



Memorial Hospital Medical Center
Graduate Medical Education

Competencies for MSIII and MSIV Core Emergency Medicine Clinical Rotations

Medical Knowledge: Demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

- List the most common acute and chronic conditions seen during this rotation
- For those problems seen during this rotation, apply the relevant genetics, physiology, embryology and development biology, anatomy, pharmacology, pathology, microbiology and immunology.
- For the most common presenting symptoms and signs encountered during this rotation, explain the pathophysiological principles that underlie the manifestation of the symptoms and signs
- Apply basic pharmacological principles to the most common conditions seen during this rotation
- State the health promotion/disease prevention issues relevant to patients seen on this rotation

Common Problems in Emergency Medicine

<p><u>Undifferentiated Symptoms</u></p> <ul style="list-style-type: none"> • Shortness of Breath • Chest Pain • Shock • Altered Mental Status • Headache • Syncope • Abdominal Pain • Fever • "unwell" patient • GI Bleeding • Vaginal Bleeding • Abnormal Behavior • Seizure <p><u>Respiratory</u></p> <ul style="list-style-type: none"> • Asthma and COPD • Pulmonary Embolism • Airway Obstruction • Pneumothorax • Pneumonia 	<p><u>Cardiovascular</u></p> <ul style="list-style-type: none"> • Acute Coronary Syndromes • Congestive Heart Failure • Cardiac Dysrhythmias • Hypertensive Emergency • Aortic Dissection and Aneurysm <p><u>Neurological</u></p> <ul style="list-style-type: none"> • Stroke/Transient Ischemic Attack • Seizure • Meningitis • Cerebral Hemorrhage <p><u>HEENT</u></p> <ul style="list-style-type: none"> • Corneal Abrasion/Foreign Body • Epiglottitis • Epistaxis <p><u>Gastrointestinal Disorders</u></p> <ul style="list-style-type: none"> • Gastritis/Peptic Ulcer Disease • GI Bleed (upper and lower) • Acute cholecystitis • Bowel Obstruction • Appendicitis
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<p><u>Genitourinary Disorders</u></p> <ul style="list-style-type: none"> • UTI • STD • Vaginal Bleeding • Ectopic Pregnancy • Nephrolithiasis • Testicular torsion • Acute Urinary Retention <p><u>Musculoskeletal</u></p> <ul style="list-style-type: none"> • Ankle sprain/strain • Common fractures • Common dislocations <p>Trauma</p>	
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Patient Care: Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

- Demonstrate the ability to completely evaluate problems via appropriate medical history, physical examination, and laboratory/radiological and other modalities of evaluation
- Balance proper use of investigations and treatment for patients with a social obligation to control health care costs
- Formulate biopsychosocial hypotheses into a differential diagnosis, provisional diagnosis and working diagnosis
- Identify patients at highest risk for serious morbidity and mortality
- Present cases clearly and concisely to preceptors and others
- Write legible, concise, accurate and timely notes
- Perform skills and procedures relevant to the most common conditions seen during this rotation
- Demonstrate an ability to involve other relevant caregivers into patient care decisions and plans

Describe and perform the following procedures

- o Laceration repair
- o Regional anesthesia
- o Casting/splinting techniques
- o Reduction of uncomplicated dislocations
- o Removal foreign bodies
- o Interpretation of diagnostic imaging
- o Gastric lavage
- o Nasal packs/cautery
- o Legal and therapeutic indications for blood-alcohol testing
- o Incision and drainage of abscesses
- o Appropriate tetanus prophylaxis
- o Appropriate immunization procedures

Interpersonal and Communication Skills: Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients families, and professional associates

- Communicate effectively with patients, their families and other members of the health care team: adhere to the principles of openness, honesty, completeness and responsibility in communication, demonstrate an ability to effectively communicate difficult/bad news

- Provide effective patient education and anticipatory guidance
- Respect confidentiality
- Demonstrate willingness and ability to receive and act upon feedback from colleagues, other health care workers and their families and caregivers
- Demonstrate empathy with patients
- Utilize touch when appropriate and within the boundaries of an appropriate doctor-patient relationship
- Demonstrate an ability to combine speed, compassion, clarity and precision in communicating emergency medical issues for acute and urgent problems
- Demonstrate an ability to combine respect, compassion and empathy when communicating surgical and medical emergency issues for unexpected, serious, life-threatening diagnoses

Practice-Based Learning and Improvement: Investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.

- Practice and apply the principles of evidence-based medicine to all patient care encounters
- Collect and analyze patterns of practice and compare/contrast these individual patterns with established clinical guidelines and norms (best practices)
- Access, in a disciplined way, sources of new information pertaining to the practice of emergency medicine
- Apply the basic principles of continuous quality improvement to the practice setting
- Recognize and accept one's own limitations in the practice of emergency medicine
- Accept that emergency medicine involves extreme outcomes, both positive and negative, and that the nature of these outcomes is not always predictable
- Utilize the network of health care facilities, providers, agencies and institutions available for the diagnosis, management and support of patients and their families
- Acknowledge and act in accord with payment issues involved in medical care
- Advocate for patient and family issues
- Take into consideration issues related to the cost and supply of pharmaceuticals in medical decision-making
- Develop and demonstrate respect and honor for the roles of the many health care professionals required for collaborative emergency medicine care including Primary care, and attending physicians, medical and other consultants, operative and nursing personnel, social workers and discharge planning personnel, pain management specialists, nutritionists, therapists – physical and occupational, hospice and clergy

