

 <p>Halton Healthcare GEORGETOWN • MILTON • OAKVILLE</p>	Physician Assistant Medical Directive in Acute Care General Surgery			
	Program/Dept:	Surgery Program	Document Category	Medical Directive
	Developed by:	Department of Surgery	Original Approval Date: December 2019	
	Approved by:	Medical Advisory Board (MAC)	Reviewed Date: April 2021	
Review Frequency:	1 year	Revised Date: April 2021		

Purpose

This medical directive was developed to define the practice of Physician Assistant(s) (PAs) working within the Acute Care Surgery program in the division of general surgery at Oakville Trafalgar Memorial Hospital.

Recipient Patient Population

This medical directive applies to all adult and pediatric patients referred or admitted to the Acute Care Surgery program, under a supervising physician who has reviewed and approved this medical directive.

Authorized Implementers

PAs working in the Acute Care Surgery service who are certified under the Physician Assistant Certification Council of Canada (PACCC) and have successfully completed a Canadian Medical Association (CMA) accredited Physician Assistant Program. The PA works under the supervision of a registered physician. The PA supports the supervising physician, who maintains primary responsibility for patient care as the principle decision-maker.

Contraindications

- Patient does not consent to plan of care; including diagnostic or therapeutic intervention(s), or to receiving treatment from a PA
- Patient exhibits contraindications for specific diagnostic or therapeutic intervention(s) or clinical indication is absent
- When the clinical situation exceeds the PA's knowledge, skill and ability

Medical Directive

Clinical Criteria/Client Situation:

1a. CONSULTATIONS

The PA is authorized to provide Acute Care Surgery general surgery consultation to patients referred to an attending general surgeon, who has approved this medical directive. The PA may perform an assessment of emergency department patients or ward patients as directed by an on-call general surgeon. The PA may admit patients to hospital on behalf of an attending general surgeon for observation, surgical, or non-surgical intervention. The PA will review the patients with the attending surgeon and document a consultation note.

Prior to implementing this medical directive, the PA is required to perform an assessment of the patient's status including:

- History of present illness and physical examination;

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- Past medical and surgical history and pertinent family history;
- Current medications and allergies; and
- Current and previous investigations and laboratory results.

The PA may put an instrument, hand or finger: beyond the opening of the urethra, beyond the labia majora, beyond the anal verge, or into an artificial opening in the body. The term instrument will refer to the following: swabs for culture and sensitivity, rectal thermometer, urinary catheter, and all surgical, wound care, or resuscitation instruments carried on surgical trays sanctioned by Halton Healthcare.

The PA may communicate the diagnosis and management plan to the patient or his/her delegate. The PA may communicate patient information to friends/family members of the patient with their verbal consent. The PA may also communicate patient information, with implied consent from the patient, to other health care providers within the patient's circle of care when seeking consultation or transfer of care.

1b. ORDERS AND DIAGNOSTIC TESTS

The PA may implement this medical directive for patients referred to an attending Acute Care Surgeon or on-call elective general surgeon, who has approved this medical directive. The PA will order diagnostic investigations as clinically indicated and communicate the results (normal or abnormal) to patients and the on-call general surgeon.

Refer to Appendix A for all bloodwork and associated tests approved for the PA to order on behalf of the supervising Acute Care Surgeon, or on-call elective general surgeon.

The PA may implement this medical directive to:

- Aid in confirming and / or ruling out medical diagnoses by taking histories, performing physical examinations, reviewing tests, and ordering tests;
- Assess and / or monitor a patient's illness;
- Evaluate success of prescribed treatments and / or screen for comorbid conditions

Diagnostic Imaging:

The PA will implement this directive according to the clinical indications in Appendix B.

The PA is **not** authorized to order a CT scan on patients who are pregnant.

The clinical indication for the examination will be included with the order. The PA will be available to speak with a radiologist if the latter requests a review of pertinent clinical information. The indications for ordering a CT scan will match clinical program specialty.

Regarding contrast-enhanced CT scans, special consideration will be given to patients with impaired renal function and patients with allergy to contrast. Alternative imaging options will be discussed. If the patient with contrast allergy requires a contrast-enhanced CT scan, pretreatment may be warranted and given according to hospital policy. Enhanced CT scan is relatively contraindicated in patients with renal insufficiency (GFR <30mL/min)

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1c. THERAPEUTIC INTERVENTIONS

The PA may implement this medical directive for patients referred to an on-call general surgeon who has approved this medical directive. The PA will order therapeutic interventions as clinically indicated and communicate the results of such interventions to patients and the on-call general surgeon.

