Authorizing Prescribers

All Lakeridge Health (LH) Emergency Department (ED) Physicians.

Authorized to Whom

Physician Assistants (PA) who:

- Are certified Physician Assistants through the Canadian Association of Physician Assistants or National Commission on Certification of Physician Assistants
- Are currently working within the ED program at LH

Co-implementers:

Medical Radiation Technologists (Radiography)
Phlebotomist/ Med Lab Assistant
Nurse
Registered Respiratory Therapist

Patient Description/Population

Registered ED patients receiving care at LH.

Order and/or Procedure

- The PA will obtain a comprehensive health history and perform a physical assessment to determine current medical status and to subsequently select specific investigations and/ or treatment for patients outlined in this Medical Directive.
- The PA will discuss with the Authorizing Prescriber the patient's physical assessment and the result of any diagnostic investigations obtained by the PA for further management.
- The PA will communicate the patient's plan of care to the patient and partners in care.
- These orders include the following delegated controlled acts:
    - Communicating to the individual or his or her personal representative a diagnosis identifying a disease or disorder as the cause of symptoms of the individual in circumstances in which it is reasonably foreseeable that the individual or his or her personal representative will rely on the diagnosis
    - Performing a procedure on tissue below the dermis, below the surface of a mucous membrane
    - Administering a substance by injection or inhalation

- Applying or ordering the application of a form of energy prescribed by the regulations under the Regulated Health Professional Act (RHPA)
- Putting a hand, instrument or finger;
  - Beyond the external ear canal,
  - Beyond the point in the nasal passages where they normally narrow
  - Beyond the larynx
  - Beyond the opening of the urethra
  - Beyond the labia majora
  - Beyond the anal verge or
  - Into an artificial opening in the body

1. The Physician Assistant (PA) may perform a history and physical exam on such patients at the discretion of the PA.

2. The PA may order the following investigations/procedures at their discretion (includes both inpatient and outpatient):

- Bloodwork
- Urinalyses
- Bodily fluid analysis and/or culture (including, but not limited to: synovial, cerebrospinal, pleural, sputum, blood, intra-abdominal)
- X-ray
- Ultrasound
- Computed Tomography with or without contrast (oral, IV and/or rectal).
- ECG
- Echocardiogram
- MRI with or without contrast
- Bone scans
- Interventional Radiology (IR)-guided procedures (i.e. drainage, biopsy, etc.)

3. The PA may perform diagnostic and therapeutic procedures outlined in the Canadian Association of Physician Assistants (CAPA) Key Competencies (Appendix A)

4. The PA may select medications as defined in Appendix B

6. The PA may make referrals and consults to physicians/specialists and to all members of the interdisciplinary team and to Home and Community Care as per Appendix D.

Indications to the Implementation of the Directive

1. The patient must be a registered patient of the ED, and
2. The patient condition must meet the indication(s) for the specific investigation or procedure.
3. The patient consents to the plan of care and to receiving care from the PA.
4. The patient meets the indications for the medications as per Appendix B.

5. See Appendices for specific indications

Contraindications to the Implementation of the Directive

1. Procedure/Medication-specific contraindications as outlined in the table(s) below
2. The Physician Assistant will not initiate the directive for any medication if there is hypersensitivity or allergy as reported by the patient, family or noted by an attending health care professional or existing in the Electronic Health Record (EHR). Any new hypersensitivity or allergic reaction will be documented in EHR and discussed with the Supervising Physician. The medication will be put on hold until clarified.
3. The Physician Assistant will not order narcotics or benzodiazepines.
4. Patient or SDM (substitute decision maker) refuses consent.
5. The PA does not have the necessary knowledge, skill and judgment to perform the delegated acts.

Consent

A PA utilizing this directive will obtain consent in accordance with the *Health Care Consent Act* and document it in the patients' health record.

- The PA will disclose to the patient the nature of the proposed treatment, its gravity, any material risks and any special risks relating to the specific treatment in question.
- The PA must have the knowledge and ability to explain how and why the test will be obtained.
- PA must answer any specific questions posed by the patient and/or SDM as to the risks involved in the proposed treatment or implementation of this medical directive.
- PA will disclose the consequences of leaving the ailment untreated.
- PA will disclose available alternative forms of treatment and their risks
- The PA will obtain written consent from the patient or SDM for the transfusion of blood products as per hospital protocol if the indications are met (described below)

Documentation Requirements

The Physician Assistant will provide:

