DEPARTMENT OF EMERGENCY MEDICINE
GUIDELINES FOR POSTGRADUATE TRAINEES
(Updated October 2021)

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You should have a professional attitude and presence. This includes appropriate dress (no blue jeans, no bare feet) and males should be clean shaven. Your hospital I.D. badge must be worn and be clearly visible. You should introduce yourself as *"Dr. Jones"* working with *"Dr. Smith"* the attending Emergency Physician

INTRODUCTION

Welcome to the Department of Emergency Medicine. We hope your rotation will be enjoyable and provide you with an opportunity to develop and improve your skills in the practice of this discipline.

1. ORGANIZATION OF ROTATION

Rotations in Emergency Medicine occur in the Hotel Dieu Hospital Urgent Care Center (UCC) and the Kingston General Hospital (KGH). The HDH Urgent Care Center registers new patients from 08:00 hours to 20:00 hours, 7 days a week, and sees ambulatory adult and pediatric patients. The KGH is a full-service 24-hour Emergency Department that receives all ambulance patients and patients for the regional trauma, stroke, and STEMI programs. To provide you with exposure to the total range of Emergency Medicine patients you will be scheduled to work at both departments during your rotation.

Your schedule is arranged before your rotation and any academic time off or holiday requests need to have been made well in advance and in accordance with the policies of the Department. **Scheduling requests to be made to the head resident at least 30 days prior to the block in which the leave is requested. There is no formal orientation session at the beginning of your rotation. It is therefore essential that you read these guidelines so you may more quickly understand how we operate and what your role will be.** On your first shift you will be shown the layout of the departments, how patient care and the paper work flow from registration to admission or discharge and how investigations are ordered. There are important differences in these processes between the two hospitals.

It is also important to learn what research projects are ongoing in the Department so you can be alert to recruit patients and understand what your involvement might be. Research assistants will often approach you about potential subjects or place a research form on an eligible patient's chart. Please try your best to complete these forms if you encounter them. The research assistants at either site can be paged if you have questions about potential research subjects – ask the unit clerk in the ER.

2. SUPERVISION

The following guidelines are the internal guidelines of the Department of Emergency Medicine and supplement the 1993 College of Physicians and Surgeons of Ontario guidelines regarding supervision of Postgraduate Trainees (See Appendix 1).

While junior residents (PGY 1 and 2) are expected to carry out independent patient assessments and develop management plans for each patient they see, they must discuss each patient with the Emergency Physician (or Senior Emergency Medicine Resident) prior to discharging the patient, requesting a consultation, ordering advanced imaging (e.g. CT scans or Ultrasounds) or making a clinic referral.

3. APPROACH TO PATIENTS IN THE EMERGENCY DEPARTMENT

Patients present to the ED with a wide range of problems varying in severity from trivial to life threatening. The ED is usually very busy with a high volume of patients with complex problems taxing the resources of the department. This reality requires a somewhat non-traditional approach to patients.

- Assessments are often two phased – a quick “primary” survey, checking the ABC’s and determining the need for resuscitation or urgent intervention, followed by a more complete “secondary” survey.
- Consider the possibility of a serious cause for the patient’s problem.
- Treatment and diagnosis often occur simultaneously – often we must act before test results are available.
- A specific diagnosis may not be possible and not all patient problems can be solved in the time frame of the emergency visit.
- Time is often employed as a diagnostic tool. It is important to reassess patients and document your reassessments, ideally every two hours or so.
- Successful management of the patient’s problem often ultimately depends on clear discharge advice and instructions to the patient or family and arranging timely and appropriate follow up care.

Specific Patient Problems

Formal management guidelines and protocols are beyond the scope of this document and are generally not established for most patient problems seen in our EDs. Hospital treatment protocols have been established for some diagnoses such as hip fractures, acute coronary syndromes, TIA/stroke and diabetic emergencies. These are kept for reference in each department. There are also some pre-populated order sets on EDIS for some common presentations e.g. COPD exacerbation, chest pain, trauma, etc.

