EMERGENCY MEDICINE MILESTONES

PC1. Emergency Stabilization

Prioritizes critical initial stabilization action and mobilizes hospital support services in the resuscitation of a critically ill or injured patient and reassesses after stabilizing intervention.				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes a primary assessment on a critically ill or injured patient Recognizes abnormal vital signs	Recognizes when a patient is unstable requiring immediate intervention Prioritizes vital critical initial stabilization actions in the resuscitation of a critically ill or injured patient Performs a primary assessment on a critically ill or injured patient	Discerns relevant data to formulate a diagnostic impression and plan Reassesses after implementing a stabilizing intervention	Manages and prioritizes critically ill or injured patients Recognizes in a timely fashion when further clinical intervention is futile Evaluates the validity of a DNR order Integrates hospital support services into a management strategy for a problematic stabilization situation	Develops policies and protocols for the management and/or transfer of critically ill or injured patients
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT, observed resuscitations, simulation, checklist, videotape review

PC2. Performance of Focused History and Physical Exam

Abstracts current findings in a patient with multiple chronic medical problems and, when appropriate, compares with a prior medical record and identifies significant differences between the current presentation and past presentations				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs and communicates a reliable, comprehensive history and physical exam	Performs and communicates a focused history and physical exam which reliably addresses the chief complaint and urgent patient issues	Prioritizes essential components of a history given a limited or dynamic circumstance Prioritizes essential components of a physical examination given a limited or dynamic circumstance	Synthesizes essential data necessary for the correct management of patients using all potential sources of data Abstracts and compares current findings in a patient with multiple chronic medical problems with a prior medical record and identifies significant differences between the current presentation and past presentations	Efficiently abstracts relevant historical and physical exam findings which suggest ominous but occult or obscure patient conditions
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Global ratings of live performance, checklist assessments of live performance , SDOT, oral boards, simulation

PC3. Diagnostic Studies

Applies the results of diagnostic testing based on the probability of disease and the likelihood of test results altering mangament.				
Level 1	Level 2	Level 3	Level 4	Level 5
Determines necessity and urgency of diagnostic studies	Prioritizes essential testing Orders appropriate diagnostic studies using decision rules as appropriate Performs appropriate bedside diagnostic studies and procedures	Interprets results of a diagnostic study, recognizing limitations and risks, seeking interpretive assistance when appropriate Reviews risks, benefits, contraindications, and alternatives to a diagnostic study or procedure	Uses diagnostic testing based on the pre-test probability of disease and the likelihood of test results altering management Practices cost effective ordering of diagnostic studies Understands the implications of false positives and negatives for post-test probability	Places the results of diagnostic studies in the appropriate context of the patient presentation
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT, oral boards, standardized exams, chart review, simulation

PC4. Diagnosis

Based on all of the available data, narrows and prioritizes the list of weighted differential diagnoses to determine appropriate management				
Level 1	Level 2	Level 3	Level 4	Level 5
Constructs a list of potential diagnoses based on chief complaint and initial assessment	Constructs a list of potential diagnoses, based on the greatest likelihood of occurrence Constructs a list of potential diagnoses with the greatest potential for morbidity or mortality Correctly identifies "sick versus not sick" patients	Synthesizes the chief complaint, history, physical examination, and available medical information to develop a list of ranked differential diagnoses including those with the greatest potential for morbidity or mortality	Based on all of the available data, narrows and prioritizes the list of weighted differential diagnoses to determine appropriate management Revises a differential diagnosis in response to changes in a patient's course over time	Uses pattern recognition to identify discriminating features between similar patients and avoids premature closure
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT as baseline, global ratings, simulation, oral boards, chart review

PC5. Pharmacotherapy

Selects and prescribes, appropriate pharmaceutical agents based upon relevant considerations such as mechanism of action, intended effect, financial considerations, possible adverse effects, patient preferences, allergies, potential drug-food and drug-drug interactions, institutional policies, and clinical guidelines; and effectively combines agents and monitors and intervenes in the advent of adverse effects in the ED				
Level 1	Level 2	Level 3	Level 4	Level 5
Knows the different classifications of pharmacologic agents and their mechanism of action. Consistently asks patient for drug allergies	Applies medical knowledge for selection of appropriate agent for therapeutic intervention This merge from Therapeutic Intervention is better covered in the Procedures sections.	Considers array of drug therapy for treatment. Selects appropriate agent based on mechanism of action, intended effect, and anticipates potential adverse side effects Considers and recognizes potential drug to drug interactions	Selects the appropriate agent based on mechanism of action, intended effect, possible adverse effects, patient preferences, allergies, potential drug-food and drug-drug interactions, financial considerations, institutional policies, and clinical guidelines, including patient's age, weight, and other modifying factors Effectively uses multiple pharmacologic agents to stabilize and optimize patient care	Participates in developing institutional policies on pharmacy and therapeutics
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT, portfolio, simulation, oral boards, global ratings, medical knowledge examinations