Pharmacologic Orders:

All controlled substances, including narcotics and benzodiazepines **cannot** be prescribed by the PA. The PA is not authorized to document verbal or telephone orders for chemotherapeutics, narcotics, or other controlled substances. For all non-controlled medications not listed in the medical directive, the PA is authorized to accept and document telephone and verbal orders from any authorized prescriber in accordance to hospital policy (see "Management of Patient Orders Policy").

The PA is authorized to order, on admission, all pre-admission medications if the drug, dose, and frequency of administration are clinically indicated and contained in the hospital formulary. If the drug is non-formulary, a pharmacy substitution may be used or the patient may be allowed to use their own medication while an inpatient. The PA will consult the on-call general surgeon regarding continuation/discontinuation of home anticoagulants and/or antiplatelets.

During the course of a patient's hospitalization, the PA may prescribe and/or initiate titration of medications included in the medical directive (see Appendix C: Pharmacologic Orders), as clinically indicated. Medication dose will be based on product monograph, hospital formulary, and patient co-factors. References that are available for consultation include but are not limited to: UpToDate, Compendium of Pharmaceuticals and Specialties (CPS), Micromedex, Lexi-Comp Online, Rx Files Drug Comparison Charts, drug monographs, hospital protocols, and clinical practice guidelines. The PA will consult standard references to define contraindications, precautions, and potential side effects and drug interactions when implementing the medical directive for ordering medications. Patient co-factors may include: weight, age, renal function, previous response to specific or similar medications, concurrent medications, drug allergies/sensitivities, co-morbid conditions, physical examination, and results of relevant laboratory, imaging, or other diagnostic tests, as well as ongoing response to the relevant medication.

For patients going to the OR, an anesthesia consult is required according to the Department of Anaesthesiology policies

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1d. OTHER ORDERS

For specific orders not covered by the medical directives, the PA requires a co-signature for telephone or verbal orders from any attending Acute Care Surgeon or on- call elective general surgeon, who has approved this medical directive. The PA will document the name of ordering physician, date and time, and medical directive in the health record. Regulated health care professionals are authorized to enact orders received from the PA that are included in this medical directive and by telephone orders given by an authorized prescriber. Verbal Orders, due to their inherent risk to patient safety, are to be used only in emergency situations or when the prescriber is unable to document the order such as when in the Operating Room. The authorized prescriber will co-sign verbal and telephone orders in the patient's health record when the ordering physician next access the patient's records.

1e. PROCEDURES

Consent: The PA may initiate the consent discussion for major surgery, explain the surgical intervention to the patient, the associated risks and benefits of the procedure, alternative treatment options, and address any questions or concerns. The PA may have a patient or substitute decision maker sign a consent form, but the operating surgeon must confirm that the patient is comfortable with the consent process before proceeding with the proposed surgery. It is the accountability of the operating surgeon to obtain consent prior to performance of any surgical intervention as per the Halton Healthcare "Consent to Treatment Policy".

With the on-call general surgeon's approval, the PA may book operations with the operating room's front desk / charge nurse. The PA is authorized to assist under supervision in the operating room as directed by the attending general surgeon. The PA may perform any act normally done by any surgical assistant under the supervising general surgeon's charge. The list in Appendix D: Procedures is not exhaustive.

The PA is authorized to perform a procedure on tissue below the dermis or below the surface of a mucous membrane, and administer a substance via injection as delegated by the on-call general surgeon. It is the PA's responsibility to obtain informed consent from a capable patient or his/her delegate prior to performing any procedure.

It is the responsibility of the PA and the physician that prior to performing any procedure, the PA is supervised, educated, and evaluated on proper technique to ensure competency. The PA is accountable for getting a physician signatory to the medical directive and documenting this approval on the procedure list. This list is not intended to be inclusive of all procedures a PA is permitted to perform under this medical directive but represents those procedures that might be considered to be of higher risk. Any of the signatories may attest to the competency of the PA to perform these procedures.