Some general information which may be helpful:

i. Chest Pain:

- Patients with chest pain receive priority to identify candidates for PCI.

ii. Pediatric Patients:

- Children require careful and timely assessments and the possibility of child abuse/neglect must always be considered.
- Always double check weight based medications for young children!

iii. Obstetrical Patients:

- The possibility of pregnancy must be considered in any woman of childbearing age. Pregnant patients are high-risk patients. Patients twenty or more weeks pregnant are referred directly to the Obstetrical Unit (Connell 5-KGH).

iv. Poisonings:

- Each department has the Poisondex accessed through PCS system under the toolbar. Toxicology consultation is available through the Ontario Poison Information Center at the Hospital for Sick Children in Toronto – ask the unit clerk to page. Two of our attending staff are trained toxicologists.

v. Trauma:

- The Trauma Team manages serious trauma at KGH. The team is activated by the Emergency Attending and Charge Nurse based on particular activation criteria. The criteria are posted by the EMS patch phone and also available on EDIS (see below for description of EDIS).

vi. Dental Problems:

- Community dentists and the local dental surgeons provide back up to the Emergency Department. The Oral Surgery service can be paged through switchboard.

vii. Substance Misuse and Dependance:

- Patients requiring detoxification are referred following assessment to the Detox Centre on Brock Street. Patients can also be referred to Street Health for assessment of addictions concerns and/or initiation of treatments for alcohol use disorder, opiate use disorder, etc.

viii. Wound Care:

- Wounds need careful assessment for occult injury and retained foreign bodies. Offer tetanus prophylaxis as needed. Referrals for wound care can be made through Home and Community Care (link on EDIS).

ix. Workers Compensation:

- Patients with injuries sustained during employment will have a FAF form attached to the chart. The Emergency Physician will complete this form only if a clear history of the injury, a description of findings of the exam, an outline of treatment and advice about work are recorded on the chart. Please ensure your documentation is thorough.

Diagnostic Investigations

Deciding what tests/investigations to order is an important skill in Emergency Medicine. Unnecessary or inappropriate tests not only will increase costs and waste time but also may be risky to the patient and prolong his/her stay in the ED.

- Order only tests that are relevant to the patient's problem and likely to help in the ED resolution of the problem. If unsure what tests to order ask the attending Emergency Physician. There are clinical decision aids to help in your decisions such as the Ottawa Rules for ankle and knee x-rays, PERC for d-dimer testing, Canadian CT head rule, etc.
- Significant test results must be written on the chart. X-rays should be reviewed with the Emergency Physician.
- The interpretation must be recorded on the PACS system for quality assurance using the sticky note function.
- The physician who orders a test **is legally responsible** for following up the result. This is a problem in Emergency Medicine as test results may not be available at the time of discharge or the interpretation may change (i.e. X-rays, EKGs). Reliable follow up arrangements must be made in these situations. Check that the patient's telephone number is correct, or in the case of visitors to the area, find out how they can be reached.

Consultations

Often the management of your patient's problem requires consultation with one of the inpatient services. Consultation requests need to be discussed with the Emergency Physician, not only to ensure that the consult is appropriate but also to be sure the correct service is called. A consultation algorithm (showing common clinical diagnoses and the service that should be consulted for management) has been developed and is available on EDIS. In general, a consultation for a patient seen at HDH usually requires the patient be transferred to KGH.

Clinic Referrals

Referrals to an outpatient clinic must be discussed with the Emergency Physician to ensure it is appropriate and to determine the timing of the appointment. **Urgent appointments can usually only be made with direct physician contact with the service involved**. When completing the chart you must clearly indicate what clinic appointment you have requested and its desired timing.

The Children's Outpatient Clinic (COPC) at HDH will see pediatric patients without an appointment, Monday to Friday.

The Eye Clinic at HDH has daily emergency eye clinics 7 days a week. There is a binder in which you can assign patients to a clinic time in each ED. The Rapid Cardiology Clinic is for patients seen in the ED who do not need to be admitted but need a cardiologist's evaluation on a more urgent basis. There is a binder in each ED for scheduling appointments.

Note: It is important for your learning to follow up on your patients. This is often difficult, however, you are encouraged to discuss your patient with the consultant and check on your admitted patients. Often the easiest way to do this is to make sure that you keep one of the patient's chart stickers or add them to your patient list on PCS.