- Documentation of an implemented directive will be recorded in the patient's health record and will include:
    - Date
    - Name and signature (electronic) of the implementer
    - The name of the medical directive
- Documentation of the patient's history, present illness, physical assessment, any procedures, and plan of care, including necessary follow-up, within the health record.
- The Physician Assistant will contact the Most Responsible Physician if clarification of any aspect of the medical directive is required. The Most Responsible Physician will be notified of the completion of treatments and the patient's response to treatment.
- PA notes will be co-signed/attested by an ED physician

Review/Evaluation Process

1. The physicians have reviewed the potential benefits and possible harms associated with the performance of this controlled act and are satisfied that delegating the act supports high quality patient care.
2. The controlled act is being delegated to a PA who has met the education and competency requirements.
3. Quality chart reviews will include appropriate implementation of any medical directives.
4. The Medical Directive will be reviewed every 2 years by the ED program.
5. Staff identifying any untoward or unintended outcomes arising from implementation of this directive will report to the supervising physician immediately for the appropriate disposition.

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Appendix A: Diagnostic and Therapeutic Procedures

The PA must demonstrate effective, appropriate, and timely performance of diagnostic and therapeutic procedures relevant to patient care ED procedures will be observed and competency confirmed prior to PAs being able to perform them independently. At least 5 procedures of each type will be observed. Competency and skills will be confirmed by the PA physician lead, experienced physician assistants and/or the Department Chief.

Integumentary Procedures:

Procedure	Indication	Contraindication	Notes (Optional)
Incision & Drainage	• For release of confirmed/suspected fluctuant/purulent abscess	• Anatomical challenges • Patient refusal • Allergy or sensitivity to local anaesthetic agents	• Includes drainage of acute paronychia, release of subungual hematoma (trephination), skin and soft tissue collections
Wound Repair (Hemorrhage Control)	• Lacerations requiring primary closure (gaping wound, heavy active bleeding) • Wounds with active bleeding	• Non-gaping Animal/Human Bites (exception of face/scalp) • Signs of active Infection • Retained foreign body • Allergy or sensitivity to local anaesthetic agents	• Includes Suturing, Staples • Tissue adhesive (skin glue) • Includes use of solver nitrate cautery, electrocautery
Foreign Body Removal	• Retained epidermal/dermal foreign bodies	• Anatomical challenges • Patient refusal • Allergy or sensitivity to local anaesthetic agents • Suspect arterial tamponade by object	
Instillation of Local Anesthetic	• Anesthesia required to affected area	• Known allergy/hypersensitivity to anesthetic agent • L.E.T. and lidocaine with epinephrine is contraindicated in/on the following: mucous membranes, burns	•

Ophthalmological Procedures:

Procedure	Indication	Contraindication	Notes (Optional)
Foreign Body Removal	• Retained corneal/scleral foreign body • PAs may remove an ocular FB with eye spud or blunt needle if clinically indicated and discussed with MRP prior to removal	• Patient or SDM refusal • Allergy to ophthalmologic anaesthetic • Suspected Open Globe Injury	• Includes use of rotating burr/Alger brush
POCUS (ultrasound)	• Assessment of posterior structures • Suspicion of retrobulbar hematoma, retinal detachment, vitreous hemorrhage, posterior vitreous detachment, lens dislocation	• Suspected Open Globe Injury	
Morgan Lens Irrigation	• Irrigations for retained foreign material, chemical exposure	• Patient or SDM refusal • Suspected Open Globe Injury	
Application of Eye Patch/Shield	• Eye protection in suspected/confirmed open globe injury, orbital fracture • Relief of eye pain/photophobia		
Intraocular Pressure (IOP) Measurement	• Use of tonopen or similar device to measure IOP	• Confirmed or suspected open globe rupture	

Otolaryngological (ENT) Procedures:

Procedure	Indication	Contraindication	Notes (Optional)
Cerumen/Foreign Body Removal/Irrigation	• Cerumen impaction in highly symptomatic patients • Confirmed foreign body in external auditory canal	• Patient or SDM refusal • Suspected/Confirmed Tympanostomy tubes or perforated tympanic membranes and for the removal of absorbable material or button batteries	

Procedure	Indication	Contraindication	Notes (Optional)
Nasal Foreign Body Removal	• Confirmed Foreign Body in Nasal Cavity within reach	• Patient or SDM refusal • Anatomical Challenges • Impacted intranasal button batteries	• If any concerns, defer to ENT consultation
Epistaxis Management	• The PA may pack or cauterize the nose to control bleeding. • The PA may perform a physical examination to find the source of the bleeding, including a nasal speculum • All patients with Epistaxis despite at least 20 mins of direct pressure	• Patient or SDM refusal	• Includes use of silver nitrate cautery, rapid rhino/simple gauze tampon (with or without tranexamic acid soak, Otrivin soak, Vaseline)