PC6. Observation and Reassessment

Re-evaluates patients undergoing ED observation (and monitoring) and using appropriate data and resources, determines the differential diagnosis and, treatment plan, and displosition.				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes when a therapeutic intervention is indicated as part of a patient management plan	Ensures that necessary therapeutic interventions are performed during a patient's ED stay Identifies which patients will require observation in the ED	Develops a strategy and perform therapeutic interventions, using appropriate adjuncts Monitors a patients' clinical status at timely intervals during their stay in the ED	Evaluates effectiveness of therapies and treatments provided during observation Considers additional diagnoses and therapies for a patient who is under observation and changes treatment plan accordingly	Develops protocols to avoid potential complications of interventions Identifies and complies with federal and other regulatory requirements, including billing, which must be met for a patient who is under observation
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT, multi-source feedback, oral boards, simulation

PC7. Disposition

Establishes and implements a comprehensive disposition plan that uses appropriate consultation resources; patient education regarding diagnosis; treatment plan; medications; and time and location specific disposition instructions.				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands basic resources available for care of the emergency department patient (consultants, social work, PT/OT, financial aid, care coordinators)	Formulates a specific follow-up plan for common ED complaints with appropriate resource utilization Provides patient education regarding diagnosis, treatment plan, and health promotion	Formulates and provides patient education regarding diagnosis, treatment plan, medication review and PCP/ Consultant appointments for complicated patients Involves appropriate consultants/PCP in a timely manner Makes correct decision regarding admission or discharge of patients	Formulates sufficient admission plans or discharge instructions including future diagnostic/therapeutic interventions for ED patients. Summarizes diagnosis, discharge plan, medications, and follow-up to patient or surrogate Correctly assigns admitted patients to an appropriate level of care (ICU/Telemetry/Floor/ Observation Unit)	Teaches other healthcare providers to use advanced electronic resources utilized to insure safe patient disposition Works within the institution to develop hospital systems that enhance safe patient disposition and maximizes resource utilization
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT, shift evaluations, simulation cases / Objective Structure Clinical Exam (OSCE)**,** multi-source feedback, chart review

PC8. Multi-tasking (Task-switching)

Mobilizes andmanages necessary personel and other hospital resources to meet critical needs of multiple patients.				
Level 1	Level 2	Level 3	Level 4	Level 5
Manages a single patient amidst distractions	Task switches between different patients	Employs task switching in an efficient and timely manner in order to manage multiple patients	Employs task switching in an efficient and timely manner in order to manage the ED Mobilizes necessary personnel and other hospital resources to meet ED needs, including consultants, back-up attending physicians and residents, and mid-level providers	Employs task switching in an efficient and timely manner in order to manage the ED under high volume or surge situations
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Simulation, SDOT, mock oral examination, multi-source feedback

PC9. General Approach to Procedures

Performs the indicated procedure on all appropriate patients (including those who are uncooperative, at the extremes of age, hemodynamically unstable and those who have multiple co-morbidities, poorly defined anatomy, high risk for pain or procedural complications, sedation requirement), takes steps to avoid potential complications, and recognizes the outcome and/ or complications resulting from the procedure				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies pertinent anatomy and physiology for a specific procedure Uses appropriate Universal Precautions	Performs patient assessment, obtains informed consent and ensures monitoring equipment is in place in accordance with patient safety standards Knows indications, contraindications, anatomic landmarks, equipment, anesthetic and procedural technique, and potential complications for common ED procedures Performs the indicated common procedure on a patient with moderate urgency who has identifiable landmarks and a low-moderate risk for complications Performs post-procedural assessment and identifies any potential complications	Performs any indicated procedure on a patient with moderate urgency who has poorly identifiable landmarks, at extremes of age or with co-morbid conditions Determines a backup strategy if initial attempts to perform a procedure are unsuccessful Correctly interprets the results of a diagnostic procedure	Performs the indicated procedure in any circumstance, takes steps to avoid potential complications, and recognizes the outcome and/or complications resulting from the procedure	Immediately recognizes subtle complications of procedures Teaches procedural competency and corrects mistakes
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Procedural competency forms, checklist assessment of procedure and simulation lab performance, global ratings