Discharge and Follow-up

Most patients are discharged from the Emergency Department. Since few patient problems are completely resolved during the emergency visit, there is usually a need for a clear discussion with the patient or family regarding:

- **i.** Diagnosis
- **ii.** Treatment plan
- **iii.** Any diagnostic uncertainty (including how test results will be followed up)
- **iv.** What to expect
- **v.** What should require a return visit to the Emergency Department
- **vi.** When the patient should see their own Family Physician. If the patient is to see the Family Doctor in a few days give the patient a copy of the Emergency Department chart to take with them since the ED charts typically take a week to arrive at the FP's office. A telephone call to the FP is often a good idea.
- **vii.** Arrangements for clinic visits or further diagnostic testing. (Since these arrangements can fall apart, always tell the patient what to do in such an eventuality)
- **viii.** Any need for Homecare and how it will be arranged
- **ix.** Any restrictions, short term or long term, to the patient's ability to drive safely should be discussed

4. THE EMERGENCY DEPARTMENT RECORD

Good record keeping is an essential part of good emergency care. A complete record must contain:

- accurate and complete patient demographic information
- a relevant history and physical exam
- a record of the results of investigations
- a record of treatment given and response to treatment
- a record and time of any reassessment and status of the patient on discharge
- a clearly written diagnosis. If a specific diagnosis is not made use the presenting complaint NYD (not yet diagnosed) For example: abdominal pain NYD
- a clearly written treatment plan, including follow up arrangements, that is consistent with the diagnosis
- your signature (remember to sign off your charts on EDIS!)

Use only accepted abbreviations.

Remember the medical legal adage "If it was not charted, it was not done"

EDIS – Emergency Department Information System

At both EDs you will be using the EDIS, our electronic record system, to sign up for patients, track results and review the nursing and allied health documentation and complete your documentation. Please ensure you sign up on the EDIS prior to seeing a new patient. You should also ensure you "sign" off your patient visit by entering your initial in the appropriate box. For residents new to Queen's training on the EDIS system will be provided at the start of the academic year.

5. HELPFUL ADVICE TO SURVIVE, BE HAPPY AND STAY OUT OF TROUBLE IN THE EMERGENCY DEPARTMENT

Learn to work as part of the team

Not only do you need to interact with other physicians, nurses and support staff in the ED, you need to deal effectively with the large number of professionals that can be involved with patients: police, EMS providers, lab techs, other medical staff, social workers, homecare providers and nursing home staff.

Be effective in your interactions with your patients and their families

Visits to the ED are usually very stressful, confusing, fraught with delays and often accompanied by pain. You should be courteous, empathetic and considerate of your patient's needs. You should inform patients as to what is happening, the reason for delays, whom they are going to be seen by and why. You should also attend to the patient's safety (i.e. put up side rails).

Be complete and accurate in your record keeping.

Avoid using any pejorative or demeaning terms in your notes or conversation.
Know your limitations and don't be afraid to ask for help. Remember medicine is a team sport!

Consider the issues of consent:

- Patients with immediate life-threatening problems can be treated without consent.
- Most consent in the ED is implied or presumed.
- For any procedure or treatment with risk, it is good practice to explain the issues to the patient and obtain his/her expressed and informed consent. For the consent to be valid, the patient must be capable, i.e. able to understand the information relevant to making a decision regarding treatment. A child under 16 can be capable and there are many reasons an adult may be incapable.
- For some procedures, hospital policy requires completion of a consent form to document this discussion (e.g. blood transfusion). When a form is not mandated, a note on the chart is advisable.
- Do not release information about patients without that patient's authorization. Notes to employers need only contain the date a patient was seen and any modification to ability to work. Police officers can be given general information about patients involved in incidents that they are investigating. More specific information requires a warrant. This also applies to requests for specific laboratory testing (i.e. ethanol level). Ask your Attending before providing any potentially confidential information in any of these situations.

6. EVALUATION PROCESS

Each resident will be evaluated daily. This will typically be completed via Elentra, based on program-specific evaluation forms.

You will also have an opportunity to evaluate the teaching performance of the Attending Physicians. A QR code can be scanned to access the confidential evaluation form.

Dr. Chris Evans (FRCPC Emergency Medicine Assistant Program Director) and Dr. Elizabeth Blackmore (CCFP Emergency Medicine Assistant Program Director) will assist residents who are identified as requiring remediation during their rotation.

7. SHIFT SCHEDULING

The EM Head Resident is responsible for making the monthly schedules for all residents in both departments. Although we do our best to ensure that the upcoming month's schedule is posted on the website 14 days prior to the start of each block; rarely, some last-minute revisions need to be made, and you will be notified by email if a revised schedule is posted.

The number of shifts you will work in a month may vary to ensure adequate resident coverage; typically 12 -18 shifts per block. You should expect to be scheduled to work during two weekends each month.

