



Preamble

On completion of a rotation, the resident must have achieved proficiency in the recognition and initial management of problems commonly encountered in the intensive care unit.

MEDICAL EXPERT

At the end of the rotation, the resident must be proficient, but is not limited to,

- acute respiratory failure
- hemodynamic instability
- sepsis
- acute renal failure
- overdoses and poisonings
- acute neurologic insults
- acute electrolyte and endocrine emergencies, and coagulation disorders

For less common problems, the trainee must gain a knowledge base that allows them to formulate a differential diagnosis, initiate a management plan, and request appropriate consultations.

The resident must become familiar with strategies to prevent such failures in the high-risk patient.

The resident is also expected to have mastered the fundamental aspects of technical procedures commonly used in the treatment of critically ill patients.

Emphasis will be placed on the ability to recognize, investigate, and stabilize acute critical illness.

The resident must demonstrate the ability to collect and synthesize relevant data, to formulate an appropriate differential diagnosis, and offer an initial investigational and management plan.

Cost effective use of laboratory and radiological investigations are expected
As Critical Care is a multi-specialty discipline, the resident must have gained exposure to a wide variety of patients from a mixed population of medical, surgical, and obstetrical patients.

All residents must develop an appreciation for the future interaction between the Critical Care Unit, themselves, and their medical discipline.



- Relate and apply a sound fund of basic science knowledge to patient care in the majority of cases.
- Relate and apply a fund of clinical knowledge in a manner that enables resolution of common clinical situations on a consistent basis. This includes but is not limited to the ability to recognize common rhythm disturbances, determine acid-base status from arterial blood gases, provide ventilator orders for most patients, classify shock and outline hemodynamic patterns, use inotropes and vasopressors correctly, and recognize and manage acute renal failure.
- Obtain an appropriate history from the patient, family, or other medical personnel, that is complete, accurate and systematic.
- Perform a problem-oriented physical examination with the recognition of most findings to allow for proper diagnosis and management.
- Accurately interpret the results of common lab and diagnostic tests.
- Develop diagnostic plans that are appropriate and reflect current standards. Demonstrate the ability to order most tests logically and interpret the results correctly.
- Institute appropriate investigations in a cost-effective manner.
- Be able to synthesize historical, physical exam, and diagnostic testing information into a problem list and appropriately prioritize problems.
- Outline a therapeutic plan in conjunction with the ICU fellow or attending physician. Institute appropriate therapy.
- Make judgments that are usually complete and sound. Arrive at decisions appropriately with appropriate use of available information.
- Demonstrate the ability to handle most common problems independently, while appropriately asking consultants for help with specific questions in more complex questions.
- Develop an ability to immediately recognize acute life-threatening illness and institute immediate life sustaining supportive therapy. Display appropriate leadership of the team, utilizing resources in an effective manner.
- Demonstrate adequate knowledge of monitoring techniques for the critically ill patient to allow for appropriate management.
- Consistently use appropriate preventative measures and apply knowledge in a prospective manner so as to anticipate potential problems and attempt to prevent them.
- Demonstrate an ability to perform an appropriate consultation assessment to and answer a question or request from another health care provider. Be able to present well-reasoned, well-documented assessments and recommendations in written and oral form in response to a request from another health care provider.



- Demonstrate competency in performing essential procedures with appropriate skill and manual dexterity for level of training. Carries out techniques correctly and efficiently with appropriate knowledge of indications and risks.

Technical Skills:

- Placement of IJ, subclavian and femoral lines
- Placement of radial, brachial and dorsalis pedis arterial lines
- Interpretation of EKGs
- Lumbar puncture
- Be able to conduct an effective End-of-Life family meeting
- Bag-mask ventilation
- Intubation
- Chest tube insertion
- Interpretation of a CXR including recognition of a pneumothorax and deep sulcus sign, pleural effusions in the supine patient, CHF, airspace disease, ARDS, correct placement of central lines, pulmonary artery catheters, endotracheal tube, NG tubes, and chest tubes
- Peritoneal tap

Communicator

To provide humane, high-quality care, establish effective relationships with patients, other physicians, and other health professionals.

