

Portland VA Medical Center

Goals and Objectives

Intern (PGY-1):

Goals:

Medical Knowledge

- Understand the overall evaluation and management of the surgical patient.
- Understand the physiology of common postoperative problems in patients on the ward, including surgical infections, hemorrhage, thrombotic events, and the management of fluids and electrolytes.
- Understand the perioperative risk stratification of patients.
- Understand the initial work up and physiology of patients with hernias, abscesses, biliary disease, abscesses, bowel obstructions, diverticulitis, and cancer patients.
- Understand the anatomy of the above patients.
- Understand the physiologic changes following surgeries.
- Understand the nutritional assessment and needs of the surgical patient.
- Understand the management of patients with coronary artery disease, diabetes, hypertension, pulmonary dysfunction, and anticoagulation needs.
- Understand the principles and recognition of necrotizing fasciitis.

Patient Care:

- Develop an understanding of the management of common postoperative patients on surgery and how these principles prevent complications.
- Understand the common methods of treating common postoperative complications including: chest pain, shortness of breath, hypotension, low urine output, fever, abdominal pain, wound infections and dehiscences, and anastomotic leaks.
- Understand the concepts surrounding drain and catheter care including: central lines, bladder catheters, chest tubes, feeding tubes, nasogastric tubes, and surgically placed drains.
- Counsel and educate patients and their families
- Learn to make informed decisions about diagnostic tests and therapeutic interventions.
- Understand the management of small bowel obstruction
- Understand the management of enterocutaneous fistula.
- Understand the management of ileus.
- Understand the interpretation of laboratory and radiographic tests.
- Understand the initial workup for patients with cancers, such as rectal, melanoma, colon, and breast.
- Understand the perioperative issues of the patient undergoing splenectomy.
- Understand the potential complications of abdominal wall hernia repairs and their preventative strategies.
- Understand the management of complicated wounds.
- Understand the effects of aging on perioperative management of the surgical patient.

Professionalism:

- Learn to communicate effectively and compassionately with patients, patient's family, team members, and staff.
- Learn to efficiently sign out patients to other teams.
- Be sensitive to patients and in their social and cultural context as well as with mental health diseases, such as PTSD, anger issues, schizophrenia, depression or limited resources.
- Be sensitive to patients who have come back from wars, as well as for the service the patients have provided in previous military service.
- Understand the importance of completing documentation of patient charts, discharges, your operative logs and duty hours.
- Learn and practice the ethical principles involved with caring for the surgical population, including consent-ability, confidentiality, and informed consent.

Interpersonal and Communication Skills

- Respectfully interact with patients, staff and families in a way that they can understand.
- Learn to listen and assess non-verbal cues from patients and staff.
- Work effectively with the team, communicating issues appropriately and succinctly.
- Work effectively with ancillary care such as social workers, pharmacists, and other medical fields.

Practice-Based Learning

- Accept responsibility for the care of patients on the ward, learning and modifying practice management style.
- Apply knowledge of scientific data to the care of the surgical patient.
- Facilitate the learning of medical students on the team.

-Use the OHSU library, internet, VA library, and other IT to access medical information and review recent advances of the surgical patient.

System-Based Practice

- Develop systems to help maintain consistent quality of patient care.
- Understand, utilize and review clinical pathways for patients.
- Learn to practice cost-effective health care without sacrificing quality of care.
- Assist patients to negotiate the medical system in a consistent and fair manner.
- Partner with surgical facilitators, coordinators and social workers to provide seamless care across the system.

Educational Objectives for Interns:

Medical Knowledge:

- Describe the potential complications arising from disorders in electrolytes and in under or over resuscitation.
- Describe the management of glucose in the diabetic patient.
- List etiologies for persistent high NGT output in the postoperative patient, or patient with small bowel obstruction.
- Describe the clinical presentation of a patient with hernias, abscesses, biliary disease, abscesses, bowel obstructions, diverticulitis, hemorrhoids, fissures, and cancer patients.
- Draw the anatomy of the gallbladder, triangle of Calot, and hepatic artery.
- Describe the blood supply of the colon and rectum.
- Describe epidural and PCA complications
- List at least seven etiologies for small bowel obstructions and ileuses.
- List three of four causes of mesenteric ischemia
- Describe the Childs classification and its impact on cholecystectomy or any abdominal surgery.
- Describe the risks associated with hernia repair, cholecystectomy, I&D of abscesses.
- List the differential diagnosis of the patient with chest pain, low urine output, hypotension, hypertension, and hypoxia.
- Describe the important history and data to be taken prior to central line placement.
- List the important factors in prognosis for melanoma.