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1f. REFERRALS

The PA may request physician consultation as clinically indicated, after consultation with the supervising on-call or Acute Care Surgery physician. The PA will clarify the reason for, the appropriateness, and the urgency of the consultation. Sample indications for referrals to allied health professionals are listed below:

Allied Health Professions	Indications
Dietitian	Management of nutritional needs for malnourished patients, calorie counts, patients requiring TPN and/or tube feeds, etc. Patient education for low-fibre diet, diabetic diet, new ostomy diet, etc.
Speech Language Pathology	Difficulty swallowing, aspiration, prolonged intubation, history of stroke, etc.
Social Work (SW)	Psychosocial assessment/counselling, discharge/disposition planning, family meetings, etc.
Physiotherapy (PT)	Chest physiotherapy, mobilization, ambulation, discharge planning, etc.
Occupational Therapy (OT)	Post-operative ADLs/IADLS, geriatric cognition, home safety assessment, discharge planning, etc.
Homecare Services	Home care: Surgical drain care, percutaneous drain care, IV antibiotics, best practice wound care, staple removal, PICC care, etc.
Wound Care and Enterostomal Therapy	Assessment and management of complex wounds, VAC wound therapy, stoma care, etc.
Respiratory Therapy (RT)	Oxygen management, ABGs, bedside spirometry.
Physicians and extenders	Consulting specialists as appropriate and directed by supervising surgeon.
Acute Pain Service	Acute pain as a result of surgical intervention.
Discharge Planner	Complicated discharges, patients returning to long term care or retirement residence.

1g. DISCHARGES

After consultation with and approval from the attending on-call or Acute Care Surgery physician, the PA may:

- Discharge a patient home according to multidisciplinary plan of care when the patient no longer has any acute issues that warrant continued hospitalization,
- Transfer a patient to other wards/services within the facility when patient can best be managed on with a different service. (Example: Slow Stream Rehab, Palliative),
- Transfer a patient to other wards/services within the facility when the patient's acuity exceeds abilities of current environment. (Example: Critical Care),
- Arrange for homecare service follow up upon discharge from hospital,
- Instruct the patient regarding the discharge plan, follow up appointments, prescription medications, wound care, and further diagnostic investigations if indicated, and / or

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- Dictate discharge summaries and complete appropriate documentation, including homecare forms, work/school notes, and outpatient diagnostic imaging or lab requisitions. Prescriptions for narcotics require a signature of the attending Acute Care Surgery physician

Documentation/Communication

The PA implementing this medical directive will:

- Inform MRP of implementation of medical directive within 24 hours via face-to-face, telephone discussion, or multidisciplinary progress note,
- Provide timely reporting of any developments and/or changes in the patient's status that would affect the established medical care plan to the MRP,
- Contact the MRP via hospital paging system should the medical directives require clarification or in the event immediate support is required, and
- Any unintended outcomes or issues arising from implementing this medical directive will be reported to the MRP as soon as possible for appropriate disposition.

The PA implementing this medical directive will document the following in the patient's health record:

- Patient assessment and necessary clinical information in history and physical, consultation, and / or progress notes section(s),
- Indications for performing investigations and procedures in progress notes
- Results of investigations, response to procedure(s) and treatment(s) in progress notes, and

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Review and Quality Monitoring Guidelines

The PA in Acute Care General Surgery will monitor and track individual practices and seek feedback from physician and multi-disciplinary colleagues to further improve clinical skills and knowledge.

Responsibilities

1. Physicians who develop the medical directive / delegation will determine the content of the learning package and review annually with the Physician Assistant (PA) and / or Professional Practice Clinician (PPC)
2. The PPC is responsible for providing and updating the learning package.
3. The PPC, PA, and / or physician who develops the medical directive uses the learning package to train staff, assess competence, and document outcomes.
4. Authorized Practitioner(s) will complete the learning requirements and competency assessment as outlined in the learning package prior to implementation of the medical directive.