PC10. Airway Management

Performs airway management on all appropriate patients (including those who are uncooperative, at the extremes of age, hemodynamically unstable and those who have multiple co-morbidities, poorly defined anatomy, high risk for pain or procedural complications, sedation requirement), takes steps to avoid potential complications, and recognize the outcome and/ or complications resulting from the procedure				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes upper airway anatomy including indicators of a difficult airway Identifies the compromised airway, performs basic airway maneuvers or adjuncts (jaw thrust / chin lift / oral airway / nasopharyngeal airway) and ventilates/oxygenates patient using BVM	Describes elements of airway assessment and indications impacting the decision to intubate Describes the pharmacology of agents used for rapid sequence intubation including specific indications and contraindications Performs rapid sequence intubation in patients without adjuncts Confirms proper tube placement	Uses airway algorithms in decision making for complicated patients employing airway adjuncts as indicated Performs rapid sequence intubation in patients using airway adjuncts Performs post-intubation assessment using multiple modalities Employs appropriate methods of mechanical ventilation based on specific patient physiology	Performs airway management in any circumstance taking steps to avoid potential complications, and recognizes the outcome and/or complications resulting from the procedure Performs a minimum of 35 intubations Demonstrates the ability to perform a cricothyrotomy	Teaches airway management skills to health care providers Uses fiber-optic intubation or other advanced modalities in complicated patients
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Airway Management Competency Assessment Tool (CORD), Airway Management Assessment Cards, SDOT, checklist, procedure log, and simulation

PC11. Anesthesia and Acute Pain Management

Provides safe acute pain management, anesthesia, and procedural sedation to patients of all ages regardless of the clinical situation				
Level 1	Level 2	Level 3	Level 4	Level 5
Discusses with the patient indications, contraindications and possible complications of local anesthesia Performs local anesthesia using appropriate doses of local anesthetic and appropriate technique to provide skin to sub-dermal anesthesia for procedures	Knows the indications, contraindications, potential complications and appropriate doses of analgesic / sedative medications Performs patient assessment and discuss with the patient the most appropriate analgesic / sedative medication and administer in the most appropriate dose and route	Knows the anatomic landmarks, indications, contraindications, potential complications and appropriate doses of local anesthetics used for regional anesthesia Obtains informed consent and correctly perform regional anesthesia Performs pre-sedation assessment, obtains informed consent and orders appropriate choice and dose of medications for procedural sedation	Knows the indications, contraindications, potential complications and appropriate doses of medications used for moderate to deep procedural sedation Ensures appropriate monitoring of patients during procedural sedation, responds appropriately to any complication and discharges patients with instructions following complete recovery	Performs ultrasound guided regional anesthesia Masters procedural sedation providing effective sedation with the least risk of complications and minimal recovery time through selective dosing, route and choice of medications Develops pain management protocols/care plans
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Procedural competency forms, checklist assessment of procedure and simulation lab performance, global ratings, patient survey,chart review

PC12. Other Diagnostic and Therapeutic Procedures: Ultrasound (Diagnostic / Procedural)

Uses Ultrasound for the bedside diagnostic evaluation of emergency medical conditions and diagnoses, resuscitation of the acutely ill or injured patient, and procedural guidance				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes the indications and limitations of limited, goal directed emergency ultrasound	Explains how to optimize ultrasound images and Identify the proper probe for each of the focused ultrasound applications Performs an eFAST Correctly interprets acquired images Uses ultrasound for procedural guidance for central venous access	Performs focused ultrasound exams such as Intrauterine pregnancy, AAA, Cardiac, Biliary, Urinary Tract, Soft-tissue/musculoskeletal, Thoracic, Procedures and Ocular complaints	Performs a minimum of 150 focused ultrasound examinations	Expands ultrasonography skills to include: advanced Echo, TEE, bowel, adnexal and testicular pathology, and transcranial Doppler
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Comments:				