Gastrointestinal Procedures:

Procedure	Indication	Contraindication	Notes (Optional)
Nasogastric (NG) Tube Placement	• Gastric decompression for confirmed bowel obstruction or ileus	• Patient or SDM refusal • Confirmed or suspected esophageal stricture (perforation risk) • Confirmed or suspected basilar skull/facial fracture • Esophageal stricture • Caution in patients with known or suspected esophageal varices	
Fecal Occult Blood Testing (FOBT)	• Suspect occult blood loss (melena, hematochezia)	• Patient or SDM refusal	• Includes rectal examination for stool sampling

Genitourinary/Obstetric Procedures: ED Staff Chaperone Required For Sensitive Examinations (especially of opposing gender)

Procedure	Indication	Contraindication	Notes (Optional)
Speculum Examination	• Suspected/Confirmed Vaginal Foreign Body, Non-pregnant GI bleeding, Gynecological infection, Uterine/Vaginal mass	• Patient or SDM refusal • Lack of staff chaperone	• **Use sterile speculum, Sterile Gloves if pregnant**
Cervical Culture	• Suspected/Confirmed Gynecological Infection, Pelvic Inflammatory Disease (PID), STI screening	• Patient or SDM refusal	
POCUS (Obstetrical)	• Suspected/Confirmed miscarriage, ectopic pregnancy, free fluid	• Patient or SDM refusal	
Foley Catheterization	• The treatment of confirmed urinary retention (PVR 200cc) • Bladder incontinence • Collect clean urine sample	• Patient or SDM refusal • Blood at urethral meatus • High-riding prostate on DRE • Scrotal hematoma	

Musculoskeletal Procedures:

Procedure	Indication	Contraindication	Notes (Optional)
Application of Brace/ Splint	• Confirmed/Suspected Fracture/Tendon Injury	• Patient or SDM refusal	• Cast includes: thumb spica, ulnar gutter, radial gutter, volar splint, above elbow splint, sugar tong splint, below knee back, above knee splint, splint in equines. • Application of: Zimmer splints, air casts, shoulder immobilizers, metal finger splints, ankle stirrup braces, wrist splints
Diagnostic/Therapeutic Joint Aspiration (Arthrocentesis)	• Collection of Synovial fluid for culture/analysis • Injection of anesthetic/anti-inflammatory agent for joint pain • Discussion with, and involvement of MRP prior to procedure	• Patient or SDM refusal • Suspect overlying cellulitis	
Closed Reduction of Fracture/Dislocation	• Confirmed fracture with clinically significant displacement • Discussion with, and involvement of MRP prior to procedure	• Patient or SDM refusal • Suspected/Confirmed Neurovascular Injury	

Hematoma Block	• For Anesthesia in Suspected/Confirmed Fracture • Anesthesia Prior to Closed Reduction • Discussion with, and involvement of MRP prior to procedure	• Patient or SDM refusal	• Discussion of risks, benefits, alternatives including procedural sedation option

ACLS/Resuscitative Procedures:

Procedure	Indication	Contraindication	Notes (Optional)
Oral Airway Insertion	• Inability to protect airway & Absence of gag reflex		
Intraosseous (I/O) Insertion	• Inability to achieve peripheral access in NPO/unconscious patient	• Suspected or confirmed fracture at site • Avoid in cellulitis, burns, osteomyelitis at site	
Cardiac Defibrillation	• Confirmed Pulseless, Shockable Rhythm (Pulseless Ventricular Tachycardia, Ventricular fibrillation)	• Presence of palpable pulse, Non-Shockable Rhythms (PEA, Asystole)	
Supplemental Oxygen Therapy (Initiate, titrate, or discontinue)	• To maintain SpO_2 greater than 92% or 88-92% in patients with COPD		• Nasal prongs, Simple Face Mask, Non-Rebreather

Injections and Cannulation:

