

Emergency Medicine Rotation Manual

Rotation Description

This is a core rotation designed to educate students about the evaluation, diagnosis, and management of emergency, urgent, and non-urgent medical problems that present to the emergency department. Students will work with clinical preceptors and the Bethel PA program clinical team to coordinate adequate student exposure to minimum requirements for diagnoses and procedures. Each student will complete this rotation at least once during the clinical year to provide students sufficient training in the emergency medicine setting.

Preceptor Requirements

Board Certified Emergency Medicine Physician, NCCPA Certified PA, or Certified NP (B3.05 & B3.06)

Course Topics

- Cardiovascular
- Orthopedics/rheumatology
- Gastrointestinal/nutritional
- Pulmonology
- Neurology
- ENOT/ophthalmology
- Urology/renal
- Dermatology
- Endocrinology
- Obstetrics/gynecology
- Psychiatry/behavioral medicine
- Hematology

Required Minimum Exposures

Students should see the listed diagnoses and perform the listed procedures during this rotation and will be expected to document a minimum of 90% of all minimum exposures by the end of the clinical year, prior to the Summative Skills Stations (completed at the end of Spring term). Additionally, at the end of the rotation, students will complete the Clinical Student Self-assessment form, which summarizes their overall completion of minimum exposures, and describes where they might achieve any remaining exposures in the coming rotations.

Diagnosis	Procedures (Perform all under supervision)
EM - Abdominal Pain	EM - EKG Interpretation

EM - Chest Pain	EM - Laceration Repair
EM - Fracture/Sprain	EM - X-ray Interpretation
EM - Genitourinary	EM - Application of Cast / Splint
EM - Head or Neck Injury	EM - Imaging interpretation (ultrasound, CT or MRI)
EM - Laceration	
EM - Overdose (alcohol or drug)	
EM - Seizures	
EM - Shortness of Breath	
EM - Upper or Lower GI Bleed	

Emergency Medicine: Rotation Learning Outcomes

At the end of this course, the successful PA student will demonstrate competency in the following by achieving minimum scores as detailed in the course syllabus:

Knowledge

1. Demonstrate acquisition of medical knowledge necessary to provide acute and emergent care in the emergency medicine setting (K1)
2. Order and interpret laboratory and imaging test results appropriately to aid in clinical decision making (K2)
3. Provide effective, empathetic, and patient-centered counseling and education to patients in the emergency medicine setting (K3)

Clinical and Technical Skills

4. Demonstrate appropriate history taking and physical exam skills when caring for infants, children, adolescent, adult, and elderly patients in the emergency medicine setting (CT1, CT2)
5. Safely and correctly perform clinical procedures within the scope of the emergency medicine physician assistant role (CT3)

Clinical Reasoning

6. Assimilate clinical data to a develop differential diagnoses using evidence-based principles for acute and emergent care (CR1)
7. Using evidence-based principles, develop plans for patients for acute and emergent care (CR1).
8. Utilize appropriate medical resources for the delivery of patient-centered care in the emergency medicine setting (CR2)

Interpersonal Skills

9. Establish professional relationships and communication skills with patients, preceptors, and clinical staff (IP1, IP2)

Professional Behaviors

10. Assess ethical dilemmas encountered when in clinic, including analysis of how the patient and provider's worldview or faith perspective impacted the situation (PB1)
11. Demonstrate understanding of the PA profession, including ethical, legal, and regulatory guidelines for practicing (PB2)
12. Appropriately complete professional administrative requirements for each rotation including logging in the electronic tracking system and submitting required evaluations (PB2)

Rotation Grading

Please see Student Handbook for academic and progression requirements. Students in clinical rotation courses must achieve an 80% on all course assessments. Failure to achieve 80% or higher on an assessment will result in referral to the Progress and Remediation Committee.

ASSESSMENT TOOL	COURSE OUTCOME MEASURED
End of Rotation Exam*	1 – Medical Knowledge 2 – Lab and imaging 3 – Patient-centered care 4 – History & Physical Exam 5 – Clinical procedures 6 – Assimilate clinical data/DDx 8 – Professional relationships and communication
Final Preceptor Evaluation	All LO
Self-Assessment with DOP log and patient logging	All LO
Clinical Forum Posts, Self-Assessment, and Assignments	9 – Ethical decision-making 10 – Understanding of PA profession 11 – Professional administrative tasks
Completing Administrative Requirements (Pt Logs, preceptor email, site eval)	11 – Professional administrative tasks

* A sliding scale will be used for grading the PAEA EOR exam, based upon national data – see Clinical Education Handbook. All requirements must be completed no later than 10pm the day following the EOR Exam. Students who fail to meet this deadline will receive a grade of incomplete, which may result in repeating the rotation.