Patient Care:

- List the nutritional options for the pre and post-operative patients, the risks and benefits of each depending on the different operations, such as colon surgery, small bowel, cholecystectomies, cancer surgeries.
- Calculate the estimated energy requirements for the postoperative patient.
- Describe appropriate pre-operative strategies to decrease post operative MI in patients.
- Describe the treatment of a patient with mild or severe hypo or hyper natremia.
- List intravenous and enteral options for hyper or hypokalemia, phosphatemia and magnesium.
- Describe the calculation of IV solution rate and choice of IV solution.
- Describe the symptoms, evaluation, and management of intraabdominal abscess.
- List the appropriate studies and interpretations for evaluation of a patient with chest pain, hypoxemia, low urine output, hypotension and hypertension.
- List the appropriate studies and management of patients requiring anticoagulation based on history of DVT, PE, mitral valve, other valves, low EF, atrial fibrillation, and cardiac stents.
- List the appropriate DVT prophylaxis in mild, moderate and high risk surgical patients.
- List appropriate immunizations for proposed splenectomy.
- Describe the signs and symptoms, diagnostic tests and management of small bowel obstruction.
- Differentiate between ileus and small bowel obstruction.
- Identify the common clinical presentation of the patient with mesenteric ischemia.
- Describe the work up of a patient with a breast mass and cancer and interpret a mammogram if patient encountered on service in regards to orientation and suspicious findings.
- Describe the appropriate evaluation of suspected leak in a patient.
- Describe the work up of a patient with diverticulitis and management as well as complications and management of these complications from diverticulitis and surgery. Describe the post operative dietary instructions for the patient during the treatment for diverticulitis and for diverticulosis.
- Describe the management, operative and medical for patients with fissures, fistulas in and, and hemorrhoids. Describe the corresponding surgeries for these. Describe the banding procedure.
- List the indications for cholecystectomy, herniorrhaphy
- Scrub in the OR as assisting surgeon to at least 4 hernia (inguinal or umbilical) repairs while on the service and practice technical expertise and list steps in the procedure.
- Scrub in the OR as assisting surgeon for at least 1 I&D of abscess if occurs during service and delineate important steps in the procedure.

- Scrub in the OR for at least 1 subcutaneous procedure or breast biopsy if occurs during service and practice wound closure techniques, tissue dissection.
- Scrub in the OR if on service during patient with appendicitis and describe workup, and anatomy and steps in the procedure.
- Demonstrate one and two-handed ties in the operating room.
- Perform history and physicals on patients in Surgery Prep Clinic, general surgery clinic and on wards and present patients to resident team of faculty, listing important elements of patient's H&P and developing an assessment and plan. Present in an orderly and organized manner of a formal H&P.
- Round on ward patients and present pertinent SOAP info to surgery team and pertinent I/O's.
- Attend indications conference and present pertinent information on patients seen in Surgery Prep Clinic as an adjunct to Chief resident presentation.
- Present case at attending rounds and list main medical knowledge aspects of that patient's disease, and your plans for the patient care.

Professionalism:

- Attend Grand Rounds, Resident Conference, Mortality and Morbidity, Thursday VA Resident education conference, Indications conference and Tuesday attending conference.
- Be on time to all conferences.
- Complete documentation, such as discharge summaries (within 24 hours or at discharge for transfers to other facilities), operative dictations (same day), operative logs, duty hours on time.

Interpersonal and Communication Skills

- Complete discharges and orders, and speak with social worker and wound care nurses by phone or in person (M-F) on complicated discharges. For complicated weekend discharges, anticipate their needs (transportation, visiting nurse needs, wound care) and discuss with social worker and nurse coordinators during weekdays. Communicate with wound care nurse regarding ostomy marking and post operative care. Remember to involve the American Cancer Society's Reach for Recovery Program for all breast cancer patients via our coordinator.

Practice-Based learning:

- Evaluate an article relating to pertinent patient care issues. (Articles collected in binder in SICU resident room can be particularly helpful).

Systems-Based Practice:

- Review and recommend updates and improvements to current practice guidelines and problems particular to the VA.