Systems-Based Practice: Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

- For the problems most commonly encountered on the rotation, list the indications for referral, consultation and transfer (to others and from others)
- Demonstrate respect and honor for the roles of the many health care professionals required for collaborative care
- Utilize the network of health care facilities, providers, agencies and institutions available for the diagnosis, management and support of patients and their families
- Acknowledge and act in accord with payment issues involved in medical care
- Advocate for patient and family issues
- Take into consideration issues related to the cost and supply of pharmaceuticals in medical decision-making
- Describe and identify emergency medical services for pre-hospital care within the community, i.e., paramedics, ambulance services, communications systems, first-aid

programs, poison control, public education programs, abuse/homeless shelters, and disaster planning

- Discuss the myriad relationships between the emergency room physician and primary care physician on the one hand and the consultant specialists on the other hand

Professionalism: Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

- Exemplify those behaviors that comprise professionalism:

Altruism: the best interest of the patient must come before the interests of the doctor

Accountability: accountability to patients, their families, colleagues and to society

Excellence: an effort to exceed ordinary expectations; scientific and humanitarian curiosity

Duty: a commitment to service

Honor and Integrity: a commitment to the highest standards of personal and professional behavior

Respect for Others: the essence of humanism; includes respect for patients, their families, colleagues, nurses, students, residents, other medical and administrative personnel.

- Respect privacy, confidentiality and autonomy
- Demonstrate caring and compassionate actions at all times
- Dress appropriately when working with patients: Appropriate dress is defined as that dress which serves the interest of the healthcare needs of patients, their families and the staff
- Acknowledge and accommodate concerns related to cultural diversity
- Apply ethical and legal standards to decision making

Reading Assignments: Medical Students assigned to the Emergency Medicine Rotation at Brookhaven Memorial Hospital Medical Center will be required to complete the following reading assignments and activities prior to completing the rotation.

Access the following site <http://brighamrad.harvard.edu/education/online/ftp/FTP.html> A Problem-based Guide to Diagnostic Imaging Strategies in the Emergency Room and complete at least 3 case studies in each of the categories:

Index of Cases

Abdomen

Infection-inflammation

62 y/o man, [RUQ pain, jaundice, vomiting](#)

72 y/o woman, [RUQ pain, vomiting, fever](#)

20 y/o woman, [RUQ pain, vomiting, fever](#)

29 y/o woman, [RLO abdominal pain, nausea, vomiting](#)

24 y/o woman, [s/p laparoscopic cholecystectomy, RUQ pain and fever](#)

65 y/o man, [abdominal pain, pneumaturia, fever](#)

Vascular

46 y/o man, [right testicular pain, worsening over 4 days](#)

63 y/o man, [abdomen and left flank pain following assault](#)

27 y/o woman, [s/p MVA, abdominal tenderness, mild distension](#)

84 y/o man, [rectal bleeding](#)

Trauma

63 y/o man, [abdomen and left flank pain following assault](#)

27 y/o woman, [s/p MVA, abdominal tenderness, mild distension](#)

Chest

Infection-inflammation

Vascular

59 y/o woman, [shortness of breath, chest pain on deep inspiration](#)

21 y/o man, [s/p fall from height, ankle, back, and abdominal pain](#)

Trauma

21 y/o man, [s/p fall from height, ankle, back, and abdominal pain,](#)

Musculoskeletal

Trauma

21 y/o man, [s/p fall from height, ankle, back, and abdominal pain,](#)

36 y/o man, [s/p MVA, knee pain and weak pulse in lower extremity](#)

24 y/o man, [knee pain s/p skiing accident](#)

25 y/o woman, [s/p fall, neck pain](#)

40 y/o man, [neck pain after abrupt flexion of neck](#)

81 y/o man, [s/p minor trauma, leg and ankle pain](#)

Infection-inflammation

70 y/o man, [fever, flank pain, and later neck pain](#)

40 y/o man, [rheumatoid arthritis and right hip pain](#)

OB/GYN

30 y/o woman, [abdominal cramping, vaginal bleeding, positive pregnancy test](#)

Neurologic

Vascular

70 y/o woman, [acute onset left arm weakness, gait difficulty, aphasia](#)

Trauma

31 y/o woman, [s/p MVA, loss of consciousness](#)

75 y/o man, [s/p fall, acute mental status change](#)

Access the following Web Site <http://www.mdconsult.com> from any one of the hospital computers and click on BOOKS. Read the following assignments:

Marx: Rosen's Emergency Medicine: Concepts and Clinical Practice:

Part One – Fundamental Clinical Concept	
<u>Section I – Critical Management Principles</u> Chapter 1 – Airway Chapter 3 – Monitoring the Emergency Patient Chapter 6 – Brain Resuscitation Chapter 7 – Adult Resuscitation	<u>Section II- Cardinal Presentations</u> Chapter 10 – Clinical Decision Making Chapter 11 – Fever in the Adult Chapter 13 – Dizziness and Vertigo Chapter 14 – Confusion Chapter 16 – Seizures Chapter 18 – Dyspnea Chapter 19 – Chest Pain Chapter 20 – Syncope Chapter 22 – Abdominal Pain Chapter 29 – Back Pain Chapter 31 – Sore Throat