Procedure	Indication	Contraindication	Notes (Optional)
Intramuscular/ Subcutaneous/IntradermalInjection	• Administration of medications, immunizations, anesthetic	• Patient or SDM refusal • Known hypersensitivity to administered agent • Overlying cellulitis	
Peripheral Intravenous Line (Saline Lock)	Insertion: • IV access required for administration of medications. • Suspect potential for hemodynamic compromise (large fluid loss, hemorrhage) • Altered level of consciousness Discontinue: • Adequate hydration • Hemodynamically stable.	• Patient or SDM refusal • Cellulitis, Burns at site of insertion	
Lumbar Puncture	• Diagnostic: meningitis, inflammatory, hemorrhage (subarachnoid), pressure (NPH)	• Patient or SDM refusal • Avoid in patients with focal neurological signs (possible cerebral herniation, increased intracranial pressure) • Coagulopathy or Thrombocytopenia (Platelets < 50) • Suspect epidural abscess • Prior spinal surgery (Consult IR)	• **Discuss with MRP/Supervising physician prior** • Consult Interventional Radiology (IR) if prior spinal surgery

Paracentesis	• Diagnostic: determine cause of new onset ascites, rule out SBP (spontaneous bacterial peritonitis) • Therapeutic: relief of dyspnea or abdominal discomfort in large-volume tense ascites	• Patient or SDM refusal • Coagulopathy and thrombocytopenia (caution in platelet < 50) • Caution if pregnant, small bowel obstruction, organomegaly, adhesions	• Do not place needle through sites of infection, engorged subcutaneous vessels, surgical scars, hematomas • Consider use of POCUS for optimal landmarking

Appendix B: Physician Assistant Ordering

Group 1 medications may be initiated either before or after discussion with the Supervising Physician at the professional judgment of the Physician Assistant. This includes all possible routes of administration which may/may not be indicated below, with consideration of dosage adjustments for changes in route. All cases must be discussed with the Attending Physician while the patient is in the ED in a timely fashion.

Group 2 medications must routinely be discussed with the most responsible physician prior to initiation. There are very limited exceptions when a group 2 drug becomes Group 1 if the safety of the patient is jeopardized by any delay (see medications list).

Pediatric dosing: Group 1 medications based on information available in Hospital for Sick Children's Drug Handbook and Formulary (2010-11).

For all new graduate PAs still on probation and all Physician Assistant trainees all medications are classified Group 2.

After implementation of an appropriate history and physical examination and applying due consideration to any appropriate investigations available the PA may order.

The medication history, potential for drug allergy, prior use of analgesics and antimicrobials, and the possibility of pregnancy must be explored prior to implementing this directive.

Medication Dosages, Contraindiations, Renal or Pediatric dosing and other information used must be consistent with Lexicomp, Hospital for Sick Kids Formulary, Hospital Formulary and LH order sets as found in EPIC.

These tables must **not** be used independently apart from the Medical Directive

Order	Indication	Contraindication	Notes
Allergy Therapeutics ***Betamethasone valerate*** (Topical) 0.1% cream or ointment Applied once or twice daily to affected areas ***DiphenhydrAMINE*** (Benadryl) ***MethylPREDNISolone*** (Solu Medrol) ***PredniSONE*** ***PrednisoLONE*** (Pediapred oral solution) **Group 2** ***EPINEPHhrine*** ***HydrOXYzine***	• Suspected or confirmed allergic/inflammatory reaction • See corticosteroid therapy (below)	• Known hypersensitivity	• **EPINEPHrine may be ordered as a Group 1 drug if in the professional opinion of the PA any delay would be deleterious for the patient. Dosage for anaphylaxis: 0.1 to 0.5 mg IM Q 10 min**

Analgesics/Antipyretics ***<u>Group 1</u>*** ***Pain or Fever:*** ***Acetaminophen*** ***Ibuprofen*** ***Naproxen Enteric Coated*** ***Pain only:*** ***Indomethacin*** ***Ketorolac***	• Pain or Documented Fever (Temp >38°C)	• NSAIDs contraindicated in known hypersensitivity, renal insufficiency, anticoagulation, known or suspected GI or cerebrovascular bleeding or perforation, Severe hypertension • Acetaminophen contraindicated in known hypersensitivity, severe hepatic impairment or severe active liver disease	• ***The PA cannot order opioids under medical directives***

