actively participates in the WHO Safety Check and Team Time Out
- Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure
- Ensures specialised equipment is available as required
- Prepares and drapes appropriately

IV. Exposure and Closure

- Safe access technique (open Hassan technique if laparoscopic procedure)
- Correct incision (site and length)
- Appropriate layered wound closure (including tension, spacing, suture choice and dressing)

V. Intra-operative Technique: Global (G) and Task-specific (T)

- Opens external oblique incision to display inguinal canal clearly (if open repair) (T)
- Mobilises the cord structures/sac efficiently (T)
- Can clearly dissect out the peritoneal sac (T)
- Maintains careful haemostasis with appropriate techniques (G)
- Deals with any unexpected findings (e.g. sliding hernia) comfortably (G)
- Effects a sound mesh repair of defect (T)
- Chooses appropriate prosthetic mesh (T)
- Careful and precise tissue handling (G)
- Is logical in progress through operative steps (G)
- Uses assistant/retraction in a helpful way (G)

- Uses correct instruments in appropriate ways (G)
- Uses local anaesthetic as appropriate (G)

VI. Post-operative management

- Writes up operative notes and postoperative plans clearly
- Understands and can describe postoperative care for patient
- Good communication with staff, patient and family
- Arranges follow-up if indicated

Open Right Hemicolectomy (Principal)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses indications for surgery• Discusses common complications- bleeding, infection, iatrogenic injury (ureter), return to theatre, anastomotic leak, stoma• Discusses recovery time (time off work if applicable)• Discusses role of other adjuvant treatment
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Discussion of case in MDT forum• Has reviewed any results, imaging and appropriate histology• Stoma marking if appropriate• Is aware of clinical indications• Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Appropriate positioning• Imaging is available for review in operating theatre• Catheter and diathermy pad• Actively participates in the WHO Safety Check and Team Time Out• Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure• Ensures specialised equipment is available as required• Prepares and drapes appropriately
IV. Exposure and Closure	
	<ul style="list-style-type: none">• Appropriate closure technique
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Appropriate skin incision (midline, transverse) (G)• Safe entry into peritoneal cavity (G)• Tilting of patient to optimise exposure (G)• Appropriate retraction/packing as required (G)• Right colonic mobilisation with awareness of right ureter, duodenum (T)• Determining resection extent based on blood supply/oncological margins (T)• Preservation of blood supply at proximal and distal bowel ends (T)• Tension free anastomosis with staple/suture (T)• Appropriate management of mesenteric defect (T)• Appropriate fascial and skin closure (G)
VI. Post-operative Management	
	<ul style="list-style-type: none">• Clear operating notes and post-operative plan documentation• Post-operative review of histology and discussion of case in MDT

Opening and Closing Abdominal Incision

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses the various factors that impair wound healing (e.g. comorbidity, age, immunosuppression, obesity, smoking)
II. Pre operation planning	
	<ul style="list-style-type: none">• Discusses type of abdominal wounds (midline, Kocher's, Pfannenstiel, gridiron)• Demonstrates understanding of the anatomy of the anterior abdominal wall• Aware of clinical indications• Aware of significant co-morbidities - obesity, renal disease, etc.
III. Pre operative preparation	
	<ul style="list-style-type: none">• Demonstrates incision technique – blade, diathermy• WHO Safety check and team time out• Consideration of DVT prophylaxis and antibiotic prophylaxis• Ensures specialized equipment available as required• Patient is positioned appropriately• Prepares and drapes appropriately
IV. Exposure and closure	
	<ul style="list-style-type: none">• Appropriate sutures selected (PDS/nylon)• Appropriate spacing of sutures• Appropriate fascial incorporation with suture• Appropriate skin closure (staples/sutures)• Appropriate dressings• Demonstrates technique for avoiding bowel injury
V. Intra operative technique: global (G) and task-specific items (T)	
	<ul style="list-style-type: none">• Minimum trauma during dissection• Appropriate use of blade, diathermy (cut/coag)• Appropriate identification of tissues• Safe and appropriate entry into the peritoneal cavity• Appropriate and safe retraction• Demonstrates safe handling of sharps
VI. Post operative management	
	<ul style="list-style-type: none">• Sound documentation and operating notes• Statement regarding removal of dressing and/or skin sutures/staples• Advises wound care

