

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

- I) Rotation Goals
 - A) To manage the scope of critical care patients in the Intensive Care Unit
 - B) To become an effective Intensivist consultant

- 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 to evaluate patients with a variety of critical illnesses
 - (a) Demonstrate an ability to obtain a comprehensive and accurate history of present illness for a variety of presentations of critical illness.
 - (b) In a comatose patient, the should demonstrate the resourcefulness to utilize a number of information sources including patient's family, friends and other health care providers.
 - (c) Identify historical facts that suggest an immediate threat to survival and be able to prioritize those needing immediate attention.
 - (d) Demonstrate physical examination skills appropriate to the presentation.
 - 4) Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment specifically required for the diagnosis and treatment of critical illness
 - (a) Ability to interpret an electrocardiogram and appropriate laboratory tests which demand immediate attention.
 - (b) Integrate an interpretation of radiographic tests related to pulmonary diseases including chest roentgenograms, computed axial tomography scans, ventilation/perfusion studies and pulmonary angiograms to provide a therapeutic plan for the patient.
 - 5) Develop and carry out patient management plans in association with the supervising physician
 - (a) Apply the skills listed above to provide or confirm a clear and concise resident admission note and assist the resident in the assessment and in developing a therapeutic plan. If the evaluation is made as the result of a consult, a consultation note addended to the resident note, which directly answers the question asked by the primary care provider, is required.
 - 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

(c) Mini-CEX (to be arranged with attending)

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 critical care medicine 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 and related procedures
 - (xvi) Calibration, operation and interpretation of data from hemodynamic recording systems
 - (xvii) Examination and interpretation of sputum, bronchopulmonary secretions, pleural fluid/tissue, and lung tissue for infectious agents; cytology and histopathology
 - (b) Evaluation methods for this competency
 - (a) Attending evaluation
 - (b) Chart-stimulated recall sessions

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
 - (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
 - (d) Mini-CEX

- 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 and business practices
 - 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
 - (d) Mini-CEX

- 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) Evaluate and manage all medicine patients in the ICU
 - (a) The Critical Care Medicine (CCM) team will take care of all patients admitted to the primary CCM service and those for whom consultation has been requested from the Omaha VAMC Intensive Care Unit.

- 2) Write or confirm a daily progress note on all critical care patients in the ICU
 - 3) Perform those ICU procedures expected of an intensivist, e.g.; chest tube placement, central line and arterial line placement, intubation for mechanical ventilation
 - 4) Perform all bronchoscopic procedures on patients in the ICU.
- B) Clinical Teaching
- 1) Supervise presentation of clinical findings to the CCM attending daily on rounds
 - 2) Review ICU patient management daily
- C) Performance Feedback
- 1) Fellow and CCM attending physician will review these goals and objectives at the beginning of the rotation
 - 2) CCM attending physician will provide ad hoc feedback on a regular basis
 - 3) Fellow and CCM attending 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 CCM problems
 - 2) The fellow is expected to complete any readings assigned by the CCM attending physician
 - (a) Read the appropriate chapters in a Critical Care Medicine text covering airway management, central line placement, hemodynamic monitoring and sedation and paralysis. See Readings.
- IV) Responsibilities
- A) Fellow
- 1) First Year
 - (a) First year PCCM fellows are assigned to this rotation
 - (b) Supervise the evaluation and management including mechanical ventilation of each patient on the CCM service daily and confirm appropriate documentation.
 - (i) Review daily all the primary findings for each new admission such as the physical exam, laboratory, consultations and x-ray studies with the Residents and/or Students. This process should be completed prior to Attending rounds. As the designee of the CCM Attending, the fellow will be expected to initiate discussion and decisions regarding patient care during this time, with emphasis on new or unstable patients, or those for whom an early decision is required for patient care.
 - (ii) The fellow is responsible for supervision of care, and emphasis should be placed upon direct supervision when diagnosis, treatment or patient stability is unclear.

