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PA Program Website: https://www.med.wisc.edu/education/physician-assistant-pa-program/
PA Program Preceptor Resources: https://www.med.wisc.edu/education/physician-assistant-pa-program/preceptors/
Canvas URL: https://canvas.wisc.edu/courses/150356
COURSE OVERVIEW:
The Emergency Medicine rotation is a required, 8 – credit course where the student is expected to complete a minimum of 320 clinical hours on rotation (40 hours per week). In addition, the student is expected to complete at least 40 hours (1 hour per day) on the following activities: studying, completion of evaluations, patient encounter logging, Aquifer cases, reflection cards, and any additional course activities/requirements. The student will learn in an emergency room setting. The emergency medicine rotation is designed to provide the second-year/third year PA student with the knowledge and skills necessary to perform in the emergency room setting. For additional information and expectations of the course, please see the Clinical Year Student and Preceptor Handbook.

EMERGENCY MEDICINE PRECEPTORSHIP COURSE GOALS:

1. Provide the student with the opportunity and access to a diverse population of patients and a variety of diseases and injuries commonly encountered in an emergency room setting.
2. Support ongoing development and mastery of the student's ability and skill in obtaining a patient centered focused medical history, conducting a focused physical examination, recommending diagnostic studies and discussing and recommending treatment plans with the guidance of a preceptor.
3. Provide ongoing interactive opportunities for the student to deepen their knowledge regarding various diagnostic studies used in the evaluation of disease and injury and disease prevention.
4. Provide supervised patient care based opportunities, which foster the development of the student's ability to recommend, select and interpret (where applicable) appropriate diagnostic methods in the evaluation of a patient.
5. Provide clinical based opportunities to continue to develop the student's ability to generate differential diagnoses.
6. Provide clinical based opportunities to continue to develop clinical skills/procedures often used in an emergency room setting

EMERGENCY MEDICINE PRECEPTORSHIP LEARNING OUTCOMES:

At the end of this eight-week experience students will be able to:

1. Complete a problem-oriented history and physical examination specific to the patient’s chief complaint.
2. Complete a focused history and physical exam
3. Appropriately document patient encounters using SOAP note format (Subjective, Objective, Assessment and Plan).
4. Accurately order and interpret laboratory evaluations/diagnostic studies essential to determining the patient diagnosis (es).

5. Formulate a reasoned differential diagnosis for a patient problem paying close attention to those diagnoses that are most life-threatening.

6. Formulate an appropriate treatment plan, based on the patient’s H&P, and laboratory results/diagnostic findings, with emphasis on problems commonly seen in an emergency room setting.

7. Participate actively in patient care and management under preceptor supervision. (The level of engagement will be logged in Exxat).

8. Educate and counsel patients with common acute diseases across the lifespan that are commonly seen in an emergency room setting.

9. Educate, counsel and promote patients in healthy lifestyles and illness prevention across the lifespan.

10. Synthesize and apply medical knowledge and treatment in an evidence-based manner in the care of patients.

11. Attend to the emotional as well as physical health needs of the patient and family, with consideration of individual sociocultural and psychosocial factors.

12. Work as an effective member of an interprofessional health care team and participate in coordinated, quality, team-based care.

13. Develop relationships with and participate in clear, succinct, positive, respectful communications and interactions with all peers and related staff.

14. Participate in positive, respectful communications and interactions with all patients and their families, including effectively eliciting patient complaint, utilizing good listening skills, and practicing confidentiality.

15. Perform procedures commonly encountered in an emergency room setting like suturing, splinting, and others.


**EMERGENCY MEDICINE ROTATION -SPECIAL OBJECTIVES:**

These objectives are to guide the student in preparing for the Post Rotation examination by defining areas of content to be emphasized and studied as well as the clinical skills and professional behavior required and expected during this practicum.

Outline to this information is as follows:

