

Trauma/Surgical Critical Care
Rotation Goals and Objectives
Pulmonary/Critical Care Medicine Fellowship Program
University of Nebraska Medical Center
Revised: March 2010

- I) Rotation Goals
 - A) To manage trauma and surgical critical care patients in the Intensive Care Unit
 - B) To become an effective Intensivist consultant for trauma and surgical patients

- II) Education Objectives
 - A) Patient Care
 - 1) Demonstrate effective communication through the informed consent process for minor procedures
 - 2) Demonstrate caring and respectful behaviors when interacting with patients
 - 3) Gather essential and accurate information from patients
 - 4) Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment
 - 5) Develop and carry out patient management plans in association with the supervising physician
 - 6) Counsel and educate patients and their families
 - 7) Use information technology to support patient care decisions and patient education
 - 8) Demonstrate competency in all medical and invasive procedures performed on this rotation
 - 9) Demonstrate an ability to work with a variety of health care professionals to provide patient-focused care
 - 10) Evaluation methods for this competency
 - (a) Attending evaluation
 - (b) Physician assistant, ICU nurse evaluation

 - B) Medical Knowledge
 - 1) Demonstrate an investigatory and analytic thinking approach to clinical situations by applying an evidence-based medicine principles
 - 2) Demonstrate a fundamental knowledge of the care of trauma and surgical patients
 - (a) The fellow will acquire knowledge (indications, contraindications, complications and limitations) of and competency in the performance of the following procedural skills:
 - (i) Establishment of airway
 - (ii) Maintenance of open airway in non-intubated, unconscious, paralyzed patients
 - (iii) Oral and nasotracheal intubation
 - (iv) Oxygen delivery and augmented ventilation
 - (v) Ventilation by bag or mask
 - (vi) Mechanical ventilation using pressure-cycled, volume-cycled and negative pressure mechanical ventilation

- (vii) Use of reservoir masks and continuous positive airway pressure masks for delivery of supplemental oxygen, humidifiers, nebulizers and incentive spirometry
 - (viii) Ventilator support, liberation from the ventilator and respiratory care techniques
 - (ix) Management of pneumothorax (needle aspiration and drainage systems)
 - (x) Maintenance of circulation
 - (xi) Arterial puncture and blood sampling
 - (xii) Insertion of central venous, arterial and pulmonary artery catheters
 - (xiii) Basic and advanced cardiopulmonary resuscitation
 - (xiv) Cardioversion
 - (xv) Diagnostic and therapeutic procedures including thoracentesis, pleural biopsy, flexible fiberoptic bronchoscopy , chest tube thoracostomy and related procedures
 - (xvi) Calibration, operation and interpretation of data from hemodynamic recording systems
- 3) Evaluation methods for this competency
- (a) Attending evaluation
 - (b) Chart-stimulated recall sessions with program director
- C) Practice-based Learning and Improvement
- 1) Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
 - 2) Use information technology to manage information, access on-line medical information and support their own education
 - 3) Demonstrate teaching of students and other health care professionals
 - 4) Evaluation methods for this competency
 - (a) Attending evaluation
 - (b) Chart-stimulated recall sessions with program director
 - (c) Performance on presentation at case conference during the month
- D) Interpersonal & Communication Skills
- 1) Create and sustain a therapeutic and ethically sound relationship with patients
 - 2) Demonstrate effective listening skills
 - 3) Elicit and provide information using effective nonverbal, explanatory, questioning and writing skills
 - 4) Work effectively with others as a member or leader of a health care team
 - 5) Demonstrate an ability to develop professional relationships with residents, students and other members of the health care team
 - 6) Evaluation methods for this competency
 - (a) Attending evaluation
 - (b) Evaluations from key consultants
 - (c) Evaluations from ICU nurses and members of the multidisciplinary team
- E) Professionalism
- 1) Demonstrate respect, compassion, and integrity
 - 2) Demonstrate a responsiveness to the needs of patients and society that supercedes self-interest
 - 3) Demonstrate accountability to patients, society and the profession
 - 4) Demonstrates a commitment to excellence and on-going professional development