Administrative Approvals

Name, Title, Position	Committee	Date
Dr. Saulius Valadka	Diagnostic Imaging	June 29, 2021
Dr. Margaret Gordon	ACS Lead	June 9, 2021
Dr. Duncan Rozario	Department of Surgery	June 2, 2021

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Appendices

Appendix A – Bloodwork and Associated Tests

Biochemistry:

Diagnostic Order	Indications
Electrolytes, Creatinine	Persistent vomiting/diarrhea, abdominal pain, SOB, chest pain, change in patient condition. To assess and monitor renal function, hydration status, electrolyte imbalances.
Troponin	Chest pain, shortness of breath, ECG changes.
Arterial/Venous Blood Gases (A/VBGs)	Chest pain, SOB, dyspnea, respiratory rate > 30/min, decreased LOC, oxygen saturations <80%, cyanosis, shock.
Random/fasting blood glucose, Point of Care blood glucose, HA1C	Monitor glycemic control in appropriate diabetic patients or other patient with unstable blood glucose, decreased LOC.
Liver Enzymes (ALT, ALP, un/conjugated bilirubin)	Abdominal pain, jaundice, pancreatitis, post cholecystectomy, post liver resection, with history of ethanol abuse, liver disease, abnormal liver bloodwork.
Lipase	Abdominal pain. To rule out and follow pancreatitis.
Calcium, Magnesium, Phosphate	To assess and monitor patients receiving total parenteral nutrition (TPN), post-op liver resection, patients with high output ostomy or fistula, ileus, electrolyte imbalances.
CEA, CA-125, CA 19-9, AFP	Pre- and post-operative to monitor treatment of colon cancer, gynecologic cancer, liver cancer, and pancreatic cancer. Cancer screening.
Albumin	To assess nutritional status
Serum Drug Level	To monitor blood level of certain drugs, example: digoxin, tobramycin, gentamicin, vancomycin, anti-convulsants, etc.
Serum HcG	Pre-operative pregnancy testing
Hepatitis Screen	To screen for hepatitis. (HBsAg, Anti-HBs, Anti-HBc, HCV antibody)
Drain fluids for analysis (Lipase, amylase, bilirubin,	For investigation of intra-abdominal or thoracic fluid. To elucidate the source of fluid, assess for malignancy, investigate disease or surgical complications.

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creatinine, cytology, AFB, protein, LDH, glucose, pH, WBC differential, cholesterol, triglycerides, adenosine, deaminase, N-terminal pro-BNP, procalcitonin)

Hematology:

Diagnostic Order	Indications
CBC	Fever, vomiting, abdominal pain/distension, tachycardia, chest pain, SOB, hypotension. To assess and monitor patients for bleeding, leukocytosis, etc.
INR/PTT	Persistent bleeding, to assess pre-operative/pre-procedure risk of bleeding, liver function, to monitor patients on warfarin/coumadin, IV heparin.
Group & Screen	Low hemoglobin, pre-transfusion, pre-operative patients that may require transfusion pre-, intra-, or post-operatively.
HIT Screen	Thrombocytopenia, decrease in platelets >50% in patients on/previously on heparin.

Microbiology:

Diagnostic Order	Indications
Urinalysis, C&S	Dysuria, frequency, urgency, urinary retention, pyuria, hematuria, fever, leukocytosis.
Blood culture & sensitivity (C&S)	Fever, to rule out bacteremia, follow-up from previous positive blood cultures.
Sputum C&S	Productive cough, fever, leukocytosis.
Stool C&S, <i>C. difficile</i> antigen and toxin, O&P, FOBT	Watery diarrhea, diarrhea in patients with risk factors for <i>C.difficile</i> infection.
Wound & drainage fluid C&S	Purulent drainage.
COVID-19 swab - Rapid and PCR NP swab	New admissions, patients requiring urgent or emergent surgery or surgical procedure, patients presenting with COVID-19 symptoms. For determination of appropriate ward destination.

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Appendix B – Diagnostic Imaging