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Explains general complications (anaesthetic/bleeding/infection)• Discusses risk of injury to ureter, pelvic nerves and implications• Discusses the risk of anastomotic leak and the possibility of a stoma and in what circumstances this would be considered• Explains post-operative course. Asks for questions, checks for understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Ensures review in MDT if treatment for cancer• Need to mark stoma site if required• Inserts catheter• Is aware of clinical indications• Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes• Has reviewed the relevant results & imaging
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Appropriate patient positioning, preparation and draping• Ensures specialised equipment is available as required
IV. Exposure and Closure	
	<ul style="list-style-type: none">• N/A
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Midline laparotomy wound, appropriate length (G)• Careful entry into peritoneal cavity (G)• Appropriate tilting of patient (G)• Appropriate retraction and packing (G)• Careful handling of tissues (G)• Appropriate mobilisation of colon (T)• Identification and protection of left ureter (T)• Appropriate division of proximal and distal bowel based on oncological principles and preservation of blood supply (T)• Tension free anastomosis (stapled or open) (G)• Understanding of need for drains (G)• Understanding the need for stoma (G)• Appropriate closure (G)
VI. Post-operative Management	
	<ul style="list-style-type: none">• Writes up operative notes and postoperative plans clearly• Understands and can describe postoperative care for patient• Good communication with staff, patient and family• Arranges follow-up if indicated

Simple Laparoscopic Cholecystectomy +/- Intraoperative Cholangiogram (Core)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses general risks (anaesthetic/bleeding/infection)• Discusses specific risks (open conversion, CBD injury, bile leak, retrained stone)• Explains post-operative course. Asks for questions, checks for understanding• Understands and completes consent in accordance with the primary operation, including alternatives and non-operative management• Discusses general complications (Wound infections, bleeding, anaesthetic)• Discusses specific complications (CBD injury, bile leak, bleeding, open.)• Discusses expected post operative course and recovery• Asks for questions, and checks for understanding.
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Reviews relevant data (patient history, comorbidities, medications, relevant results) and assess as the clinical indication for the procedure• Identifies any likely complicating factors e.g. nutritional, adhesions, immune suppressing medications, age, etc.• Considers likelihood of CBD stone and how this may be dealt with• Ensures image intensifier available when appropriate and staff are equipped to do IOC• Is aware of clinical indications• Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes• Knows relevant results• Has reviewed relevant imaging
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Ensure preoperative briefing• Ensure the patient is positioned appropriately (including table position for IOC)• Actively participates in the WHO Safety Check and Team Time Out• Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure• Ensures specialised equipment available as required• Prepares and drapes appropriately
IV. Exposure and Closure	
	<ul style="list-style-type: none">• Safe Hasson port placement and establishment of pneumoperitoneum• Understands appropriate flow rates/intra-abdominal pressure settings• Appropriate table positioning for optimum view• Thorough closure of Hasson port at completion
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none">• Safe secondary port introduction and correct placement (G)• Appropriate gallbladder retraction to expose Hartmann's pouch (T)• Correctly identifies the anatomy prior to starting dissection (Rouviere's sulcus, Hartmann's pouch, base of segment 4 of liver) (T)• Correct site to commence dissection (T)

	<ul style="list-style-type: none"> • Safe dissection technique to expose cystic duct/artery (T) • Understands anterior/posterior window concepts (T) • Demonstrates “critical view of safety” prior to any division (View of segment 4 with cystic duct, cystic artery and large posterior window from rights, and view of segment 3 with cystic duct, artery and nothing else and a large posterior window from left) (T) • IOC- successful cannulation of cystic duct (T) • IOC- correct image intensifier orientation/choice of contrast/injection of contrast (T) • IOC- correct interpretation of pictures (T) • IOC- troubleshoots problems that might arise (T) • Correct application of occlusion clips to structures (T) • Safe and clean technique for dissection gallbladder off liver (G) • Uses appropriate counter-traction to maintain tension (T) • Appropriate extraction technique (bag vs not) (T) • Washout, considers drain if indicated (T)
VI. Post-operative management	<ul style="list-style-type: none"> • Writes up operative notes and postoperative plans clearly • Understands and can describe postoperative care for patient • Good communication with staff, patient and family • Arranges follow-up if indicated