- (iii) Alert the CCM Attending about any changes in patients who are critically ill, for all deaths and for any potential problems with staff or with interactions with patients and their families.
- (iv) The fellow will take all calls for admissions to the CCM team. The fellow must determine if the patient is eligible for VA admission by confirming the patient's eligibility with the Business Office or Administrative Officer of the Day. The fellow can use their clinical judgment to accept patients for admission but cannot deny admission without discussing the case with the Attending physician.
- (v) Review all of the patients who are on the service with the nurses and residents, prior to formal rounds. The fellow should have intimate knowledge regarding the daily assessment and plan for each patient and should discuss these plans with the resident and student prior to Attending rounds. The fellow must expedite intervention if necessary and help the residents and students think through the reasoning behind intervention.
- (vi) Assure continuity of care during resident absences. This will include resident obligations such as clinic, in-service exams or illness. When necessary the fellow must assume or reassign (with the consent of the attending) the responsibility for the care of the resident's patients.
- (vii) Facilitate CCM Attending Rounds. The fellow should work with the Attending to provide high quality teaching in a small group format. The fellow will organize, facilitate and co-direct the presentation and discussion of patients with the CCM Attending. The format for these rounds may vary, depending upon the team size, number and type of patients, and experience of the fellow and CCM Attending.
- (viii) Communicate with patients and families about diagnoses and prognoses on an ongoing basis.
- (ix) Alert the attending physician about patients who qualify for ongoing research protocols and participate in ongoing trials when possible.
- (c) Be available when on-call, within five minutes, to respond to ICU staff (nurses and/or respiratory care) regarding care for CCM patients
 - (i) They will take at home call as scheduled by the program director.
 - (ii) The fellow will not be required to come in for all admissions, however, they must be called by the resident about all new admissions and on any unstable patients and will have to decide whether they need to come in based on the stability of the patient and the experience of the resident on call for the ICU.
 - (iii) The only exceptions to these availability rules are illness, outpatient clinic obligations, or other arrangements previously made with the CCM Attending
- (d) Attend Multidisciplinary Rounds each weekday with the social worker, the nutritionist, physical therapist and other members of the health care team who are not participants in daily work rounds.
 - (i) The fellow should ensure that the daily goal sheet is completed on all patients each day. The completion of the daily goal sheet is the responsibility of the residents but the fellow should make sure this is completed each day.
- (e) Supervise all resident procedures done on the CCM service
 - (i) Perform or directly supervise all invasive procedures and make sure that a time out is taken and documented. These include but are not limited to intubation, arterial line placement, central line catheter placement, chest tube placement and pulmonary artery catheter placement. If for some reason the

fellow is not able to perform these duties, they must alert the Attending so that the Attending can come to supervise. All bronchoscopies, chest tube placements and pulmonary artery catheter placements must be performed with the faculty in attendance at the bedside. The fellow must enter a note for all procedures they perform. When a pulmonary artery catheter is placed, the fellow is responsible for entering a procedure note including all pertinent pulmonary artery catheter data from the procedure. The fellow needs to document all procedures performed or supervised in their procedure log.

- (f) Obtain informed consent for all fellow-level procedures, eg bronchoscopy, chest tube thoracostomy, etc. and arrange for any ancillary support for the procedure.
- (g) Provide didactic session(s) to students and residents on the CCM service
 - (i) Give at least 1 lecture to the residents on a topic of the fellow's choosing.
- (h) Attend all Pulmonary and Critical Care Fellowship conferences.
 - (i) All efforts must be made to attend these educational conferences. With the exception of a true medical emergency, rounds should be orchestrated to allow for conference attendance.
 - (i) Complete an evaluation of the CCM attending physician and one of the rotation
 - (j) Once or twice each week the fellow will be expected to make rounds with the Nutrition Support Team (Nutritionist, Pharmacist and others) as well as the Palliative Care Team as the liaison from the CCM service.

2) Second Year

- (a) No second year PCCM fellows are assigned to this rotation

3) Third Year

- (a) No third year PCCM fellows are assigned to this rotation

B) Critical Care Medicine Attending

- 1) Review these goals and objectives with the fellow at the start of the rotation along with any other expectations
- 2) Provide adequate supervision for procedures performed by the fellow by being present for the procedure or arranging for by another faculty member.
- 3) Provide instruction in the evaluation and management of CCM patients
- 4) Be available to cover for the fellow when he/she is unavailable to supervise the residents on the service.
- 5) Complete a written evaluation of the fellow and provide verbal feedback to them at the completion of the attending's rotation on service.

C) Service

1) On Call Responsibility for Fellows

- (a) Be available, in house, from 8:00 am to 5:00 PM except for officially sanctioned events
 - (i) It is recommended that the fellow arrive in the ICU earlier than that to evaluate the patients and attend to problems.
 - (ii) For unstable or decompensating patients it is imperative that the resident, fellow and attending be readily available to come to the bedside so that the highest quality of care can be delivered.
- (b) Take after hours call as assigned by the Program Director.
 - (i) Call may be altered by mutual agreement with the CCM attending physician

- (ii) The fellow will take at home call as per the schedule and generally will be scheduled to be on-call during the weekends that the Pulmonary Consult Attending is covering the service
- (iii) The fellow will have 4 days off call each month, usually encompassing two weekends.
- (c) New patients to the service that are seen after-hours should be seen promptly by the resident who will, after making a quick assessment, call the fellow.
 - (i) The CCM resident will see all new admissions and consults to the service and call the fellow

2) Vacation

- (a) Vacation time may be taken during this rotation with prior arrangement with the CCM attending and Program Director.
- (b) Emergency leave may be requested after discussion with the Program Director or surrogate (CCM attending physician)

V) Method of Evaluation

A) Formative

- 1) The Critical Care Medicine 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 CCM attending physician must prepare a written evaluation of the fellow at the conclusion of the rotation.
 - (a) This evaluation will assess the six general competencies as outlined by the ACGME and on the form provided.
 - (b) The fellow should review the assessment personally. This is best done in the presence of the CCM attending physician.
- 3) At the conclusion of the fellow's service period, he/she should complete an evaluation form assessing the quality of the rotation.
- 4) The Fellow should complete evaluation(s) of the teaching undertaken by the attending physician(s).

VI) Readings

A) Readings are from the ATS Reading List found at:

- 1) <http://www.thoracic.org/sections/career-development/fellows-and-fellowships/ats-reading-list-intro.html>