

University of Michigan / St. Joseph Mercy Hospital Emergency Medicine Residency Program

RESIDENT EDUCATIONAL GOALS BY YEAR OF TRAINING

OVERALL:

Residents are expected to achieve competence in Patient Care, Medical Knowledge, Practice Based Learning, Professionalism, Interpersonal Skills and System-Based Practice as they apply to the practice of Emergency Medicine.

CORE COMPETENCY KEY:

MK = Medical Knowledge

SBP = Systems-Based Practice

PC = Patient Care

ICS = Interpersonal/Communication Skills

PBL = Practice-Based Learning and Improvement

P = Professionalism

EM 1:

1. Develop knowledge of the pathophysiology and treatment of common acute illnesses. (MK, PC, ICS)
2. Learn basic principles governing the emergency medicine approach to the undifferentiated patient. (MK, PC, SBP)
3. Develop basic technical skills including iv placement, regional anesthesia, wound repair, splinting of extremities, joint and fracture reductions, arthrocentesis, incision and drainage of abscesses, radial and femoral arterial blood gas sampling, lumbar puncture, obstetric delivery, OR intubations, and slit lamp ophthalmologic exam. (PC, MK)
4. Develop basic skills in literature review. (PBL)
5. Develop basic medical record-keeping skills. (SBP)

EM 2:

1. Broaden knowledge of the pathophysiology and emergency medicine approach to the evaluation and management of common acute illnesses and injuries. (MK, PC, ICS)
2. Develop skill in the evaluation and management of undifferentiated emergency department patients. (MK, PC, SBP)
3. Develop skill in the simultaneous management of multiple patients. (PC, SBP)
4. Become familiar with basic management principles in critically ill patients. (MK, PC, SBP)
5. Develop advanced technical skills including emergent intubation (nasal and tracheal), cricothyroidotomy, conscious sedation, tube thoracostomy, arterial and central line placement. (PC, MK)
6. Learn basic principles of EMS base-station operation. (MK, SBP)
7. Gain experience in the management of patients in an aeromedical system. (MK, SBP)
8. Strengthen skills in literature review and develop basic lecturing skills. (PBL)
9. Develop knowledge of basic research principles. (PBL)
10. Further develop medical record-keeping skills. (SBP)
11. Give an Evidence Based Medicine (EBM) lecture. (PBL, ICS)
12. Develop a Continuous Quality Improvement (CQI) project. (PBL, SBP)

RESIDENT EDUCATIONAL GOALS BY YEAR OF TRAINING – *continued*

EM 3:

1. Demonstrate broad and deep knowledge of the emergency medicine approach to the evaluation and management of acute illnesses and injuries. (MK, PC, SBP)
2. Demonstrate proficiency in the evaluation and management of undifferentiated emergency department patients. (PC, SBP, MK)
3. Demonstrate skill and efficiency in the simultaneous management of multiple patients, including critically ill patients. (PC, SBP)
4. Demonstrate skill as a team leader in the resuscitation of critically ill patients. (PC, P, ICS)
5. Demonstrate a high level of skill and efficiency in the performance of all ED procedures. (MK, PC)
6. Gain additional experience in EMS base station and aeromedical system operation. (MK, SBP)
7. Develop an understanding of the factors affecting the efficient function of an emergency department. (SBP)
8. Develop basic clinical teaching skills and further develop lecture skills. (P, MK, ICS)
9. Further develop skill in review of the medical literature and medical writing. (PBL)
10. Expand knowledge of research principles. (PBL)
11. Demonstrate proficiency in medical record-keeping. (SBP)
12. Complete a literature review didactic session. (MK, ICS)

EM 4:

1. Demonstrate ability to function semi-independently (adhering to all CMS regulations and in a manner insuring the highest quality patient care), directing and supervising all aspects of the medical care of ED patients. (MK, PC, SBP, ICS, P)
2. Broaden and enhance knowledge base in all aspects of EM, both clinical and non-clinical. (MK, PC)
3. Develop knowledge of ED administrative principles and demonstrate ability to perform common administrative responsibilities of an emergency physician. (SBP)
4. Develop knowledge of education and teaching principles and demonstrate skill in clinical and didactic teaching. (MK, ICS, P)
5. Conduct case conferences. (MK, PC, ICS, SBP)
6. Complete a scholarly project. (PBL, MK)