- Alignment to the PA Core Competencies
- Organ system based conditions

**Alignment to the PA Core Competencies**

| Medical Knowledge | • Interpret the clinical features, differential diagnosis, and management of common acute and chronic medical conditions seen in the ambulatory medical setting.  
|                  | • Recognize the impact of disease on individuals and societal levels |
| **Patient Care** | • Compare preventive strategies for common acute and chronic medical conditions seen in the ambulatory setting, in the clinic, and at the population level.  
• Perform focused histories and physical exams relevant to common acute and chronic medical conditions.  
• Perform comprehensive wellness exams relevant to patient’s age and comorbidities.  
• Formulate treatment plans for common acute and chronic ambulatory medical problems.  
• Use test characteristics, predictive values, and likelihood ratios to enhance clinical decision making.  
• Distinguish preventive screening tests for individual patients, acknowledging prevalence, risk factors, and outcomes.  
• Formulate answerable clinical questions from patient interactions. |
| **Practice-Based Learning and Improvement** | • Practice life-long learning skills, including the use of evidence based medicine at point of care.  
• Differentiate and appraise preventive service guidelines and recommendations from various organizations.  
• Identify individual learning goals, and self-assess knowledge and behaviors. |
| **Interpersonal and Communication Skills** | • Present cases to preceptor in a patient-centered manner, integrating further testing recommendations, diagnostic probabilities, and evidence-based treatment recommendations as indicated.  
• Document clinical encounter in written SOAP note form.  
• Establish effective relationships with patients and families.  
• Ascertain patient and family beliefs regarding common acute and chronic medical conditions.  
• Educate patients and families regarding common acute and chronic medical conditions.  
• Demonstrate the process of negotiating management plans with patients, incorporating patient needs and preferences into care.  
• Check for patient’s understanding of follow-up plan, including treatments, testing, referrals, and continuity of care. |
| **System Based Practice** | • Identify community assets and system resources to improve the health of individuals and populations.  
• Demonstrate a clinical perspective that recognizes the impact of multiple systems on patient health. |
| **Professionalism** | • Recognize and address self-care and personal issues that affect one’s ability to fulfill the professional responsibilities of being a |
physician.
- Assume responsibility, behave honestly, and perform duties in a timely, organized, respectful, and dependable manner.
- Seek, accept, and apply constructive feedback appropriately.

**Learning Objectives for Organ based Conditions:**

Know etiology, risk factors, prevention, signs and symptoms, diagnostic workup, treatment plan and patient education for *(Table 1)*