Antibiotics **Antibiotic stewardship to be followed** **<u>Group 1</u>** ***Amoxicillin*** ***Ampicillin*** ***Amoxicillin-clavulanate*** (Clavulin) ***CeFAZolin)*** ***Cefixime*** ***CefTRIAXone*** ***Cefadroxil*** ***Cefuroxime*** ***Cephalexin*** ***Ciprofloxacin*** ***Ciprofloxacin and Dexamethasone (Otic) (Ciprodex)*** ***Clarithromycin (restricted)*** ***Azithromycin*** ***Clindamycin*** ***Cloxacillin*** ***Co-trimoxazole)*** Trimethoprim/Sulfamethoxazole (TMP/SMX): ***Doxycycline Fosfomycin*** ***Moxifloxacin*** ***MetroNIDAZOLE*** ***Nitrofurantoin*** ***Penicillin V Potassium*** ***Piperacillin-tazobactam*** ***Vancomycin***	• Suspected or Confirmed Bacterial Infection, Prevention of Secondary Bacterial Infection • Pre-operative prophylaxis • Suspected or Confirmed Surgical Abdominal process (Appendicitis, Cholecystitis) • Doxycycline: Tick prophylaxis, STI (Chlamydial Infections)	• Known hypersensitivity to antibiotic class •	• Fluoroquinolones: Increased risk of tendonitis & tendon rupture; May exacerbate muscle weakness in patients with myasthenia gravis • Macrolides: risk of prolonged QT • Clindamycin: high incidence of C. difficile; caution in hepatic impairment • Sulfonamides: may cause hyperkalemia; caution in hepatic impairment • Metronidazole: avoid alcohol for at least 1 day after completion (Disulfiram-like reaction)

Group 2 ***Gentamicin*** ***Tobramycin*** ***CefTAZidime*** ***Meropenem*** ***Ertapenem***			
Antibiotics Restricted to Outpatient use: **Group 1** **Levofloxacin** **Clarithromycin**	• Suspected or Confirmed Bacterial Infection, Prevention of Secondary Bacterial Infection	• Known hypersensitivity to antibiotic class	
Anticoagulation **Group 1** ***Apixaban*** ***Dabigatran*** ***Fondaparinux*** ***HeparinDalteparin*** ***Rivaroxaban*** **Group 2** ***Warfarin***	• Suspected or Confirmed Venous Thromboembolism (DVT/PE), ACS, Nonvalvular Atrial Fibrillation	• Known hypersensitivity • Confirmed/Suspected Hemorrhage, Condition/lesion with risk of bleeding • Hepatic disease with known coagulopathy • Mechanical Heart Valve • Heparin: severe thrombocytopenia, history of HIT	

Antiemetics/Anti-Reflux/Anti-vertiginous **<u>Group 1</u>** ***DimenhyDRINATE*** (Gravol) ***Metoclopramide*** ***Ondansetron*** **Aluminum hydroxide and magnesium hydroxide (Diovol)** **Betahistine (Serc)** **<u>Group 2</u>** ***Prochlorperazine***	• Nausea/Vomiting • Vertigo	• Known hypersensitivity • Metoclopramide: Mechanical GI obstruction, perforation, or hemorrhage; pheochromocytoma; History of seizure disorder (eg, epilepsy) • Ondansetron: prolonged QT interval • Aluminum hydroxide and magnesium hydroxide (Diovol): intestinal perforation, obstruction, colostomy/ileostomy, renal failure • Caution in pregnancy	• Metoclopramide: may cause tardive dyskinesia • Ondansetron: dose-dependent QT prolongation; reduce dose in hepatic impairment

Cardiovascular Therapy **<u>Group 1</u>** ***Acetylsalicylic Acid (ASA)*** ***Clopidogrel*** **Ticagrelor** ***Furosemide*** ***Nitroglycerin lingual spray*** ***Nitroglycerin Transdermal Patch*** ***DilTIAZem*** ***Metoprolol*** **AmLODIPine** **<u>Group 2</u>** ***Adenosine*** ***Atropine*** ***Amiodarone*** ***Calcium gluconate / chloride*** ***Digoxin*** ***DOBUTamine*** ***DOPamine*** ***EPINEPHrine*** ***HydrALAZINE*** ***Labetalol*** ***Nitrate infusion*** ***Nitroprusside*** ***Norepinephrine infusion*** ***Procainamide*** ***Sodium bicarbonate*** ***Vasopressin***	• Antiplatelet therapy: Suspected or Confirmed Stroke, TIA, Acute Coronary Syndrome Therapy or Prophylaxis • Diuretics: volume overload states (CHF, Edema, Nephrotic Syndrome), Hypertension • Nitroglycerin: Hypertensive Urgency/Emergency, Analgesia in ACS • Antihypertensives (Metoprolol, Amlodipine, DilTIAZem): Hypertension, Rapid Atrial Fibrillation/SVT, ACS • Magnesium Sulfate: Hypomagnesemia, Suspected/Confirmed Preeclampsia	• Clopidogrel, Ticagrelor, ASA: Acute Moderate-Severe Hemorrhage, Traumatic Chest Pain; ASA: Known allergy to Aspirin or NSAIDs • Furosemide: Hypersensitivity, Hypotensive with Systolic BP less than 80, Severe hyponatremia, Severe hypokalemia • Metoprolol: known hypersensitivity, sinus bradycardia, atrioventricular block, severe asthma • DilTIAZem: Sinus bradycardia, Heart Failure (HFrEF) • AmLOPIDine: Sinus bradycardia, severe aortic stenosis, cirrhosis	Tigacrelor must be given in combination with ASA. Clopidogrel should be given in combination with ASA.