Progressive Responsibility

MK	Medical Knowledge
PC	Patient Care
PBL	Practice-Based Learning and Improvement
SBP	Systems-Based Practice
ICS	Interpersonal/Communication Skills
P	Professionalism

EM1:

Supervision of other residents/students:

None

Clinical Duties:

- Perform comprehensive history and physical exam.(PC, ICS, P)
- Present patient to EM4 resident or Attending after evaluation and prior to ordering diagnostic tests or performing procedures. (ICS, P, MK, PC)
- Confirm that patient has been presented and seen by an Attending prior to discharge. (SBP)
- Develop knowledge of the pathophysiology and treatment of common acute illnesses. (MK)
- Learn basic principles governing the emergency medicine approach to the undifferentiated patient. (MK, PC)
- Develop basic technical skills including peripheral intravenous catheter placement, regional anesthesia, wound repair, splinting of extremities, joint and fracture reductions, arthrocentesis, incision and drainage of abscesses, radial and femoral arterial blood gas sampling, lumbar puncture, obstetric delivery, intubations, and slit lamp ophthalmologic exam. (PC, MK)
- Develop basic medical record-keeping skills. (SBP)

Didactic Duties:

- Develop basic skills in literature review. (PBL, MK)
- Review emergency medicine literature. (PBL, MK)
- Attend a minimum of 70% of Emergency Medicine conferences. (MK, PBL, SBP, P)
- Be evaluated on 4 Clinical Skills Assessment encounters. (MK, PC, SBP, PBL, P, ICS)
- Attend procedure and advanced airway skills labs. (MK, PC)
- Perform Pediatric OSCEs during EM1 year. (MK, PC, SBP)

Administration:

- Institutional mandates. (SBP, P)
- Participate on didactic and residency program committees. (SBP)
- Participate in resident recruitment lunches/dinners. (ICS)
- Maintain accurate procedure and resuscitation logs. (PC, P)
- Record duty hours into MedHub and notify Program Director and or Associate/Assistant Program Director of any potential violations. (P)
- Complete annual Faculty and Program evaluations. (P)
- Complete monthly rotation and 360 degree evaluations. (ICS, P)
- Take ABEM Inservice examination. (MK)

The focus of the EM1 year is on the development of basic familiarity with the emergency medicine approach to the evaluation and treatment of common emergency department problems. Specific guidelines regarding advancement are outlined in the Promotion Guidelines Policy

EM2:

Supervision of other residents/students:

Supervise third and fourth year medical students upon approval of the Residency Evaluation Committee. (MK, PC, P, ICS)

Clinical Duties:

- Perform comprehensive history and physical exams. (PC, ICS, P)
- May initiate diagnostic tests prior to presenting patient to Attending, but are expected to review their plans soon after evaluating each patient. (PC, ICS, P, MK)
- Care for critically ill and injured patients. (PC, MK)
- Perform invasive procedures during emergency department resuscitations. (PC)
- Confirm that patient has been presented to and seen by an Attending prior to discharge. (SBP)
- Broaden knowledge of the pathophysiology and emergency medicine approach to the evaluation and management of common acute illnesses and injuries. (MK)
- Develop skill in the evaluation and management of undifferentiated emergency department patients. (MK, PC)
- Develop skill in the simultaneous management of multiple patients. (PC, SBP)
- Become familiar with basic management principles in critically ill patients. (PC, MK, SBP)
- Develop advanced technical skills including emergent intubation (nasal and tracheal), cricothyroidotomy, conscious sedation, tube thoracostomy, arterial and central line placement. (PC, MK)
- Learn basic principles of EMS base-station operation. (MK, PC, SBP)
- Gain experience in the management of patients in an aeromedical system. (MK, PC, SBP)
- Further develop medical record-keeping skills. (SBP)
- Begin to develop basic clinical teaching skills. (MK, ICS, P)

Didactic Duties:

- Develop knowledge of basic research principles. (PBL, MK)
- Develop basic lecturing skills. (ICS, MK)
- Present a thirty minute evidence based medicine (EBM) lecture based on answering a clinical question. (PBL, ICS, MK)
- Attend a minimum of 70% of Emergency Medicine conferences. (MK, PBL, SBP, P)
- Attend Emergency Medicine resident research retreat. (MK, PBL)

Administration:

- Institutional mandates. (SBP, P)
- Participate on didactic and residency program committees. (SBP)
- Participate in resident recruitment lunches, dinners, and tours. (ICS)
- Develop continued quality improvement (CQI) project. (SBP, PBL)
- Maintain accurate procedure and resuscitation logs. (PC, P)
- Record duty hours into MedHub and notify Program Director and or Associate/Assistant Program Director of any potential violations. (P)
- Complete annual Faculty and Program evaluations. (P)
- Complete monthly rotation and 360 degree evaluations. (ICS, P)
- Take ABEM Inservice examination. (MK)
- Complete evaluations on students you supervise. (P)

EM2's are expected to develop skill in the evaluation and management of undifferentiated ED problems, and to learn to manage multiple patients simultaneously, through participation in the care of a large number and variety of emergency department patients. They participate in the care of the most seriously ill or injured patients, and begin to direct resuscitations under the supervision of an EM4 or Attending. They are responsible for performing more demanding emergency procedures under the supervision of EM4's and/or Attendings. EM2's may order diagnostic tests and treatment before presenting to an Attending, but are expected to review their plans soon after evaluation of each patient. EM2's take EMS base station and aeromedical courses early in the year (or end of PGY I)

and begin participating in the direction of prehospital care and flying with Survival Flight. Specific guidelines regarding advancement are outlined in the Promotion Guidelines Policy.

EM3:

Supervision of other residents/students:

Supervise third and fourth year medical students (EM3's preferably supervise students over EM2's). (MK, PC, P, ICS)

Clinical Duties:

- Obtain history and physical exams in a complete and efficient manner. (PC, ICS, P)
- Coordinate patient flow through the department. (SBP, PC)
- Confirm that patients have been presented to and seen by the Attending prior to discharge. (SBP)
- Expected to initiate diagnostic and treatment plans prior to presenting to the Attending. (MK, PC, SBP)
- Direct the majority of emergency department resuscitations. (MK, PC, ICS, P)
- Demonstrate broad and deep knowledge of the emergency medicine approach to the evaluation and management of acute illnesses and injuries. (MK, PC)
- Demonstrate proficiency in the evaluation and management of undifferentiated emergency department patients. (MK, PC)
- Demonstrate skill and efficiency in the simultaneous management of multiple patients, including critically ill patients. (PC, SBP)
- Demonstrate skill as a team leader in the resuscitation of critically ill patients. (MK, PC, P, ICS)
- Demonstrate a high level of skill and efficiency in the performance of all ED procedures. (PC)
- Gain additional experience in EMS base station and aeromedical system operation. (MK, PC, SBP)
- Develop and understanding of the factors affecting the efficient function of an emergency department. (PC, SBP)
- Further develop clinical teaching skills. (MK, ICS, P)
- Demonstrate proficiency in medical record-keeping. (SBP)
- Gain additional EMS/disaster management experience by attending disaster planning and EMS quality assurance committees. (MK, PC, SBP)

Didactic Duties:

- Further develop lecture skills. (ICS, MK)
- Expand knowledge of research principles. (MK, PBL)
- Further develop skill in the review of the medical literature. (PBL, MK)
- Begin to provide medical student lectures. (MK, ICS)
- Present a one hour comprehensive review of an emergency medicine topic of their choice and write up a literature review. (MK, ICS)
- Attend a minimum of 70% of Emergency Medicine conferences. (MK, PBL, SBP, P)
- Be evaluated on 4 Clinical Skills Assessment encounters. (MK, PC, SBP, PBL, ICS, P)
- Perform Pediatric OSCEs during EM3 year. (MK, PC, SBP)

Administrative Duties:

- Institutional mandatories. (SBP)
- Participate in didactic and residency program committees. (SBP)
- Participate in resident recruitment lunches, dinners, and tours. (ICS)
- Potential to participate in departmental and hospital-wide committee's (e.g.: GME, Ethics committees). (SBP, MK, P)
- Identify and begin to work on scholarly project if not already initiated. (MK, PBL, P)
- Maintain accurate procedure and resuscitation logs. (PC, P)

- Record duty hours into MedHub and notify Program Director and or Associate/Assistant Program Director of any potential violations. (P)
- Complete annual Faculty and Program evaluations. (P)
- Complete monthly rotation and 360 degree evaluations. (SBP, P)
- Take ABEM Inservice examination. (MK)
- Complete evaluations on students you supervise. (P)