HDH	KGH	
Dh = 8:00 – 16:00	DB1 = 06:30 – 14:30	CB2 = 16:00 – 23:30
Eh = 15:00 – 11:00	AB1 = 06:30 – 14:30	D3 = 17:30 – 00:00
	D2 = 10:30 – 17:30	AB3 = 19:00 – 03:00
	CB1 = 11:00 – 18:30	NK = 23:00 – 07:00
	AB2 = 14:30 – 22:30	

We do our best to ensure you have a balanced schedule that provides exposure to acute and less-urgent illnesses/injuries at both sites. This may mean that you have several consecutive days of work, or your shifts may be spaced more widely apart. If you have questions/concerns about the schedule, contact the Head resident (indicated on each month's schedule).

If you wish to trade shifts with another junior resident, you may do so. All shift changes must be approved by the Head resident. It is the responsibility of the residents making the shift changes to notify both EDs and note the changes on the master schedule located on the bulletin board on Victory 3. Note: You cannot work an evening shift followed by a day shift.

Notification of Illness

In the event that you suddenly become ill and are unable to work please notify the Head resident as soon as possible or arrange for someone else to cover your shift. If you are unable to do either please notify the staff physician on duty at that time.

8. EDUCATION AND VACATION LEAVE

All requests for leave must be submitted online via the department leave request form (either on the PGY 1 & 2 rotation homepage or at: https://emergencymed.queensu.ca/academics/frcpc-residency-program/resident-resources/vacationleave-request) **at least 30 days prior to the block** in which leave is requested.

Emailed or verbal requests are not acceptable. The type of leave requested (Vacation vs. Educational) must be indicated. Only one week of vacation should be taken during a one block rotation. If your requested dates fall between two blocks, please complete and submit two separate request forms.

We do our best to accommodate all requests that we receive by the specified deadline. In cases where requests conflict, priority for time off will be given to residents taking educational leave, followed by vacation requests. We will notify you as soon as possible if your vacation request cannot be accommodated. Our vacation/leave policy is in accordance with PARO guidelines.

Requests to accommodate specific educational activities in your home department will be considered. These requests should be forwarded by your Program Director to Mary Lee, the EM Program Coordinator (mary.lee@kingstonhsc.ca), 549-6666 x 7660, Victory 3 KGH office).

9. ACADEMIC TEACHING SESSIONS

All teaching activities are posted weekly on the Department website at: https://emergencymed.queensu.ca/

You should check this site regularly for any changes or cancellations to the teaching schedule. Attendance is MANDATORY.

Junior Inter-professional Resuscitation Rounds

The aim of this 4 or 8 week course is to introduce junior learners to simulation and cardiac resuscitation in a safe, energetic, and supportive environment.

Diverse learners from the Schools of Nursing and Medicine (Clinical Clerks, and Junior Residents) work together as they practice basic ACLS principles.

Residents will be expected to lead an inter-professional cardiac arrest team in a simulated patient care setting. Residents should already possess ACLS certification and will be expected to apply knowledge learned in the ACLS course to these scenarios.

These rounds are weekly on Friday mornings 8:00-10:00 in the simulation lab on the 2nd floor of the School of Medicine Building at 15 Arch Street. Residents are expected to attend all sessions unless they have scheduled vacation or education leave. Failure to do so will result in a "FAIL" in this portion of their EM rotation. Attendance will be tracked.

Emergency Medicine Grand Rounds

EM Grand Rounds take place weekly Thursday mornings at 0830 hours Richardson L104 from September 1st – June 30th. There will typically be presentations by Attending Physicians and Senior residents in Emergency Medicine. Occasionally guest speakers will present.

Trauma Grand Rounds are also scheduled on the last Wednesday of the month at 07:00 in Etherington Auditorium. These are interdisciplinary rounds presented by Trauma Team Leaders from the Departments of Emergency Medicine, General Surgery, and Critical Care Medicine. You are welcome to attend these.

Weekly schedules of rounds held by other Departments are posted on the Victory 3-KGH bulletin board.

APPENDIX 1: Emergency Medicine Rotation Core Content Goals and Objectives

1. CARDIOVASCULAR EMERGENCIES

Goal: To develop a systematic approach to the recognition and Emergency Department management of patients with cardiovascular emergencies including acute coronary syndrome, congestive heart failure, pulmonary embolism and aortic dissection.