- 5) Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent
- 6) Demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities
- 7) Evaluation methods for this competency
 - (a) Attending evaluation
 - (b) Evaluations from key consultants
 - (c) Evaluations from ICU nurses and members of the multidisciplinary team

F) System-based Practice

- 1) Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society
- 2) Practice cost-effective health care and resource allocation that does not compromise quality of care
- 3) Advocate for quality patient care and assist patients in dealing with system complexities
- 4) Evaluation methods for this competency
 - (a) Attending evaluation
 - (b) Evaluations from key consultants
 - (c) Evaluations from ICU nurses and members of the multidisciplinary team

III) Teaching Methods

A) Clinical experience

- 1) Observation of select trauma and surgical procedures in the operating suite
- 2) Evaluate and manage trauma and surgical patients in the ICU
- 3) Write a daily progress note on all trauma and surgical critical care patients in the ICU
- 4) Perform those ICU procedures expected of an intensivist, e.g.; chest tube placement, central line and arterial line placement, intubation for mechanical ventilation

B) Clinical Teaching

- 1) Present clinical findings to the supervising surgeon daily on rounds
- 2) Review ICU patient management daily

C) Performance Feedback

- 1) Fellow and supervising staff physician will review these goals and objectives at the beginning of the rotation
- 2) Staff physician will provide ad hoc feedback on a regular basis
- 3) Fellow and supervising staff physician will meet and provide written and verbal feedback at the completion of the rotation.

D) Didactic Sessions

- 1) Attend all daily noon conferences of the PCCM fellowship program.
- 2) The fellow will provide at least one didactic session to students and residents on the service covering a critical care medicine topic.

- E) Self-Learning
 - 1) The fellow is expected to read the primary literature in regards to current trauma and surgical problems
 - 2) The fellow is expected to complete any readings assigned by the supervising staff physician

IV) Responsibilities

- A) Fellow
 - 1) First Year
 - (a) There are no first year fellows (PGY5 or less) assigned to this rotation
 - 2) Third Year
 - (a) See each patient in the ICU on the trauma and surgical critical care service daily and document the evaluation and management including mechanical ventilation. The fellow will have no responsibility for daily evaluation and management of patients not in the ICU or Step-down.
 - (b) Be available, within five minutes, to respond to ICU staff (nurses and/or respiratory care) regarding care for trauma and surgical patients
 - (c) Observe select trauma and surgical procedures in the operating suite
 - (d) Provide didactic session(s) to students and residents on the trauma and surgical critical care service
 - (e) Complete an evaluation of the trauma and surgical critical care attending and one of the rotation.
- B) Trauma and Surgical Critical Care Attending
 - 1) Review these goals and objectives with the fellow at the start of the rotation along with any other expectations
 - 2) Assign clinical responsibilities to the PCCM fellow; this should not be delegated to the Surgical Chief Resident or senior resident on the service.
 - 3) Provide adequate supervision for procedures performed by the fellow
 - 4) Provide instruction in the management of trauma and surgical critical care patients
 - 5) Complete a written evaluation and provide verbal feedback at the completion of the rotation
- C) Service
 - 1) On Call Responsibility
 - (a) Be available, in house, from 8:00 am to 5:00 PM except for officially sanctioned events, i.e. any section conferences
 - (b) Take after hours call as assigned by the Program Director. Call may be altered by mutual agreement with the Trauma and Surgical Critical Care Attending
 - 2) Vacation
 - (a) No vacation time may be taken during this rotation.
 - (b) Emergency leave may be requested after discussion with the Program Director or surrogate (Trauma and Surgical Critical Care attending)

V) Method of Evaluation

A) Formative

- 1) The Trauma and Surgical Critical Care Attending should give feedback throughout the rotation and a formal verbal evaluation should be given at the mid-point and at the end of the rotation
- 2) The responsible attending physician must prepare a written evaluation of the fellow at the conclusion of the rotation. This evaluation will assess the six general competencies as outlined by the ACGME and on the form provided.
 1. The fellow in the presence of the attending physician should review the assessment personally.
 2. At the conclusion of the fellow's service period, he/she should complete an evaluation form assessing the quality of the rotation; he/she should also address the teaching undertaken by the attending physician(s).