Junior (PGY-2):

All intern goals and objectives as well as these Junior Resident specific goals

Goals:

Medical Knowledge:

- Understand the physiology of the acutely-ill postoperative patient in the SICU, including SIRS, hemostasis, ventilator management.
- Understand the physiology of shock: including hemorrhagic/hypovolemic shock, cardiogenic shock, septic shock and obstructive shock.
- Understand the monitoring of arterial blood pressure, pulmonary artery catheters and hemodynamic monitoring, respiratory monitoring and renal monitoring.
- Understand cancer biology, screening, and tumor markers and receptors for cancers such as colon and breast.
- Understand the physiology of the patient with portal hypertension and liver failure
- Understand the physiology of digestion in the small intestine.
- Understand the physiology of gastric acid secretion, motility and hormones.
- Understand the physiology of acute and chronic pancreatitis.
- Understand the physiology and anatomy of the rectum and diseases.
- Understand the principles of anal cancers.
- Understand the principles and presentations of Crohns and Ulcerative Colitis
- Understand the physiology of the obese patient.

Patient Care:

- Develop and practice management procedures for the care of the acutely ill postoperative patient.
- Understand the diagnosis and management of abdominal compartment syndrome, shock and SIRS.
- Understand the appropriate work up of the patient with pancreatic, colorectal, breast cancer.
- Understand the management of acute hemorrhage.
- Understand the management of patient with complications of diverticulitis.
- Develop the ability to appropriately ready a patient for the OR.
- Develop a system of evaluation and treatment of the ICU patient.

- Efficiently communicate with the SICU team.
- Counsel patients and families regarding end of life decisions in ethically appropriate manner.
- Understand the principles of performing a safe cholecystectomy
- Understand the principles of performing a safe herniorrhaphy.
- Understand the appropriate work up to minimize post operative MI, CVA, DVT, PE's in patients.
- Understand the management of GI bleeding.
- Develop a more advanced assessment of small bowel obstruction.
- Understand the classifications of cirrhosis and the prediction of surgical outcome.
- Understand the management of the patient with acute pancreatitis and late complications such as pancreatic pseudocyst.
- Understand the risks of colonoscopy and safe procedure.
- Develop a history and exam for anal diseases.
- List the treatment of necrotizing fasciitis.

Professionalism:

- Learn to effectively collaborate with the SICU team
- Learn to effectively use and respond to consultation of other physician specialties
- Learn to assume a leadership position with the team when necessary.
- Demonstrate responsiveness to patient needs, balancing ethical issues regarding withholding of care.

Interpersonal and Communication Skills:

- Effectively communicate with other team members in a leadership role.
- Assist the chief residents by taking responsibility when the chief is unavailable.
- Effectively consult other services.

Practice-Based Learning:

Systems-Based Practice:

Same as intern

Educational Objectives for Junior:

Medical Knowledge:

- Describe the therapeutic options for the patient with Barretts disease with dysplasia
- Describe the risks of central line placement and steps towards placement.
- Describe the various areas for complications in doing a lap cholecystectomy.
- Describe the utilization, circumstances and rationale of subtotal cholecystectomy in open cases.
- List the etiologies of pancreatitis, and the risk factors associated with prognosis.
- List four operations for peptic ulcer disease.
- Describe different strategies in management of diverticulitis.
- Describe management of breast cancer both of breast and lymph nodes.
- List the operative strategies for melanomas based on depth
- List the steps for sentinel lymph node biopsies.
- Describe techniques for bowel anastomoses both stapled and hand sewn.
- List the risks of colonoscopy or endoscopy and counsel patient on these risks prior to procedure. Know techniques that can help avoid complications.
- Do a Mallampati evaluation and list the rationale on a patient receiving moderate conscious sedation and document on the paperwork.
- See surgical consult patients and present your consult to the chief resident. Include appropriate H&P, laboratory and radiologic studies. Make and assessment and plan prior to hearing one from above levels.
- See patients in clinic and present same as above to faculty.
- Present ICU cases at attending rounds in a formal organized manner for the ICU by systems and list appropriate laboratory and radiologic studies.

Patient Care:

- List the indications for surgical treatment of a bleeding duodenal ulcer.
- Describe the evaluation of the patient with occult or obscure GI bleed.
- Demonstrate safe placement of central line and assist interns when proficient (see procedure section).
- Describe the management of a post operative MI, CVA, PE ICU patient.
- Describe the steps to an open cholecystectomy.
- Describe indications for open lymph node biopsy vs. FNA
- Describe the evaluation of Swan use.
- Describe the signs, symptoms and management of bile leak, with or without drain.
- Describe the strategy using mammograms of a needle localization breast biopsy and subsequent techniques for identifying the lesion in the specimen.
- Scrub into the OR and demonstrate appropriate knowledge of sequence of operations for cholecystectomy, hernias, bowel surgery.