Suggested Evaluation Methods: OSCE, SDOT**,** videotape review**,** written examination, checklist

PC13. Other Diagnostic and Therapeutic Procedures: Wounds Management

Assesses and appropriately manages wounds in patients of all ages regardless of the clinical situation				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies wounds that need medical intervention Demonstrates sterile technique Uses medical terminology to clearly describe/classify a wound (ex – stellate, abrasion, avulsion, laceration, deep vs superficial) Places a simple interrupted suture	Prepares a wound for suturing (identify appropriate suture material, anesthetize wound and irrigate) Identifies wounds that may be high risk and require more extensive evaluation (example: x-ray, ultrasound, and/or exploration) Classifies burns with respect to depth and body surface area Compares and contrasts modes of wound management (adhesives, steri-strips, hair apposition, staples)	Performs complex wound repairs (deep sutures, layered repair, corner stitch) Identifies wounds that require antibiotics or tetanus prophylaxis Educates patients on appropriate outpatient management of their wound Manages a severe burn Lists wounds that should not be closed primarily Demonstrates appropriate use of consultants	Achieves hemostasis in a bleeding wound not responding to simple measures (such as cautery, ligation, deep suture, injection, topical hemostatic agents, and tourniquet) Repairs wounds that are high risk for cosmetic complications (such as vermillion border, eyelid margin, nose, ear) Describes the indications for and steps to perform an escharotomy	Expeditiously repairs wounds Performs advanced wound repairs, such as tendon repairs and skin flaps
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Direct observation, procedure checklist, medical knowledge quiz, portfolio , global ratings, procedure log

PC14. Other Diagnostic and Therapeutic Procedures: Vascular Access

Successfully obtains vascular access in patients of all ages regardless of the clinical situation				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes the indications, contraindications, anticipated undesirable outcomes and complications for the various vascular access modalities Performs a venipuncture Places a peripheral intravenous line Performs an arterial puncture	Inserts an arterial catheter Assesses the indications in conjunction with the patient anatomy/pathophysiology and select the optimal site for a central venous catheter Inserts a central venous catheter using ultrasound and universal precautions Confirms appropriate placement of central venous catheter	Performs intraosseous access Inserts a central venous catheter without ultrasound when appropriate Places an ultrasound guided deep vein catheter (basilic, brachial, and cephalic veins)	Successfully performs 20 central venous lines Routinely gains venous access in patients with difficult vascular access	Places a PICC line Performs umbilical arterial catheterization Performs a saphenous vein cut down
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Knowledge assessment using MCQ, checklist driven task analysis, procedure log

MK. Medical Knowledge

Demonstrates appropriate medical knowledge in the care of emergency medicine patients				
Level 1	Level 2	Level 3	Level 4	Level 5
Passes initial national licensing examinations	The resident must develop and complete a self-assessment plan based on the in-training examination results. Completes objective residency training program examinations and/or assessments at an acceptable score for specific rotations	Passes final national licensing examination Demonstrates improvement of the percentage correct on the in-training examination or maintain an acceptable percentile ranking	Obtains a score on the annual in-training examination that indicates a high likelihood of passing the national qualifying examinations Successfully completes all objective residency training program examinations and/or assessments	Passes all national certifying examinations Meets all the requirements for maintenance of certification program set forth by national certifying agency
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: National licensing examinations (USMLE, COMLEX), national in-training examination (developed by ABEM & AOA), CORD Question & Answer Bank tests, MedChallenger, local residency examinations

PROF1. Professional values

Demonstrates compassion, integrity, and respect for others as well as adherence to the ethical principles relevant to the practice of medicine				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates behavior that conveys caring, honesty, genuine interest and tolerance when interacting with a diverse population of patients and families Seeks out, learns from and models the attitudes and behaviors of physicians who exemplify appropriate professional and ethical behaviors	Demonstrates an understanding of the importance of compassion, integrity, respect, sensitivity and responsiveness and exhibits these attitudes consistently in common / uncomplicated situations and with diverse populations Recognizes how own personal beliefs and values impact medical care; consistently manages own values and beliefs to optimize relationships and medical care	Effectively analyzes and manages ethical issues in complicated and challenging clinical situations	Develops and applies a consistent and appropriate approach to evaluating appropriate care, possible barriers and strategies to intervene that consistently prioritizes the patient's best interest in all relationships and situations Develops alternate care plans when patients' personal decisions/beliefs preclude the use of commonly accepted practices	Demonstrates leadership and mentoring regarding professionalism and bioethical principles Develops institutional and organizational strategies to protect and maintain professional and bioethical principles
○	○	○	○	○	○	○	○	○
Comments:								