Emergency Medicine Instructional Objectives

Knowledge

1. Demonstrate acquisition of medical knowledge necessary to provide acute and emergent care to children, adolescents, adults, and elderly patients

2. Integrate biomedical science knowledge with patient case scenarios to optimize patient outcomes
3. NCCPA End-of-Rotation Exam Blueprint for EOR provides guidelines for topics and relative weight
 - a. Pass the End-of-Rotation exam with an adjusted score of 80% or higher
 - i. Exam Blueprint Below (Current at time of publication)

Emergency Medicine 100-Question Exam	History & Physical	Diagnostic Studies	Diagnosis	Health Maintenance	Clinical Intervention	Clinical Therapeutics	Scientific Concepts	Totals
	15%	10%	25%	10%	10%	20%	10%	100%
Cardiovascular	3	2	5	2	1	5	2	20
Orthopedics/rheumatology	2	2	4	1	2	3	1	15
Gastrointestinal/nutritional	1	1	2	1	1	2	2	10
Pulmonology	2	1	2	1	1	2	1	10
Neurology	1	1	2	0	1	2	1	8
ENOT/ophthalmology	1	0	2	1	1	1	1	7
Urology/renal	1	0	1	1	1	1	1	6
Dermatology	1	0	2	1	0	1	0	5
Endocrinology	1	1	1	0	0	2	0	5
Obstetrics/gynecology	1	1	1	1	1	0	0	5
Psychiatry/behavioral medicine	1	0	2	0	1	1	0	5
Hematology	0	1	1	1	0	0	1	4
TOTALS	15	10	25	10	10	20	10	100

PAEA Exam Topic List:

<https://paeonline.org/wp-content/uploads/imported-files/eor-emergencymed-topiclist-20200309.pdf>

Clinical and Technical Skills

4. Demonstrate appropriate history taking and physical exam skills when providing acute and emergent care for children, adolescents, adults, and elderly patients
 - a. Screen for medical conditions consistent with the patient’s age, gender, risk factors, and presentation
 - b. Conduct patient histories appropriate for acuity of care
 - i. Acute and emergent
 1. Recognize and efficiently approach emergent patients
 2. Identify “red flag” factors in a patient’s presentation
 3. Appropriately prioritize multi-purpose visits
 4. Utilize a staged diagnostic approach to address the differential
 - c. Conduct patient histories appropriate for age of the patient
 - i. Children and adolescents:

1. Acquire problem-focused history related to growth, developmental disorders, and behavioral/psychosocial status
 - a. Adolescents to include activities, drugs, sexuality, and suicide/depression
 2. Include patient and parent in the conversation as appropriate
 - ii. Adults and elderly:
 1. Ask questions related to diagnoses appropriate for age of the patient
5. Perform clinical and technical skills, including physical exams and procedures, safely and effectively
 - a. Obtain and/or verify informed consent prior to performing any invasive procedure
 - b. Identify key indications, contraindications, and risk factors for any procedures performed, including laceration repair and casting/splinting
 - c. Log all completed procedures to demonstrate safe and effective performance
 - d. Protect the modesty of the patient during exams as much as possible
 - e. Differentiate between normal and abnormal findings on exam, and use information to guide remainder of patient interaction
 - f. Demonstrate correct utilization of diagnostic equipment necessary for the practice setting
 - g. Demonstrate proper interpretation of EKG's, x-rays and other imaging modalities including ultrasound, CT and MRI
 - h. Demonstrate the proper clinical techniques for performing laceration repairs, creating a sterile field, and applications of cast/splint
 - i. Protect patient safety, including positioning of patient, identifying fall risks, and maintaining clean and sterile technique when appropriate
6. Appropriately document and deliver oral presentations of patient encounters
 - a. Perform clear verbal patient presentations that accurately reflect the patient's condition
 - Present to other health care providers a brief synopsis of the patient's present illness; pertinent positive and negative history, physical exam and diagnostic findings; assessment; and recommended diagnostic and therapeutic approach to caring for the patient.
 - Deliver complete and concise oral presentations using professional language.
 - b. Communicate necessary information to complete patient transfers with other healthcare providers or caregivers
 - Incorporate during change in level of care, admission of a patient, discharge of a patient, transfer of care to another department, or a change in provider
 - Handoff communication includes, at a minimum, illness severity, patient summary, action list, contingency planning, and synthesis as a receiver of information