**Table 1. Acute Presentations with Common/Serious Diagnosis**

<table>
<thead>
<tr>
<th>Organ System</th>
<th>Symptoms</th>
<th>Common/Serious Diagnosis</th>
<th>Clinical skill or other</th>
</tr>
</thead>
</table>
| Gastrointestinal/Nutritional | Abdominal pain, anorexia, heartburn/dyspepsia, nausea/vomiting, jaundice, hematemesis, diarrhea/constipation/obstipation/chang e in bowel habits, melena/hematochez ia, bleeding per rectum | Esophagitis, Mallory-Weiss tear, Peptic ulcer disease, Acute cholecystitis, Cholangitis, Acute hepatitis, Acute pancreatitis, Acute appendicitis, Diverticular disease, Ischemic bowel disease, Inflammatory disease, Toxic megacolon, Obstruction (small bowel, large bowel, volvulus) Anal fissure/fistula/abscess, Hemorrhoids (thrombosed), Perirectal abscess Hernia (incarcerated/strangulated) Infectious diarrhea, Gastritis, Gastroenteritis, Diarrhea/constipation, Gastrointestinal bleeding, Cirrhosis, Giardiasis and other parasitic infections, Pyloric stenosis, Pancreatitis, Pancreatic pseudocyst, Cholangitis, Cholelithiasis/choledocholithiasis, Acute cholecystitis, Carcinoma (colorectal, small bowel, gastric, pancreatic, esophageal, and hepatic) | Stool guiac
FAST US exam
NG tube placement |
<p>| Cardiovascular              | Chest pain, syncope, Conduction disorders (atrial)                        | Conduction disorders (atrial)                                                                            | Interpret EKG            |
| Pulmonology       | Shortness of breath, Hemoptysis, Fatigue, Wheezing, Stridor, Pleuritic chest pain, Cough, Fever | Croup, Influenza, Pertussis, Pneumonia (bacterial, viral, fungal, human immunodeficiency virus-related) Respiratory syncytial virus Asthma Pleural effusion, Pneumothorax, Pulmonary embolism Acute respiratory distress syndrome | Interpret CXR Chest tube placement Interpret peak flow meter |</p>
<table>
<thead>
<tr>
<th>Subject</th>
<th>Symptoms and Conditions</th>
<th>Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocrinology</td>
<td>Tremors, fatigue, palpitations, heat/cold intolerance, polyurea</td>
<td>Hyperparathyroidism, Hyperthyroidism, Thyroiditis, Adrenal insufficiency, Diabetes insipidus, Diabetic ketoacidosis, Non-ketotic hyperglycemia, Diabetes mellitus, Cushing disease, Hypothyroidism</td>
</tr>
<tr>
<td>Urology/renal</td>
<td>Edema, Dysuria Hematuria Suprapubic/flank pain</td>
<td>Orthostatic hypotension, Urinary retention, Acute/chronic renal failure, Renal vascular disease, Nephrolithiasis, Testicular torsion, Cystitis, Epididymitis, Orchitis, Prostatitis, Pyelonephritis, Urethritis, Glomerulonephritis, Fluid and electrolyte disorders, Acid/base disorders, Hernias</td>
</tr>
<tr>
<td>Neurology</td>
<td>Change in vision, change in speech, motor and/or sensory loss, Vertigo Seizure (symptom)</td>
<td>Vascular disorders (carotid disease) Headache (migraine, cluster, tension, acute glaucoma) Meningitis, Encephalitis, Transient ischemic attack, Stroke, Subarachnoid hemorrhage/cerebral aneurysm Intracerebral hemorrhage, Altered level of consciousness/coma, Head trauma/concussion/contusion, Epidural/subdural hematoma, Seizure disorders, Status epilepticus, Syncope, Guillain-Barre syndrome, Spinal cord injury, Delirium, Dementia, Bell Palsy</td>
</tr>
<tr>
<td><strong>Hematology</strong></td>
<td>Easy bruising/bleeding, fatigue</td>
<td>Anemia, Aplastic anemia, Hemolytic anemia, Sickle cell anemia/crisis Clotting factor disorders, DVT, Hypercoagulable states, Thrombocytopenia, Acute leukemia, Lymphomas, Leukemias, Polycythemia</td>
</tr>
<tr>
<td><strong>OB/GYN</strong></td>
<td>Abdominal/pelvic pain, Vaginal discharge, Dysmenorrhea, Amenorrhea, Fever</td>
<td>Dysfunctional uterine bleeding, Endometriosis, Ovarian cysts, Vaginitis, Pelvic inflammatory disease, Mastitis/breast abscess Spontaneous abortion, Abruptio placentae, Ectopic pregnancy, Placenta previa, Premature rupture of membranes, Fetal distress Intrauterine pregnancy, Sexual assault Pelvic exam STD cultures Fetal heart tones (FHT) Wet Prep (KOH) Urine preg test</td>
</tr>
<tr>
<td><strong>Psych</strong></td>
<td>Fatigue, hallucinations, altered mental status, chest pain, suicidal ideation</td>
<td>Neurocognitive disorders, Bipolar and related disorders, Schizophrenia spectrum and other psychotic disorders, Depressive disorders, Anxiety disorders, Panic disorder, Posttraumatic stress disorder, Substance use disorders, Spouse or partner neglect/violence, Suicide, Sexual assault</td>
</tr>
<tr>
<td>Orthopedic/Rheumatology</td>
<td>Pain, Fever, Swelling/deformity, Ecchymosis/erythema, Numbness/tingling</td>
<td>Fractures/dislocations (shoulder, forearm/wrist/hand, hip, knee, ankle/foot), Soft tissue injuries, Back strain/sprain, Low back pain, Cauda equine, Herniated disk, Osteomyelitis, Septic arthritis, Costochondritis, Bursitis/tendonitis Gout, Sprains/strains, Compartment Syndrome</td>
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<tr>
<td>Toxicology</td>
<td>Altered mental status, Fever</td>
<td>Overdose (acetaminophen, aspirin, tricyclic antidepressants, carbon monoxide, toxic alcohols, narcotics)</td>
</tr>
</tbody>
</table>
Learning Objectives for EM Boot Camp

- ACLS review: Be able to identify the correct steps and treatments in the ACLS algorithms.
- Orthopedic review: Review and demonstrate splinting techniques for common orthopedic injuries seen in an emergency setting.
- Suture practice: Review and demonstrate suturing techniques often utilized in an ED setting.

Recommended Resources

2. Hamilton RJ. Tarascon Pharmacopoeia. (Pocket or PDA version)
3. Gilbert DN, Chambers HF, Eliopoulos GM. Sanford Guide to Antimicrobial Therapy. (Pocket or PDA version)
7. Rosen’s Emergency Medicine, (Marx et al).

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<thead>
<tr>
<th>Recommended Websites</th>
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<tbody>
<tr>
<td>UpToDate</td>
<td><a href="http://www.uptodate.com">www.uptodate.com</a></td>
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<tr>
<td>American Family Physicians</td>
<td><a href="http://www.aafp.org">www.aafp.org</a></td>
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<tr>
<td>American Medical Association (AMA)</td>
<td><a href="http://www.theasgs.org">www.theasgs.org</a></td>
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