Suggested Evaluation Methods: Direct observation, SDOT, portfolio, simulation, oral board, multi-source feedback, global ratings

PROF2: Accountability

Demonstrates accountability to patients, society, profession and self				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic professional responsibilities such as timely reporting for duty, appropriate dress/ grooming, rested and ready to work, delivery of patient care as a functional physician Demonstrates knowledge of alertness management and fatigue mitigation principles Maintains patient confidentially Uses social media ethically and responsibly	Identifies basic principles of physician wellness, including sleep hygiene Consistently recognizes limits of knowledge in common and frequent clinical situations and asks for assistance Adheres to professional responsibilities, such as conference attendance, timely chart completion, duty hour reporting, procedure reporting	Identifies and manages situations in which maintaining personal emotional, physical and mental health is challenged by common and typical clinical care situations Consistently recognizes limits of knowledge in uncommon and complicated clinical situations; develops and implements plans for the best possible patient care Recognizes and avoids inappropriate influences of marketing and advertizing	Recognizes and formulates an appropriate plan to address impairment in one's self or a colleague, in a professional and confidential manner Manages medical errors according to principles of responsibility and accountability in accordance with institutional policy	Develops institutional and organizational strategies to improve physician insight into and management of professional responsibilities Trains physicians and educators regarding responsibility, wellness, fatigue, and physician impairment
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Direct observation, SDOT, portfolio, simulation, oral boards, multi-source feedback, global ratings

ICS1. Patient Centered Communication

Demonstrates interpersonal and communication skills that result in the effective exchange of information and collaboration with patients and their families.								
Level 1		Level 2		Level 3		Level 4		Level 5
Establishes rapport with and demonstrate empathy toward patients and their families Listens effectively to patients and their families		Elicits patients' reasons for seeking health care and expectations from the ED visit Negotiates and manages simple patient/family-related conflicts		Manages the expectations of those who receive care in the ED and uses communication methods that minimize the potential for stress, conflict, and misunderstanding Effectively communicates with vulnerable populations, both patients at risk and their families		Uses flexible communication strategies and adjusts them based on the clinical situation to resolve specific ED challenges, such as drug seeking behavior, delivering bad news, unexpected outcomes, medical errors, and high risk refusal-of-care patients		Teaches communication and conflict management skills Participates in review and counsel of colleagues with communication deficiencies
○	○	○	○	○	○	○	○	○
Comments:								

Suggested Evaluation Methods: Direct observation, SDOT, simulation, multi-source feedback, OSCE, global ratings, oral boards

ICS2. Team Management

Leads patient-centered care teams, ensuring effective communication and mutual respect among members of the team.				
Level 1	Level 2	Level 3	Level 4	Level 5
Participates as a member of a patient care team	Participates in team-based care; supports activities of other team members and communicates their value to the patient and family Communicates pertinent information to emergency physicians and other healthcare colleagues	Develops working relationships across specialties and systems of care Ensures transitions of care are accurately and efficiently communicated Communicates with out-of-hospital and nonmedical personnel, such as police, media, hospital administrators	Recommends changes in team performance as necessary for optimal efficiency Ensures clear communication and respect among team members Uses flexible communication strategies to resolve specific ED challenges such as difficulties with consultants and other health care providers	Participates in and leads interdepartmental groups in the patient setting and in collaborative meetings outside of the patient care setting Designs patient care teams and evaluates their performance Seeks leadership opportunities within professional organizations
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Direct observation, SDOT, simulation, multi-source feedback, OSCE, global ratings, oral boards

PBLI1. Teaching

Teaches different audiences using different teaching strategies based on targeted learning objectives.				
Level 1	Level 2	Level 3	Level 4	Level 5
Participates in peer teaching	Evaluates teaching such as conferences and rotations	Teaches in diverse environments, such as large or small group settings Provides appropriate educational feedback to other members of the healthcare team to improve healthcare delivery	Implements teaching strategies (customized to audience and situations) Identifies teachable moments and educates appropriately Evaluates teaching effectiveness	Teaches other providers Develops patient care and provider educational sessions to promote healthcare
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Portfolio, simulation, global ratings, observed presentations observed small groups, multi-source feedback, SDOT