- Obtain and synthesize relevant history from patients/families/communities.
- Discuss appropriate information with patients/families and the health care team, particularly limitation of therapy and institution of comfort care in the ICU.
- Inter-professional Relationships; demonstrate an ability to work well with other services, using appropriate communication skills, resulting in a constructive environment.
- Communication with other allied health professionals; demonstrate an ability to communicate well with other members of the health care team. Specifically, able to provide a clear outline of the plan for patient care.
- Communication with Patients; demonstrate an ability to consistently achieve good rapport with patients and gain patient respect and confidence, and to clearly explain diagnosis and treatment options in an understandable fashion. Develop communication skills with patients on a ventilator.
- Communication with Families; demonstrate an ability to gain the respect and confidence of family members, to create a supportive and helpful environment, and to deliver information to families in a humane manner that is understandable and encourages discussion.



- Written communication & Documentation; demonstrate an ability to write records/reports that are usually complete, orderly, systematic, generally support management, and allow a physician unfamiliar with the patient to identify the relevant daily issues.

Collaborator

- Demonstrate abilities to become an active member of the Intensive Care Unit team who is able to work well with other team members.
- Demonstrate an ability to give and follow appropriate instructions with nurses and allied staff, and to develop rapport, resulting in a constructive working environment.
- Deal effectively with issues and achieve good results even in difficult situations without antagonizing others.
- Consult effectively with other physicians and health care professions.
- Contribute effectively to other interdisciplinary team activities.

Health Advocate

The resident must be able to:

- Educate the families of critically ill patients on the life-style and health issues that have led to the illnesses of their family members
- Identify the important determinants of health affecting patients
- Contribute effectively to improved health of patients and communities
- Recognize and respond to those issues where advocacy is appropriate

Manager

- Participate in bed management issues and enable efficient care of the critically ill patient by using investigations appropriately.
- Effectively organize work in such a way that priorities are established and that coordination occurs with the other members of the team ensuring total, acute, and continuing care of patients.
- ability to prioritize and effectively execute tasks through teamwork with colleagues, and make systematic decisions when allocating finite health care resources

Scholar

- Self-education skills; demonstrate up-to-date knowledge in major clinically applicable developments. Display effective skills in continuing education.
- Demonstrate an ability to identify gaps in knowledge and develop a strategy to fill the gaps.



Objectives of Training

- Critical Appraisal of the Medical Literature; Demonstrate ability to seek out, locate and judge the strength of the evidence in the literature. Able to pose an appropriate patient-related question, execute a systematic search for evidence, and critically evaluate medical literature in order to optimize clinical decision making
- Scientific Interest; Participates in the scientific activities offered in the program. Contributes actively to discussion and teaching. Able to add to and elevate the level of discussion. Incorporates a spirit of scientific enquiry and use of evidence into clinical decision-making.
- Teaching Skills; Available, approachable. Effectively shares knowledge. Helps others to develop their potential.
- Oral Presentation Skills; Able to give a clear, concise, effective oral presentation concerning a clinical or scientific topic with appropriate use of audiovisual aids.
- Identify clinical problems in surgical critical care.
- Recognize and identify gaps in knowledge and expertise around the problem.
- Formulate a management plan.
- Consult others (physicians and other health professionals) in a collegial manner.

Professional

Residents must be able to demonstrate their professionalism in the following ways;

- Integrity and honesty; demonstrate an honest, straightforward approach that is respectful of others, and deserves the respect of others.
- Responsibility and self-discipline; Dependable, reliable, honest and forthright in all information and facts; prompt, appropriate follow-up of patients. Non-clinical responsibilities, (e.g. rounds, teaching, etc.) are similarly dealt with.
- Bioethics; Sensitive to bioethical issues and demonstrates a reasonable approach to them. Performs in an ethical manner with other health care professionals, patients and families.
- Self-Assessment; demonstrates appropriate awareness of own limitations; seeks assistance and/or feedback to overcome/ compensate for limitations, and accepts advice graciously.
- Receptiveness to Feedback Responds constructively to new suggestions and ideas.