Corticosteroid Therapy **Group 1** ***DexAMETHasone*** ***Hydrocortisone*** ***MethylPREDNISolone*** (Solu Medrol) ***PredniSONE*** ***PrednisoLONE*** (Pediapred oral solution)	• DexAMETHasone: suspected/confirmed croup, severe exudative pharyngitis, COVID-19 pneumonia requiring O2, asthma exacerbation • Hydrocortisone: suspected/confirmed anaphylaxis, adrenal crisis, acute colitis flare, COVID-19 pneumonia requiring O2 • PredniSONE/MethylPREDNISolone/ Prednisolone: asthma exacerbation, COVID-19 pneumonia requiring O2, COPD exacerbation, IBD flare, Gout flare, Severe allergic reactions/anaphylaxis	• Known hypersensitivity • Systemic fungal infection	• Delayed wound healing possible. • Suppression of hypothalamic-pituitary-adrenal axis may occur particularly in patients receiving high doses for prolonged periods of time or in young children; discontinuation of therapy should be done through slow taper. • Prolonged use may increase risk of secondary infections.
Diabetes Therapy **Group 1** ***Glucagon*** ***Glucose / Dextrose Chewable Tablet or Gel*** ***Dextrose 50% Injection (50 mL syringe)*** ***Dextrose 10% IV Infusion*** **Group 2** ***Insulin*** Subcutaneously or IV	• Glucagon, Dextrose: suspected/confirmed hypoglycemia (Adults: Glucose< 4mmol/L; Children < 2.8 mmol/L or < 3.3mmol/L with confusion/seizure) • Glucagon: suspected/confirmed impacted food bolus	• Glucagon, Glucose, Dextrose: severe, symptomatic hyperglycemia, Known hypersensitivity	

Fluid & Electrolyte Therapy **Group 1** **0.9% Normal Saline** **Ringers Lactate** **D5W/0.45% Normal Saline** ***Potassium chloride*** ***Magnesium sulfate*** ***D50W ampules*** **Group 2** ***Sodium Chloride 3% Infusion*** ("Hypertonic Saline")	• Suspected/Confirmed Dehydration, Acute Kidney Injury, Hyperglycemia, Hyponatremia, Shock (Septic, Anaphylactic, Hemorrhagic, Distributive) • Electrolyte Abnormalities: Hyper/Hypokalemia, Hyper/Hypomagnesemia, Hyper/Hyponatremia, • D50W Ampules: Hypoglycaemic coma	• Severe hypertension • Pulmonary edema • Hold maintenance fluids during transfusions	• Patients receiving electrolyte replacement should be placed on cardiac monitoring

Gastrointestinal Therapy ***Acid Suppressants / Antacids:*** **Group 1** ***Antacid*** Magnesium & aluminum hydroxide (Maalox) ***Pantoprazole*** PO/IV ***Laxatives:*** **Group 1** ***Lactulose*** ***Magnesium Citrate*** ***Magnesium hydroxide*** ***Sodium Phosphate*** (Fleet Enema) ***Polyethylene Glycol*** ***Sennosides*** ***Bisacodyl*** ***Antidiarrheals:*** **Group 1** ***Loperamide***	• Acute GERD/Gastritis • Acute Upper GI Bleed • Laxatives: Suspected or Confirmed Constipation • Lactulose: suspected or confirmed hepatic encephalopathy • Antidiarrheals: suspected or confirmed acute diarrhea	• Laxatives: Hypersensitivity to drug; Intestinal obstruction; Acute intestinal inflammation (eg, Crohn disease), Colitis ulcerosa • Loperamide: children <2 years; acute dysentery; acute ulcerative colitis; bacterial enterocolitis (caused by Salmonella, Shigella, and Campylobacter) • Diphenoxylate: as above; obstructive jaundice, known hypersensitivity	