Clinical Reasoning

7. Assess laboratory and radiological test results appropriately to aid in clinical decision making for acute and emergent care
 - a. Order tests demonstrating understanding of the practice setting, availability of tests, and acuity of the patient
 - b. Utilize and compare with previous results whenever possible
 - c. Demonstrate consideration of test sensitivity, specificity, and practicality in decision-making process
8. Integrate clinical findings to develop differential diagnoses with appropriate assessments for children, adolescents, adults, and elderly patients
 - a. Determine additional data elements required to make effective patient management decisions
 - b. Generate a differential including consideration of possible atypical presentations
 - c. Approach differential diagnoses with appropriate understanding of age-related diagnoses
9. Assimilate clinical data to develop treatment plans for patients, using evidence-based principles
 - a. Create management plans that address all key elements of the patient's history, physical exam, and other data sources available
 - b. Incorporate patient preferences and needs when developing preventative care and treatment plans

Interpersonal Skills

10. Conduct patient education and counseling around acute and emergent injury and disease management in an effective, empathetic, and culturally competent manner
 - b. Demonstrate effective interpersonal skills in all interactions
 - c. Utilize active listening skills during patient interactions
 - d. Approach patients with sensitivity to individual needs, understandings, and beliefs
 - e. Demonstrates a willingness to incorporate patient preferences during interaction
 - f. Approach culturally sensitive conversations with an awareness of individual needs and a curiosity to learn more about individual patients
 - g. Identify obstacles to obtaining medical care, including barriers with insurance and cost, rural location, and mobility
 - h. Appropriately tailor education and counseling to address acuity of the problem
 - i. Emergent and acute problems should be approached efficiently with sensitivity to ongoing needs
 - ii. Preventative counseling should include consideration of evidence-based recommendations and individual needs of the patient
11. Establish professional interpersonal and communication skills with preceptors, clinical staff, and patients across the lifespan, including children, adolescents, adults, and elderly patients

- a. Relate professionally in a working situation with other members of the healthcare team
- b. Demonstrates effective and professional conflict resolution skills
- c. Conduct counseling appropriate for patient's age
 - i. Children and adolescents:
 1. Include patient and parent in the conversation as appropriate
 2. Use age-appropriate language to encourage participation and understanding
 - ii. Adults and elderly:
 3. Demonstrate respect for individual needs and preferences
 4. Establish good rapport with patients based on trust and open communication
 5. Identify necessary resources to manage complex medical needs
 6. Utilize SPIKES method, or other effective communication tool, when communicating difficult news with patients

Professional Behaviors

12. Assess ethical dilemmas encountered when in clinic, including analysis of how the patient and provider's worldview or faith perspective impacted the situation
 - a. Identify potential points of conflict for patients and providers in the medical setting
 - b. Analyze ethical situations with appropriate consideration of legal and regulatory guidelines
 - c. Examine personal beliefs and impact on approach to practice
13. Demonstrate understanding of the physician assistant profession, including ethical, legal, and regulatory guidelines for practicing
 - a. Demonstrate an openness to receive constructive criticism and incorporate feedback into future performance
 - b. Identify limitations and seek help from preceptor and appropriate reference materials
 - c. Maintain professional attitude and meet professional expectations such as regular attendance, punctuality, and dress code
 - d. Identify appropriate medical resources for obtaining information and guidance in the clinical decision making process
14. Obtain required minimum experiences for the emergency medicine rotation (listed above), or create a plan for obtaining these experiences on subsequent rotations. A reasonable plan will be sufficient for completing the requirements for this rotation.
15. Conduct self-assessment of academic progress and clinical performance, demonstrating an understanding of their own limitations and biases, leading to appropriate professional development and help-seeking behavior
 - Accurately report progress toward required minimum experiences and procedures
 - Develop a reasonable plan for obtaining any missed experiences

- Identify gaps in knowledge and appropriate development activities related to these gaps
- Thoughtfully assess their own performance in alignment with preceptor evaluation