1.1 Approach to a Patient with Chest Pain

Objectives: At the end of this rotation, the student will:

i) Have a concise and directed approach to history taking, physical examination and laboratory testing in patients presenting with chest pain syndromes.
ii) Demonstrate an evidence-based approach to initial management of patients presenting with chest pain syndromes.

1.2 Diagnosis and Management of Acute Coronary Syndrome

Objectives: At the end of this rotation, the student will:

i) Be able to recognize the pattern of EKG changes for inferior, septal, anterior, lateral, posterior and right ventricular infarction.
ii) Know the current recommendations for selection of reperfusion therapy (thrombolysis or PCI).
iii) Know the indications and contraindications for adjunctive drug therapy in acute MI
iv) Recognize and manage early complications associated with acute coronary syndromes.

1.3 Diagnosis and Management of Congestive Heart Failure

Objectives: At the end of this rotation, the student will:

i) Know the pathophysiologic mechanisms resulting in congestive heart failure and the impact of these mechanisms on emergency department management.
ii) Identify the severity of patient symptoms according to the Canadian Heart Failure Classification system.
iii) Have a concise and directed approach to history taking, physical examination and laboratory testing in patients presenting in heart failure.
iv) Demonstrate evidence-based management measures for patients with congestive heart failure including pharmacologic and ventilator support therapies.

1.4 Diagnosis and Management of Aortic Dissection

Objectives: At the end of this rotation, the student will:

i) Know the classification system for thoracic aortic dissection.
ii) Have a concise and directed approach to history taking, physical examination and laboratory testing in patients presenting with thoracic aortic dissection.
iii) Demonstrate evidence-based management of patients with thoracic aortic dissection including pharmacologic therapies.

1.5 Diagnosis and Management of Pulmonary Embolism

Objectives: At the end of this rotation, the student will:

i) Have a concise and directed approach to history taking and physical examination in patients presenting with pulmonary embolism.
ii) Demonstrate an understanding of the limitations and interpretation of ancillary testing for PE including: EKG, chest radiographs, d-dimer assay, V/Q scan, CT pulmonary angiography.
iii) Use the Well's Criteria and PERC rule to assist in establishing a pre-test probability of PE for a given patient.
iv) Demonstrate a systematic approach to the investigation of patients with low, moderate and high probability PE.
v) Demonstrate an evidence-based approach to the management of a patient with a proven PE.
vi) Know the indications for thrombolysis of massive pulmonary embolism.

2. TOXICOLOGIC EMERGENCIES

Goal: To develop a general approach to the Emergency Department management of patients with toxic ingestions.

Objectives: At the end of this rotation, the student will:

i) Demonstrate an approach to the initial management of a patient with altered level of consciousness from suspected toxic ingestion.
ii) Recognize the characteristics of classic toxidromes: anticholinergic, cholinergic, sympathomimetic, opioids, hypnotic/sedatives.
iii) Demonstrate an approach to the history taking and physical examination of patients with toxic ingestions.
iv) Understand the limitations of urine drug screens and drug levels.
v) Understand the principles and techniques used to enhance elimination of toxins.
vi) Know the antidotes for at least five common toxic ingestions.
vii) Demonstrate ability to perform a simple search and generate a management strategy using the emergency department Poisondex.
viii) Recognize and manage common withdrawal syndromes of ethanol and opioids.

3. RESPIRATORY EMERGENCIES

Goal: To develop an evidence-based approach to the diagnosis and management of common respiratory emergencies including asthma, Chronic Obstructive Pulmonary Disease, Croup and Bronchiolitis.

3.1 Approach to a Patient with Dyspnea

Objectives: At the end of this rotation, the student will:

i) Demonstrate an evidence-based approach to the history taking, physical examination and investigation of a patient presenting with dyspnea.

3.2 Diagnosis and Management of Asthma

Objectives: At the end of this rotation, the student will:

i) List historical and clinical features which indicate a severe asthma exacerbation.
ii) Demonstrate a rational and concise approach to the history taking and physical examination of a patient presenting with an asthma exacerbation.
iii) Identify the indications for ancillary testing in asthma including use of chest radiograph and arterial blood gas sampling.
iv) Describe the emergency department management of patients with mild, moderate, severe and potentially fatal exacerbations of their illness.
v) Know the options available for pharmacologic therapy of asthma including: corticosteroids, beta agonists, anticholinergics, magnesium sulfate, and epinephrine.
vi) Know the indications for ventilator support in asthma and understand the risks involved in intubation/ventilation of patients with severe asthma.