EM3's further refine their clinical skills and efficiency, and become proficient in the management of critically ill patients by treating a large number of patients and by assuming responsibility for the care of the majority of the sickest patients. EM3's direct resuscitations and perform the most complicated and difficult emergency department procedures including cricothyroidotomy and thoracotomy. EM3's routinely plan and begin to carry out diagnostic evaluations and treatment before presenting cases to faculty. EM3's direct base station calls and fly with Survival Flight on a regular basis. Students are regularly assigned to the EM3's at UMHS. Specific guidelines regarding advancement are outlined in the Promotion Guidelines Policy

EM4:

Supervision of other residents/students:

Supervise third and fourth year medical students (preferentially assigned to EM3 or EM2), EM1's, rotating junior residents from other services. (MK, PC, P, ICS)

Clinical Duties:

- Supervise junior residents in all aspects of patient care. (MK, PC, ICS, P)
- Manage multiple patients independently while supervising junior residents. (PC, SBP)
- Coordinate patient flow through the department. (SBP, PC)
- Supervise junior residents as they direct resuscitations. (MK, PC, ICS, P)
- Confirm all patients are presented to and seen by the Attending prior to discharge. (SBP)
- Demonstrate ability to function semi-independently (adhering to all CMS regulations and in a manner insuring the highest quality of patient care), directing and supervising all aspects of the medical care of ED patients. (MK, PC, SBP, ICS, P)
- Broaden and enhance knowledge base in all aspects of EM, both clinical and non-clinical. (MK, PC)
- Develop knowledge of ED administrative principles and demonstrate ability to perform common administrative responsibilities of an emergency physician. (SBP)
- Develop knowledge of education and teaching principles and demonstrate skills in clinical teaching. (MK, ICS, P)

Didactic Duties:

- Become proficient in the review of medical literature. (MK, PBL)
- Further expand knowledge of research principles. (MK, PBL)
- Develop knowledge of education and teaching principles and demonstrate skill in didactic teaching. (MK, ICS, P)
- Present the majority of medical student lectures. (MK, ICS, P)
- Present topics and participate in teaching procedure labs during the intern orientation month. (MK, ICS, P)
- Participate in the teaching of the advanced airway and animal procedure labs. (MK, ICS, P)
- Present three case conferences for EM conferences per year. (MK, ICS, P, SBP, PC)
- Co-coordinate and present at a multi-disciplinary conference. (MK, PC, SBP, ICS, P)
- Present results of CQI project (30 minutes). (PBL, SBP, ICS, P)
- Potentially teach ACLS course. (MK, ICS, P)
- Attend a minimum of 70% of Emergency Medicine conferences. (MK, PBL, SBP, P)
- Perform Pediatric OSCE's. (MK, PC, SBP)

Administrative Duties:

- Institutional mandates. (SBP, P)
- Participate in didactic and residency program committees. (SBP)
- Participate in residency recruitment lunches, dinners, and tours. (ICS)
- Perform daily lab/x-ray follow-up and collection of CQI data. (PC, SBP)
- Potential participation in departmental and hospital-wide committees (e.g.: GME, Ethics committees). (SBP, ICS, P)
- Complete scholarly project. (MK, P, PBL)
- Maintain accurate procedure and resuscitation logs. (PC, P)
- Record duty hours into MedHub and notify Program Director and or Associate/Assistant Program Director of any potential violations. (P)
- Complete annual Faculty and Program evaluations. (P)
- Complete monthly rotation and 360 degree evaluations. (ICS, P)
- Take ABEM Inservice examination. (MK)
- Complete evaluations on interns and students you supervise. (P)

EM4's will be expected to demonstrate skill in the full spectrum of activities common to emergency physicians practicing in any clinical setting. This will include direct provision of clinical care, supervision of the care provided by junior house officers, clinical and didactic teaching, and serving as a resource to handle administrative issues. EM4's will be assigned responsibility for supervising and teaching one or two junior house officers. They will work closely with nursing staff addressing administrative and patient flow problems, and will be responsible for daily lab/x-ray follow-up and collection of CQI data. They will supervise the base station activities of the EM2's and EM3's. They will present all cases to faculty prior to disposition or at any earlier time they desire faculty guidance. EM4 residents staff a nine or ten hour shift at each of the participating ED's every day. Specific guidelines regarding advancement are outlined in the Promotion Guidelines Policy