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none"> Understands and completes consent in accordance with the primary operation, including alternatives and non-operative management. Discusses general complications (Wound infections, bleeding, anaesthetic) Discusses specific complications (Leak, Ileus, haematoma.) Discusses expected post operative course and recovery Asks for questions, and checks for understanding.
II. Pre Operation Planning	
	<ul style="list-style-type: none"> Reviews referral daughter (patient history, comorbidities, medications, relevant results) and assess as the clinical indication for the procedure Foresees and plans for any nutritional consequences of small bowel resection Is aware of clinical indications Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes Knows relevant results Has reviewed relevant imaging
III. Pre-operative Preparation	
	<ul style="list-style-type: none"> Ensures preoperative briefing Ensures patient is appropriately positioned Actively participates in the WHO Safety Check and Team Time Out Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure Ensures specialised equipment is available as required Prepares and drapes appropriately
IV. Exposure and Closure	
	<ul style="list-style-type: none"> Makes appropriate midline abdominal incision Mass closure of abdominal wound with appropriate suture material, technique and tension Skin closure with staples or suture material
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none"> Serial division of mesentery with suture ties or vessel sealing device (T) Accurately identifies diseased bowel to be resected (T) Division of proximal and distal bowel between clamps or using linear cutter-stapler (T) Confirms blood supply and tension free anastomosis (T) Bowel anastomosis: side-to-side using stapler OR end-to-end hand-sewn (selects appropriate suture material if hand sewn) (T) Appropriate management of mesenteric defect (T) Checks for patency or leaks (T)
VI. Post-operative management	
	<ul style="list-style-type: none"> Writes up operative notes and postoperative plans clearly Understands and can describe postoperative care for patient Good communication with staff, patient and family

Stoma Formation (Principal)

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none">• Discusses general risks (anaesthetic/bleeding/infection)• Discusses indications for stoma• Discusses possible complications of stoma formation• Explains likely post-operative course• Asks for questions and checks for understanding
II. Pre Operation Planning	
	<ul style="list-style-type: none">• Ensures optimal siting of stoma (by self or stomal therapist)• Is aware of clinical indications• Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes• Knows relevant results• Has reviewed relevant imaging
III. Pre-operative Preparation	
	<ul style="list-style-type: none">• Actively participates in the WHO Safety Check and Team Time Out• Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure• Ensures specialised equipment is available as required• Ensures patient is positioned appropriately• Prepares and drapes appropriately
IV. Exposure and Closure	
	<ul style="list-style-type: none">• Laparoscopic or open approach• Fashions stoma with or without spouting, as indicated• Decides whether to fashion over rod (if loop stoma)• Fitting and application of wafer and bag
V. Intra-operative Technique: Global and Task-specific	
	<ul style="list-style-type: none">• Mobilises bowel to ensure adequate length to reach surface without tension• Makes appropriately sized skin opening with core of subcutaneous fat• Enters peritoneal cavity using rectus-splitting technique• Retrieves bowel with minimal trauma
VI. Post-operative Management	
	<ul style="list-style-type: none">• Ensures procedural notes and post-procedural plans are clearly communicated• Understands and can describe post-procedural care for patient• Communicates effectively with staff, patient and family/Whānau• Arranges follow-up if indicated

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none"> • Discusses rationale for surgical treatment • Discusses general complications (e.g. infection, bleeding) • Discusses procedure specific complications (e.g. haemorrhage, nerve injury, hypocalcaemia)
II. Pre Operation Planning	
	<ul style="list-style-type: none"> • Ensures a preoperative voice assessment is performed • Reviews imaging (e.g. CT scan if suspicion of retrosternal goitre, side of nodule to be excised)
III. Pre-operative Preparation	
	<ul style="list-style-type: none"> • Actively participates in the WHO Safety Check and Team Time Out • Positions patient for optimal access (e.g. head-ring, sand-bag between shoulders) • Effectively prepares and drapes the operative field
IV. Exposure and Closure	
	<ul style="list-style-type: none"> • Plans / marks skin incision • Raises upper and lower flaps in sub-platysmal plane • Separates or divides strap muscles as indicated • Closes wound in layers with an appropriate choice of suture
V. Intra-operative Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none"> • Capsular dissection of gland (T) • Controls vessels in continuity or with vessel sealing device (G) • Takes care to preserve well-vascularised parathyroid glands/perform autotransplantation where viability is compromised (T) • Identifies and preserves recurrent laryngeal nerve(s) (T) • Minimises risk of injury to external branch of superior laryngeal nerve by division of individual branches of superior thyroid artery (T) • Adequately controls the thyroid isthmus (if hemithyroidectomy) (T)
VI. Post-operative Management	
	<ul style="list-style-type: none"> • Is aware of signs of respiratory compromise from haemorrhage or recurrent laryngeal nerve palsy • Monitors serum calcium if total/completion thyroidectomy • Considers indication for and/or timing of thyroxine replacement