3.3 Diagnosis and Management of Chronic Obstructive Pulmonary Disease (COPD)

Objectives: At the end of this rotation, the student will:

i) Demonstrate a rational and concise approach to the history taking and physical examination of a patient presenting with a COPD exacerbation.
ii) Classify disease severity using the Canadian Thoracic Society guidelines of impairment of FEV_1.
iii) Describe the management of mild, moderate and severe COPD exacerbations.
iv) Describe the indications and contraindications for noninvasive ventilator support in COPD.

3.4 Diagnosis and Management of Croup and Bronchiolitis

Objectives: At the end of this rotation, the student will:

i) Demonstrate a rational and concise approach to the history taking and physical examination of a patient presenting with croup or bronchiolitis.
ii) Identify historical and clinical findings of severe bronchiolitis.
iii) Apply the Westley Croup Score to determine disease severity.
iv) Demonstrate an evidence-based approach to the emergency department management of patients with croup and bronchiolitis.
v) Provide appropriate discharge instructions to parents of children with croup or bronchiolitis including home management strategies and return to emergency department advice.

4. PRINCIPLES OF MANAGEMENT OF THE MULTIPLE TRAUMA PATIENT

Goal: To develop a systematic approach to the initial management of patients with multiple traumatic injuries.

Objectives: At the end of this rotation, the student will:

i) Demonstrate and understanding of and ability to assess the components of the primary survey: airway, breathing, circulation, disability, exposure.
ii) Demonstrate and approach to monitoring and resuscitating the trauma patient.
iii) Demonstrate an understanding of and ability to assess the components of the secondary survey.
iv) Know the ancillary testing available in trauma and demonstrate an understanding of the appropriate timing of these investigations.
v) Know the Canadian CT Head and C Spine rules in trauma.
vi) Demonstrate an approach to interpreting the C spine, pelvic and chest x-rays in trauma and understand the limitations of these investigations in ruling out injury.
vii) Understand the roles of the Trauma Team members.

5. PEDIATRIC EMERGENCIES

Goal: To develop an evidence-based approach to the diagnosis and emergency department management of common pediatric emergencies including: the approach to the febrile child, febrile seizures, pediatric urinary tract infections and minor closed head injuries.

5.1 Diagnosis and Management of the Febrile Infant

Objectives: At the end of this rotation, the student will:

i) Understand the reasons febrile infants less than 3 months are at risk for serious bacterial infection.
ii) Know the Rochester criteria for identifying infants less than 3 months who are at risk for serious bacterial infection.
iii) Demonstrate a rational approach to the investigation of a febrile child less than 1 month of age, aged 1-3 months and aged 3-36 months.
iv) Understand the importance of careful follow-up in the management of infants with fever.

5.2 Diagnosis and Management of Febrile Seizures

Objectives: At the end of this rotation, the student will:

i) Know the definitions of simple and complex febrile seizures.
ii) Describe the investigation and emergency department management of a child with first presentation of febrile seizure.
iii) Know the recurrence rate and expected long term outcomes of children with febrile seizures.
iv) Provide appropriate discharge advice to parents of children with febrile seizures.

5.3 Diagnosis and Management of Pediatric Urinary Tract Infections

Objectives: At the end of this rotation, the student will:

i) Demonstrate a rational and concise approach to the history taking, physical examination and investigation of a child with suspect urinary tract infection.
ii) Understand the limitations of urine bag testing in children.
iii) List the indications for urinalysis and methods of sample collection in children.
iv) Know the current recommendations for follow-up testing of children with first diagnosis of urinary tract infection.
v) Identify appropriate antibiotic therapy and duration of treatment in urinary tract infections for children aged less than 1 month, 1-3 months and 3-36 months.

5.4 Diagnosis and Management of Minor Closed Head Injury in Children

Objectives: At the end of this rotation, the student will:

i) Demonstrate a rational and concise approach to the history taking, physical examination and investigation of a child with minor closed head injury.
ii) Apply the CATCH rule to determine the need for neuroimaging.
iii) Provide counseling on return to activity or sports for patients and their parents.

6. ORTHOPEDIC EMERGENCIES

Goal: To develop a rational and safe approach to investigating and managing patients with orthopedic injuries in the emergency department.