Diagnostic Order	Indications
Chest X-ray (CXR) PA / lateral / portable Inspiratory / expiratory	Acute dyspnea, respiratory distress. Significant abnormality in air entry where an effusion, fluid overload, pneumothorax, atelectasis or consolidation/infiltrate is suspected based on physical exam. Follow-up of previous abnormal CXR.
Abdominal X-ray (AXR) 1-3 views	Vomiting, abdominal distension, pain, obstipation. Follow-up AXR for management of bowel obstruction. One view to verify NGT placement.
Abdominal X-ray (AXR) 1-3 views after PO/PR contrast administration	Monitor progress of bowel obstructions, define transition point of large bowel obstruction
Abdominal / pelvic ultrasound (US)	Abdominal pain, pelvic pain, jaundice, post-operative abdominal pain and/or fever, leukocytosis, to rule out abscess, follow-up to previous abnormal imaging. Suspicion of cholelithiasis, cholecystitis, appendicitis, gynecologic pathology, aortic aneurysm, hernia, subcutaneous abscess, intra-abdominal collection. Assess liver, liver lesions.
Kidney, ureter, bladder ultrasound	Urinary retention, obstructive symptoms, hematuria. Elevated Cr, follow-up abnormal imaging
US other body parts	Assess for abscesses (including peri-anal), cutaneous lesions
Venous Doppler ultrasounds	Clinical signs of DVT.
CT head (no contrast)	Acute change in neurological status, focal neurological findings, decreased LOC, head trauma and / or fall. To rule out fracture, epidural or subdural hemorrhage, or cerebrovascular accident (CVA).
V/Q scan CT chest / pulmonary angiography	Dyspnea, pleuritic chest pain, cough, hemoptysis, orthopnea, wheezing, tachycardia, staging, pneumothorax, empyema, and/or clinical signs/symptoms of DVT. To rule out pulmonary embolus (PE). If patient has impaired renal function or contrast allergy V/Q scan will be considered.

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CT abdo / pelvis (with or without IV and PO contrast)	Abdominal pain, peritonitis, leukocytosis, and / or fever. To assess for post-operative complications such as abscess), anastomotic leak, fistula, obstruction. To assess pancreatitis. To rule out metastatic disease. Follow-up of abnormal imaging
CT enterography and colonography	Assess for luminal lesions
CT angiography abdo, pelvis, chest, neck	Assess for active bleeding
MRI	Operative planning, abscess, malignancy staging, abdominal pain in pregnant patients Follow up of abnormal imaging
Upper GI series / Small bowel follow-through (SBFT)	To define anatomy of stomach and small bowel, to rule out stricture, obstruction, dysmotility. Use of barium versus gastrografin will be made based on clinical indication and upcoming radiologic investigations.
Fistulograms, drain checks, sinograms	To define anatomy of fistula, location of percutaneous or surgical drains.

Nuclear Medicine Tests:

HIDA Scan	Biliary dyskinesia, rule out surgical complications
Gastric Emptying Studies	Gastroparesis
Bone Scan	Osteomyelitis, malignancy staging
RBC Scan	GI Bleeding
Meckel's Scan	GI Bleeding

Interventional Radiology Procedures

PICC line insertion	Patient to receive TPN, prolonged IV antibiotics. Patients with tenuous IV access, difficult bloodwork draws.
Embolization	Active bleeding
Percutaneous drain, percutaneous cholecystostomy tube, paracentesis, thoracentesis	Drainage of intra-abdominal, thoracic, or other deep fluid / abscess. Fistula control, for example pancreatic fistula or ulcer leakage. Drainage of gallbladder. Obtaining fluid for testing (i.e. biochemistry, C&S, cytology).
Percutaneous gastrostomy, gastrojejunostomy tube	Feeding or palliative venting via stomach
Feeding tube insertion, exchange, modification.	Venting G-tubes for palliation of malignant obstructions
IVC (inferior vena cava) filter placement and removal	Prevention of lower extremity clot migration to pulmonary arteries. Retrieval when no longer indicated.

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Percutaneous trans-hepatic cholangiography and drain placement	Biliary obstruction not amenable to endoscopic intervention
Biopsy	To obtain pathologic analysis of abnormal tissue
Other IR procedures	As indicated

Cardiac Investigations:

ECG	Chest pain, SOB, pre-operative screening, to identify/rule out abnormal rhythms, conduction defects, myocardial infarction (MI), pericarditis, etc. To monitor drug effects, cardiac pacemaker function.
Echocardiogram	Evaluate left ventricular and cardiac valve function. Assess new murmurs/rubs, pericardial fluid accumulation. Rule out endocarditis. Upon consultation with cardiology.