Competencies and Definitions	
I. Consent	
	<ul style="list-style-type: none"> • Discusses indications for procedure, including potential findings, alternatives and need for biopsy • Discusses possible risks and complications of procedure, such as perforation, bleeding from biopsy site, reaction to anaesthetic/sedation, etc.
II. Pre Procedure Planning	
	<ul style="list-style-type: none"> • Reviews referral data (patient history, comorbidities, medications, relevant results) and assesses the clinical indication for the procedure • Assesses the patient to identify significant comorbidities and foresee risks or contraindications • Identifies and ensures appropriate management of anticoagulation pre-procedure, where required • Demonstrates leadership and teamwork within the endoscopy unit
III. Pre-procedure Preparation	
	<ul style="list-style-type: none"> • Ensures appropriate monitoring in place, and is able to describe the principles of monitoring • Ensures all equipment and the endoscopy room are set up correctly • Checks endoscope function, identifies and correct problems prior to procedure • Actively participates in the WHO Safety Check and Team Time Out or equivalent, according to local protocols
IV. Exposure and Positioning	
	<ul style="list-style-type: none"> • Positions patient in left lateral position, with mouthguard in • Administers (or supervises) appropriate sedation, and is able to demonstrate understanding of the principles of safe sedation and potential risks • Monitors and maintains patient dignity and comfort throughout the procedure
V. Intra-procedure Technique: Global (G) and Task-specific (T)	
	<ul style="list-style-type: none"> • Demonstrates appropriate insertion technique, maintaining luminal views (T) • Demonstrates good tip control, is able to deliberately and reliably direct view of the scope using the control wheels and torque (T) • Negotiates the oropharynx and safely intubates the oesophagus (T) • Notes the level of the gastro-oesophageal junction, including the presence and description of Barrett's Oesophagus and hiatus hernia (T) • Passes the endoscope through the stomach, negotiating the pylorus to reach the duodenum safely (T) • Retroflexes the scope to view cardia, with adequate views (T) • Appropriately uses insufflation, irrigation/flushing, suction and lens washing (luminal adjunct skills) (T) • Withdrawal technique is thorough and effective to view entire mucosa, identifying pathology (T) • Inspects the entire mucosa and photo-documents important landmarks (e.g. duodenum, pylorus, incisura, lesser curve, cardia and GOJ) and any pathology encountered (T) • Pathology identified is correctly identified and managed (T) • Intervention techniques (including biopsies) are appropriate and completely performed (T) • Optimises technique to maintain comfort, with additional reassurance, analgesia and

	<p>sedation given when required (G)</p> <ul style="list-style-type: none"> • Communication with the patient and staff is effective and respectful throughout procedure (G) • Judgement and decision making is sound and reasoned throughout the procedure (G)
VI. Post Procedure Management	<ul style="list-style-type: none"> • Completes an accurate and appropriately detailed report in a timely manner • Arranges appropriate follow-up based on patient presentation, endoscopic findings and local protocols • Ensures an appropriate post-procedure anticoagulation management plan is made and documented in the report, where required • Discusses the report and findings with the patient, or delegates this appropriately • Is able to demonstrate an understanding of the principles of identifying and managing complications, and performs this where required • Is able to discuss the management of common histological findings that may be relevant to the patient

Competencies and Definitions	
I. Consent	<ul style="list-style-type: none"> • Discusses possible risks and complications, including: need for re-excision (if WLE), haematoma, seroma, post-operative pain • Discusses axillary surgery plan (and risks), where relevant
II. Pre Operation Planning	<ul style="list-style-type: none"> • Reviews results of triple assessment, including breast imaging • Arranges localisation (eg hook-wire) if indicated (WLE) • Arranges scintigraphy prior to concomitant sentinel node biopsy, where relevant • Is aware of clinical indications; Demonstrates knowledge of indications for wide local excision (WLE) vs mastectomy • Reviews relevant data (patient history, medications, pathology results) to foresee any risks or contraindications – such as coagulopathy, diabetes
III. Pre-operative Preparation	<ul style="list-style-type: none"> • Marks a cosmetically mindful incision • Actively participates in the WHO Safety Check and Team Time Out • Identifies and ensures appropriate anticoagulation and antibiotic prophylaxis pre-procedure • Ensures specialised equipment is available as required • Patient is positioned appropriately (e.g. positions patient at edge of the bed to allow optimal access to breast) • Prepares and drapes appropriately
IV. Exposure and Closure	<ul style="list-style-type: none"> • Raises skin flaps • Closes wound effectively – with subcutaneous sutures and subcuticular sutures to skin
V. Intra Operative Technique: Global (G) and Task-specific (T)	<ul style="list-style-type: none"> • For WLE: dissects around palpable tumour or end of hook-wire); orientates specimen margins with clips and/or sutures; obtains specimen mammogram if indicated; utilises breast re-shaping techniques, when indicated (T) • For mastectomy: dissects to include all breast tissue, including axillary tail (T) • Manages bleeding to achieve effective haemostasis, with diligence • Inserts drain/s, when indicated
VI. Post-operative Management	<ul style="list-style-type: none"> • Makes a plan for management of possible post operative haematoma/seroma • Makes a follow-up plan (for histology check, wound/drain care, etc) • Gives instructions for drain care and removal, if applicable