Objectives: At the end of this rotation, the student will:

i) Apply the Ottawa Ankle Rules to patients with ankle and foot injuries.
ii) Demonstrate an ability to interpret orthopedic radiographs including foot, ankle, knee, hip/pelvis, wrist, elbow and shoulder x-rays.
iii) Demonstrate an approach to the interpretation of pediatric elbow radiographs.
iv) Demonstrate the principles of fracture management.
v) Demonstrate an approach to the management of common soft tissue injuries including sprains, back pain, ligamentous injuries of the knee and digits.
vi) Identify fracture patterns that require orthopedic consultation (inpatient or outpatient) and the factors that make these fracture patterns unique (i.e. unstable, neurovascular compromise, open).

7. OPHTHALMOLOGIC EMERGENCIES

Goal: To develop an approach to common ophthalmologic emergencies including: the patient with the red eye, acute vision loss and traumatic eye injuries.

7.1 Approach to the Patient with an Eye Complaint

Objectives: At the end of this rotation, the student will:
i) Demonstrate an ability to take a thorough but directed history of the eye complaint.
ii) Demonstrate the ability to perform a thorough physical examination of the eye including appropriate use of tonometry, fluorescein staining and slit lamp examination.
iii) Recognize the signs of papilledema and identify potential causes of this finding.

7.2 Diagnosis and Management of Acute Vision Loss

Objectives: At the end of this rotation, the student will:
i) Demonstrate a rational and concise approach to the history taking, physical examination and investigation of acute vision loss.
ii) Demonstrate an approach to the diagnosis and management of retinal detachment.
iii) Demonstrate an approach to the diagnosis and management of acute angle closure glaucoma including appropriate pharmacologic therapy pending ophthalmologic consultation.
iv) Demonstrate an approach to the diagnosis and management of acute vascular occlusion.
v) Demonstrate an approach to the diagnosis, investigation and management of patients with giant cell arteritis.

7.3 Diagnosis and Management of a Patient with a Red Eye

Objectives: At the end of this rotation, the student will:
i) Demonstrate a rational and concise approach to the history taking, physical examination and investigation of the “red eye”.
ii) Demonstrate an approach to the diagnosis and management of extra ocular causes of the red eye: blepharitis, stye, chalazion, dacrocystitis, periorbital cellulitis and orbital cellulitis.
iii) Demonstrate an approach to the diagnosis and management of corneal causes of the red eye: dry eye, keratitis, conjunctivitis.
iv) Demonstrate an approach to the diagnosis and management of intraocular causes of the red eye: iritis, endopthalmitis, scleritis, and episcleritis.

7.4 Diagnosis and Management of Traumatic Eye Injuries

Objectives: At the end of this rotation, the student will:
i) Demonstrate an approach to the diagnosis and management of an open globe injury,
ii) Demonstrate an approach to the diagnosis of a chemical eye injury.
iii) Know the characteristics of lid lacerations that require emergent ophthalmologic consultation for repair.
iv) Demonstrate an approach to the diagnosis and management of traumatic hyphema.

8. APPROACH TO THE ELDER PATIENT

Goal: To develop an evidence-based approach to common Emergency Department presentations in the elder patient including general malaise, urinary tract infections and delirium.

8.1 Approach to the Elder Patient with General Malaise

Objective: At the end of this rotation, the student will:
i) Demonstrate an approach to the history taking, physical examination and investigation of elder patients presenting with nonspecific complaints or general malaise.

ii) Be aware of the role of polypharmacy, elder abuse and social deprivation as potential causes of general malaise.

8.2 Diagnosis and Management of Delirium

Objective: At the end of this rotation, the student will:

i) Identify historical and clinical factors that place an elderly patient at risk for delirium.
ii) Provide a differential diagnosis for delirium.
iii) Demonstrate a rational and concise approach to history taking and physical examination of patients with suspected delirium.
iv) Demonstrate use of the mini mental status examination or similar cognition screening tool.
v) Know pharmacologic options for management of the agitated patients.
vi) Know strategies for prevention of delirium in the elder patient.

8.3 Diagnosis and Management of Urinary Tract Infection

Objective: At the end of this rotation, the student will:

i) Understand the limitations of urinalysis in the elder patient.
ii) Demonstrate an evidence-based approach to the management of urinary tract infections in the elder patient.