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Appendix C: Pharmacologic Orders

Medications: Generic/Trade Name
Analgesics/NSAIDs: Ibuprofen (Advil®, Motrin®) Acetaminophen (Tylenol®) – IV and PO Ketorolac (Toradol®) –for maximum 48 hours Naproxen (Naprosyn®, Aleve®) Celecoxib (Celebrex®) Gabapentin
Antibiotics: Amoxicillin Ceftriaxone Metronidazole (Flagyl®) Ciprofloxacin (Cipro®) Clxacillin Moxifloxacin (Avelox®) Levofloxacin (Levaquin®) Amoxicillin/Clavulanic Acid (Clavulin®) Pipercillin/Tazobactam (Tazosin®) Cefazolin (Ancef®) Cephalexin (Keflex®) Cefadroxil Clarithromycin Clindamycin Nitrofurantoin (Macrobid®) Cotrimoxazole (Bactrim®, Septra®) Vancomycin Neomycin Erythromycin
Antihistamines: Diphenhydramine (Benadryl®)
Anti-fungals: Note that the attached list of medications is not intended to be comprehensive Fluconazole (Diflucan®) Nystatin

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Clotrimazole 1% (Canesten®) Topical

Anti-emetics:

Dimenhydrinate (Gravol®)

Ondansetron (Zofran®)

Prochlorperazine (Stemetil®)

Anti-Hyperglycemic Agents:

As per pre-printed order set for insulin.

Oral diabetes medications: Metformin, Januvia, etc

Anti-platelet & Anti-thrombotic Agents:

Aspirin (ASA)

Clopidogrel (Plavix)

Heparin – for DVT prophylaxis or therapy

Dalteparin (Fragmin®) – or formulary LMWH for VTE prophylaxis

Warfarin (Coumadin®) – as prescribed at home, post-operative titration for patients taking warfarin pre-admission

Rivaroxaban (Xarelto)

Dabigatran (Pradax)

Apixaban (Eliquis)

Ticagrelor (Brilinta)

Edoxaban (Lixiana)

Antifibrinolytics

Tranexamic Acid (IV and Topical)

Acid Suppression:

Ranitidine (Zantac®)

Pantoprazole (Pantoloc®) – IV and PO

Pantoprazole (Pantoloc®) Infusion – for 48 to 72 hours

Lansoprazole Fastab (Prevacid)

Sedatives:

Zopiclone (Imovane®)

Stool Softeners & Laxatives:

Docusate Sodium (Colace®)

Lactulose

Senna (Senokot®)

Milk of Magnesia (MOM)

Bisacodyl (Dulcolax®)

Glycerin suppositories

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Go-Lytely/ Peg-Lyte

Pico Salax

PEG 3350 (Restoralax®, Lax-a-Day, Peglax)

Prokinetics:

Metoclopramide (Maxeran®) – for 24 to 48 hours

Pinaverium (Dicetel®)

Domperidone (Motilium®)

Topicals:

Anusol® Cream

Hydrocortisone Cream 0.5-1%

Lidocaine jelly 2% (Xylocaine)

Zinc Oxide (Zincofax®, Ihle's Paste)

Voltaren

Other:

Loperamide (Imodium®)

Octreotide (Sandostatin®)

Alteplase (t-PA, Cathflo®)

Dornase

Nicotine replacement (as per orderset)

Thiamine (Vitamin B1)

Folic acid

Furosemide (Lasix®)

Multivitamins

Ferrous fumarate, other iron formulations

Oral and IV potassium replacement (K-Elixir, K-dur)

Oral and IV magnesium replacement

Oral and IV phosphorous replacement

Oral and IV calcium replacement

Tamsulosin (Flomax®)

Silodosin (Rapaflo®)

Alfuzosin (Uroxatral®)

Doxazosin (Cardura®)

Terazosin – BPH indication

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Non-Pharmacologic Orders:

Therapeutic Intervention	Indications
<u>IV Fluids:</u> 0.9% NaCl, RL, 2/3 + 1/3, D5W 0.9% NaCl or D5W 0.45% NaCl, +/- 20-40 mEq KCl/L at 25-150 mL/hr	Fluid resuscitation for patients with clinical evidence of dehydration including low urine output, low blood pressure, and tachycardia, and all patients who are NPO.
IV Bolus: RL 0.5-1L, 0.9% NaCl 0.5 – 1L Discontinuation of IV: Saline lock (SL) IV, to keep vein open (TKVO), Discontinue IV	
Packed Red Blood Cells (PRBC) 1-2 units	Patients with low hemoglobin <70 mmHg or Hgb 70-90 mmHg and symptomatic. Patients actively bleeding.
Fresh Frozen Plasma	To correct abnormal clotting
Albumin 5%, 25%	100-500 mL IV over 1 hour
Voluven	250-500 mL IV
Cryoprecipitate	To correct abnormal clotting
Octaplex	To correct abnormal clotting
Paracentesis, thoracentesis	Diagnostic and therapeutic indications
Oxygen therapy	To maintain saturations >90%, in patients with COPD maintain saturations of 88-92%.
Enemas	Indication: Constipation. Contraindication: Anastomosis of left colon or rectum within 7 days.
Sequential Compression Devices (SCDs)	Patient at increased risk for developing DVT, LE edema. In accordance with Halton Healthcare VTE prophylaxis guidelines.