Local Anesthesia **Group 1** ***Bupivacaine 0.25% or 0.5%*** ***EMLA*** (2.5%prilocaine, 2.5%lidocaine) ***LET Solution*** (lidocaine 4%, Epinephrine 1:1000, Tetracaine 0.5%) ***Lidocaine 1% or 2% with or without epinephrine*** 1:100,000 or 1:200,000 Via subcutaneous infiltration ***Lidocaine Viscous 2%*** ***Lidocaine Topical Solution 4%***	• Required local anesthesia (primary wound closure, pain control, fracture/dislocation reduction without sedation, foreign body removal) • Lidocaine local for live insect in external ear canal, prior to removal (insecticidal)	• Known Hypersensitivity. • Do not use an anesthetic with epinephrine on burns • Lidocaine Viscous - Caution in children under 3 years old due to cases of seizures, cardiopulmonary arrest, and death when dosing guidelines not followed	
Ophthalmological Therapy **Group 1** ***Tetracaine 0.5%*** ***Tropicamide 1%*** **Group 2** ***Carbonic Anhydrase Inhibitors*** ***Cyclopentolate*** ***Pilocarpine*** ***Atropine Eye drops*** ***Timolol maleate***	• Tetracaine: analgesia/anesthesia for severe pain, minor procedure, to facilitate examination, foreign body removal • Tropicamide: cycloplegia, mydriasis for posterior ocular examination/fundoscopy	• Known hypersensitivity • Tropicamide: known/suspected acute angle closure, known severe hyperopia	
Outpatient Medications for Maintenance Therapy **Group 1 & 2** The PA may /order (without prior discussion with a physician) any medication that the patient was taking as an outpatient and that requires continuation while the patient is in the Emergency Department or admitted to the hospital.			• ***The PA cannot prescribe controlled substances*** • ***The PA will review the medication list and hold any medications deemed in their professional opinion to be causing harm***

Respiratory Therapy **<u>Group 1</u>** Ciclesonide ***Ipratropium*** ***Salbutamol***	• Known or suspected bronchoconstriction (asthma, COPD exacerbation, anaphylaxis, reactive airway disease) • Ventolin only: hyperkalemia **IPAC guidance and best practice should inform the use of nebulized medications**	• Known hypersensitivity	
SEDATION: Moderate/Conscious Sedation The PA **<u>may *administer* these drugs:</u>** ***Fentanyl*** ***Ketamine*** ***Midazolam*** ***Propofol*** ***(Authority for <u>Administration Only</u>)**	• Moderate/conscious sedation **only in the presence of the MRP** or after explanation, discussion and instruction • See LH Procedural Sedation policy and procedure		• ***The PA must hold current ACLS Provider status.*** • ***The patient must be in a monitored environment and a department crash cart placed adjacent to the patient with full ability to immediately control the airway.***
SEIZURE THERAPY **<u>Group 1</u>** ***Carbamazepine (****Tegretol****)*** ***Divalproex (****Epival) OR ***Valproic acid*** (Depakene caps or syrup) ***Phenytoin (****Dilantin****)*** ***Levetiracetam (****Keppra****)***	• Seizure termination or prophylaxis only	• Carbamazepine: Bone marrow suppression; Jaundice/ hepatitis; Pregnancy • Valproic acid : Liver disease, Mitochondrial disease, pregnancy • Phenytoin: Pregnancy, Breastfeeding, Sinus Bradycardia, Heart Block,	• ***The PA cannot prescribe benzodiazepines (e.g., diazepam, lorazepam, midazolam) as per Federal Law.*** • Phenytoin – check drug interactions

Toxicology **Group 1** ***Activated charcoal*** ***Naloxone*** ***Thiamine*** **Group 2** ***Acetylcysteine (NAC)*** ***Calcium Gluconate*** ***Calcium Chloride*** ***Lipid Emulsion***	• Activated Charcoal: known or suspected toxic ingestion within 4h • Naloxone: suspected/confirmed opioid overdose	• Activated Charcoal: altered mental status, unable to tolerate PO, PO intake contraindicated/NPO (pancreatitis, small bowel obstruction, ileus), Caustic ingestions	• Naloxone: Caution in patients with seizure & cardiovascular disease; May precipitate acute abstinence syndrome in opioid dependent
Wound Therapy **Group 1** ***Any hospital approved ward stock antiseptic skin cleansing agent(s)*** ***Hydrogen Peroxide 3% solution*** ***Polysporin cream or ointment*** ***Silver sulfadiazine 1% cream*** (Flamazine ***Tetanus & Diphtheria Toxoids*** (TdAP) ***Surgicel*** ***Surgifoam*** ***Tissue Glue*** **Group 2** ***Tetanus Immune Globulin***	• Lacerations or other wounds requiring cleansing, debridement, tetanus prophylaxis	• Known hypersensitivity	