- Demonstrate two-handed ties, one-handed ties, and appropriate tissue handling and use of the needles and suturing in the OR.
- Describe circumstances for verress technique vs Hassan in laparoscopic procedures and how to do them.
- Describe trouble shooting of equipment for laparoscopic surgery, to include alarms for high pressures, camera problems.
- List separate concerns of the obese patient that differ from non-obese in post operative care.

Professionalism:

- Same as interns
- Complete documentation of consults.
- Complete OR logs, dictations, duty hour duties on time (same as listed in intern section but repeated here for added emphasis).

Interpersonal and Communication Skills

- Demonstrate appropriate hand off of patients to on call SICU or Junior resident.
- Demonstrate method of consulting another service.

Practice-Based Learning

Systems-Based Practice

- Same as intern but articles on higher level, particularly ICU

Chief (PGY-5):

Responsible for all intern and junior goals and specific ones listed.

Goals:

Medical Knowledge and Patient Care:

- Understand the physiology of esophageal cancer, staging and surgical principles in esophagectomy, both open and laparoscopic.
- Understand the physiology, treatment and surgical principles of reflux disease and hiatal/paraesophageal hernias.
- Understand the physiology, treatment, and surgical principles of colorectal cancer.
- Understand the physiology, treatment and surgical principles of breast cancer.
- Understand the physiology, treatment and surgical principles of melanoma.
- Understand the physiology, management and surgical principles of sentinel lymph node mapping for melanoma and breast cancer.
- Understand the chemotherapeutic and/or radiation treatments for colorectal and breast cancers.
- Understand the appropriate management and work up of a complicated pre-operative surgical patient with elements of CAD, DM, CVA, DVT, pulmonary dysfunction.
- Become proficient in not only doing an operation, but in set up, exposure and teaching of procedures to a junior resident.
- Understand pitfalls or areas of complications in assessing abilities of your team.
- Understand different bariatric procedures and advantages/disadvantages of each procedure based on patients.

Professionalism:

- no additions

Interpersonal and Communications Skills:

- Develop effective strategies for running a general surgery team and checking on assignments that have been delegated.

Practice-Based Learning:

- Develop an understanding of systems and patterns for recognizing common complications and management of complicated patients based on experiences of previous years.

Systems-Based Learning

- Understand the elements other than medical and surgical knowledge and abilities that can contribute to complications.

Educational Objectives for Chief:

Medical Knowledge and Patient Care:

- Describe and demonstrate in the OR the above listed operations, with appropriate technique, tissue handling, avoidance of potential complications at the various stages of the operation.
- List the chemotherapies and appropriate stage indications for chemotherapy and radiation therapy of colorectal and breast patients.
- Describe management and work up of all pre-operative surgical patients with an understanding of their disease processes, on every elective patient scheduled for the week at our Indications conference. Be ready to justify care plans and delineate any ethical issues that may exist.

- Take junior residents through an uncomplicated bowel operation or cholecystectomy, or interns through a hernia case, appendectomy, or I&D of abscess, demonstrating ability to instruct, knowledge of pitfalls in the case, and where complications can develop and set up of an operation.
- Give 2-3 talks in two months during Resident education conference that highlights general surgery topic and issues, becoming a mini-expert in the field and literature on the topic.
- Present all VA M&M cases for the service monthly with explanation of medical surgical aspects of the patient.
- Supervise ward and ICU rounds and consults and confer with an attending on all cases.
- Assess consults with junior resident.
- Communicate plans and care with attending, particularly for changes in course.
- Present cases at attending rounds and display knowledge of patient disease and synthesis of information with plans and justifications of decisions.
- Demonstrate bariatric procedures in OR with Dr. McConnell on obese patients.
- Describe unique bariatric patient peri-operative concerns.

Professionalism:

- Assist in running service in compliance with duty hours.

Interpersonal and Communications Skills:

- Knowing knowledge of patients and laboratory or radiologic findings, check with junior and intern residents to which tasks have been delegated in order to verify abilities of team members and areas they excel or may need guidance.
- After input from team member presentations, make clear plans and assignments at morning rounds to team members.
- Discuss management of patients with staff, keeping in mind their preferences, but voicing other strategies if they can be backed up with literature.
- Communicate and document with ECU and be sure junior lists staff and chief involved in care.
- Communicate OR preferences and needs to OR nurse attending Indications conference. (ex: positioning, obtaining of the Navigator for SLN cases, etc).
- Communicate additions and non-elective cases to facilitator at Indications conference and as they arise.

Practice-Based Learning:

- Keep a file of dictations of complicated cases and literature on the topics.

Systems-Based Learning:

- Present monthly VA M&Ms with evaluation of system problems or good systems.