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Diet Advance Criteria:

Diet	Indications
NPO	Patients scheduled for surgery / procedure, or requiring NG tube or bowel rest.
Sips of water or sips of clear fluid	For comfort. To assess for patient's tolerance for oral intake. To allow patients to take oral medications.
Clear fluid diet (CF)	Patients with normal bowel function as demonstrated by flatus and / or bowel movement. Patients who are expected to have normal bowel function shortly. To stimulate the return of normal bowel function.
Full fluid diet (FF)	Patients tolerating clear fluid diet.
Low-residue diet	Patients tolerating a FF diet with recent bowel obstruction, stricture, or ileostomy.
Regular diet / Diet as tolerated (DAT)	Patients tolerating a clear / full fluid diet with no diet restrictions. Patients with normal bowel function or patients with illnesses not expected to affect bowel function. As part of the BERAS (Bowel Enhanced Recovery After Surgery) protocol.
Diabetic diet	Diabetic patients tolerating a regular texture diet
Renal Diet	Patients with renal insufficiency tolerating a regular texture diet
Cardiac diet	
Continue pre-admission diet	
Other altered textures	As recommended by Speech Language Pathology

Appendix D: Procedures

Procedure	Indications
Percutaneous and surgical drain removal	Resolution of abscess, low outputs, serous drainage.
Chest tube removal	
tPA/dornase intra-thoracic instillation	Hemothorax, empyema
Cutaneous suture / staple insertion with local anesthesia	Wound healing via primary intention.
Staple / suture removal	Post-operative day 5-14, evidence of wound infection.
Abscess incision and drainage	Subcutaneous abscess amenable to drainage.
Wound care: Open, clean, debride, pack, and apply dressing to the wound	Signs of wound infection.
Apply staples / clips	Hemostasis, wound closure

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Insertion and removal of urinary catheter	Insertion: pre-, peri-, and post-operative urinary retention. Removal: No further clinical indication.
Nasogastric tube (NGT) insertion and removal	Insertion: Persistent nausea / vomiting, abdominal pain / distension, and obstipation for management of bowel obstruction or ileus. For feeding when oral intake is not safe. Removal: Low outputs, evidence of normal bowel function, resolution of small bowel obstruction. Contraindications: Severe facial trauma, significant epistaxis / nasal deformity, recent trans-sphenoidal surgery, patient refusal, recent gastric or esophageal surgery.
Injection or topical application of local anaesthetic	For incision and drainage, suturing, wound exploration, debridement, NG tube insertion, etc.
Peri-operative and intra-operative assisting as directed by the attending surgeon	Move and position a patient, place protective padding, apply SCDs, apply a warming device, insert a urinary catheter, remove dressings and drains, clip hair, apply antiseptic prep, manipulate surgical drapes, assemble surgical equipment and handle surgical instruments, suction fluid, use surgical sponges, apply cautery, apply hemostatic clips, position and hold retractors, operate ("fire") staplers, tie small vessels, suture, manipulate laparoscopic cameras and instruments

I, the undersigned professional group do hereby certify that I possess the knowledge, skills and judgment to perform the identify treatment, procedure or intervention provided for in the Medical Directive/Delegation and

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that I have completed the necessary educational requirements

Date	Practitioner's Name	Professional Designation	Signature	Authorized Signature

References

College of Physicians and Surgeons of Ontario (2012). Policy Statement – Delegation of Controlled Acts. Toronto, Ontario.

Sunnybrook Odette Cancer Center. Medical Directive: Physician Assistants (PA) in Oncology (2015). Toronto, Ontario.