PBLI2. Practice Based Performance Improvement

Participates in performance improvement to optimize ED function, self-learning, and patient care				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes basic concepts in research methodology, clinical epidemiology, biostatics and clinical reasoning	Performs patient follow-up Continually assesses performance by evaluating feedback and assessment	Performs self-assessment to identify areas for continued self-improvement and implements learning plans Demonstrates the ability to critically appraise scientific literature and apply evidence-based medicine to improve one's individual performance Knows basics of a performance improvement methodology, such as PDSA	Applies performance improvement methodologies Demonstrates evidenced-based clinical practice and information retrieval mastery Participates in a process improvement plan to optimize ED practice	Independently teaches evidenced-based medicine and information mastery techniques
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: SDOT, simulation, global ratings, checklist or ratings of portfolio work products, including a literature review, Vanderbilt matrix evaluation of a clinical issue, critical appraisal

SBP1. Patient Safety

Participates in performance improvement to optimize patient safety.				
Level 1	Level 2	Level 3	Level 4	Level 5
Adheres to standards for maintenance of a safe working environment Describes adverse events, medical error and patient safety concepts	Identifies situations where the breakdown in teamwork or communication may contribute to medical error Employs processes (such as checklists, SBAR), personnel, and technologies that optimizes patient safety *SBAR = Situation – Background – Assessment - Recommendation	Routinely uses patient safety practices, such as time-outs, read-back, repeats and 'calls for help'	Participates in an institutional process improvement plan to optimize ED practice and patient safety Leads team reflection such as code debriefings, root cause analysis, or M&M to improve ED performance Appropriately uses system resources to improve both patient care and medical knowledge	Uses analytical tools to assess healthcare quality and safety and reassess quality improvement programs for effectiveness for patients and for populations Develops and evaluates measures of professional performance and process improvement and implements them to improve departmental practice
○ ○	○ ○	○ ○	○ ○	○ ○
Comments:				

Suggested Evaluation Methods: SDOT, simulation, global ratings, multi-source feedback, portfolio work products, including a QI project

SBP2. Systems-based Management

Participates in strategies to improve healthcare delivery and flow. Demonstrates an awareness of and responsiveness to the larger context and system of health care.				
Level 1	Level 2	Level 3	Level 4	Level 5
Assists patients in navigating the healthcare system Defines and describes roles of care team members	Mobilizes institutional resources to assist patients with challenging social and ethical situations Uses strategies to enhance patient satisfaction	Participates in processes and logistics to improve patient flow and decrease turnaround times, e.g., rapid triage, bedside registration, Fast Tracks, bedside testing, rapid treatment units, standard protocols, and observation units Participates in public health and regulatory reporting requirements Coordinates system resources to optimize a patient's care for complicated medical situations	Participates in strategies to improve departmental healthcare delivery and flow, such as operational problems like crowding Recommends strategies by which patients' access to care can be improved Practices cost effective care Demonstrates the ability to call effectively on other resources in the system to provide optimal health care	Creates departmental flow metric from benchmarks, best practices, and dash boards Develops internal and external departmental solutions to process and operational problems Addresses the differing customer needs of patients, hospital medical staff, EMS, and the community
○	○	○	○	○	○	○	○	○
Comments:				

Suggested Evaluation Methods: Direct observation-SDOT, chart review, global ratings, billing records, simulation, multi-source feedback, and outcome data including throughput numbers and patients per hour

SBP3. Technology

Uses technology to accomplish and document safe healthcare delivery				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Explains the role of the Electronic Health Record (EHR) and Computerized Physician Order Entry (CPOE) in prevention of medical errors	Uses the Electronic Health Record (EHR) to order tests, medications and document notes, and respond to alerts Recognizes the risk of computer shortcuts and reliance upon computer information on accurate patient care and documentation Ensures that the written records are complete, with attention to preventing confusion and error	Reviews medications for patients	Effectively and ethically uses technology for patient care, medical communication and learning Uses decision support systems in EHR (as applicable in institution)	Recommends systems re-design for improved computerized processes
○	○ ○	○	○ ○	○ ○ ○
Comments:				

Suggested Evaluation Methods: Direct observation-SDOT, chart review, global ratings, billing records, simulation, multi-source feedback