Miscellaneous ***Tranexamic acid*** **<u>Group 2</u>** ***Haloperidol*** ***Misoprostol***	• Tranexamic acid: severe hemorrhage (heavy menstrual, intra-abdominal bleeding)	• Tranexamic acid: Active intravascular clotting; subarachnoid hemorrhage; Active thromboembolic disease (e.g., cerebral thrombosis, DVT, or pulmonary embolism); history of thrombosis or thromboembolism, patients using combined hormonal contraception who may become pregnant	

Life Threatening Medical Emergency, <u>Unsupervised</u> **Life Threatening Medical Emergency, <u>Unsupervised</u>** In the unlikely circumstance that a fully certified staff PA, for whatever reason, finds themselves asked to see a life-threatening illness and the most responsible physician is not available <u>and</u> it is the professional judgment of that PA that any further delay significantly and imminently jeopardizes the life of that patient, the PA is authorized to take whatever action is deemed appropriate to maintain the life of the patient and may intervene with any of the above listed medications (Group 1 or 2) and act within the full current ACLS guidelines as sanctioned by the Ontario Heart & Stroke Foundation. PAs should also be familiar with the existing LH policy and procedures and medical directives regarding code blue **In the event that this Directive is used by a staff PA, there must be a mandatory review by the Program Co-Directors (Medical Director and Patient Care Manager) to investigate the circumstances from an operational and systems perspective and to elicit any learning's that may pertain to the Emergency Department.** Actions must be in complete compliance with the latest ACLS Provider and ACLS Advanced algorithms.			

These tables must **not** be used independently apart from the Medical Directive

Appendix C: Consultations

Consultation	Indication	Special Considerations
Anesthesia/Acute & Chronic Pain Services	Pre-op assessment & determination of surgical risk, and complex airway issues Assessment and management of acute or chronic pain	
Cardiology	Assessment and management of patients with myocardial dysfunction, ischemia/infarction, conduction abnormalities	
Community Care Access (Home Care)	Assessment and planning of discharge needs	
Dermatology	Assessment and management of complex dermatological issues	
Diabetes Educator	Assessment and management of newly diagnosed or previously unmanaged diabetic patients	
Dietitian	Assessment and management of nutritional status	
Ear, Nose & Throat (ENT)	Assessment and management of complex airway issues	
Endocrine	Assessment and management of patients with diabetes, chronic electrolyte disturbances, and hormonal imbalances	
Gastroenterology	Assessment and management of complex gastro-intestinal issues	
General Surgery	Assessment and management of general surgical issues	
Geriatrics/CCAC	Assessment and management of issues related to the elderly/ discharge	
Hematology	Assessment and management of coagulation disorders	
Hyperbaric Treatment	Assessment and management of wound infections	
Infectious Diseases	Assessment and management of complex infections	
Internal Medicine/Hospitalist	Assessment and management of medical conditions	

Nephrology	Assessment and management of acute and chronic renal disorders	
Neurology/Movement Disorders Program	Assessment and management of neurological issues (non-neurosurgical)	
Obstetrics & Gynecology	Assessment and management of gynecological issues	
Occupational Therapy	Assessment and management of cognitive deficits, assistance with ADL's & discharge planning	
Oncology (Medical & Radiation)	Assessment and management of oncological issues	
Ophthalmology & Neuro-ophthalmology	Assessment of visual fields and disorders	Visual disturbance secondary to neurosurgical issues referred to neuro-ophthalmology
Orthopedics	Assessment and management of orthopedic issues	
Palliative Care Team	Assessment and management of palliative patients	
Pharmacy	Assessment and management of pharmacological treatment	
Physiotherapy	Assessment and management of impaired mobility, and chest physiotherapy	
Plastic Surgery	Assessment and management of complex wounds	
Psychiatry & Neuro-Psychiatry & Neuro-Psychology	Assessment and management of acute or chronic psychiatric disorders and/or cognitive impairment	
Respiratory Therapy	Assessment and management of acute and chronic respiratory issues	
Respirology	Assessment and management of complex respiratory issues	
Rheumatology	Assessment and management of complex inflammatory processes	
Social work	Assessment and planning of discharge needs; Assistance with coping (patient or family)	

Speech Language Pathology	Assessment and management of impaired swallowing and communication	
Stroke Team	Assessment and management of neurological deficits related to stroke (non-neurosurgical)	
Urology	Assessment and management of urological complications	
Vascular Surgery	Assessment and management of complications related to complex vascular issues	
Wound Care/Ostomy Nurse	Assessment and management of wounds and skin care in complex patients	