MEDICAL INTENSIVE CARE UNIT: INTERNAL MEDICINE

PGY 1, 2, 3 – Inpatient, VA or University Hospital
Last modified by Michael Stillman, MD and Rodrigo Cavallazzi, MD on July 22, 2013

Goals for Rotation:
1. Quickly evaluate, appropriately stabilize, and initiate therapy in critically ill patients.
2. Gain knowledge and experience in managing critically ill patients.
3. Gain skill in performing procedures, especially central lines and airway management.

Learning Objectives for Rotation:

- **Patient Care:** objectives accomplished via direct care, morning report, Grand Rounds, & attending rounds; evaluated by attending, fellow, nurse, and peer evaluations.
  - PGY 1, 2, & 3 residents will:
    - Perform a complete history and physical examination, tailoring the initial length to the severity of the presenting illness.
    - Quickly obtain and interpret initial labs.
    - Admit and manage the multisystem care of patients presenting to a University or VA hospital with critical illnesses, including prevention of complications common to the ICU setting.
    - Understand indications for intensive monitoring and interpret the results.
    - Understand indications for mechanical ventilation, and how to initiate ventilation, adjust ventilator settings, and withdraw ventilation.
    - Acquire experience to become credentialed in procedures under the supervision of an accredited individual.
    - Minimize discomfort and risk of procedures and demonstrate knowledge of indications, contraindications, necessary equipment, specimen handling, and patient aftercare.
    - Develop a prioritized differential diagnosis, evidence based therapeutic plan, and work to avoid common complications of therapy.
      - PGY-2 residents, in addition to above, will regularly integrate medical facts, clinical data, and patient preference in decision making and management.
      - PGY-3 residents will demonstrate all the above, and the ability to reason in ambiguous situations.

- **Medical Knowledge:** objectives accomplished via direct patient care, attending rounds, weekly didactics, grand rounds, radiology conferences, and morning report; evaluated by attending, fellow, nurse, and peer evaluations.
  - PGY 1, 2, & 3 residents will demonstrate:
    - Understanding of the pathophysiology, natural history, presentation, diagnostic workup, complications, and management of common intensive care problems.
    - Working knowledge of their patients’ diseases, the initial diagnosis and usual course, and preferred treatment strategy.
      - PGY-2 residents will also accomplish the above, and
        - Familiarize themselves with applicable practice guidelines, and recognize when to vary from the guidelines.
        - Demonstrate understanding and use of evidence based approach to patient care.
      - PGY-3 residents will demonstrate all of the above, display knowledge of the most current evidence based recommendations, and integrate this with expert opinion and clinical variables.
Syllabus

Core Readings:

Asthma

Weaning

Gastrointestinal Bleeding


Catheter-Related Infection

Pressors

PEEP

Pneumonia


SIRS
Steroid Use


ARDS


Hepatorenal Syndrome


Sepsis Guidelines

Sedation

Tracheostomy

Acute Kidney Injury

Ultrasound

Controversies in the ICU:


Suggested readings:

MKSAP Critical Care Medicine

Appropriate chapters of Harrison's Textbook of Medicine.


Guidelines from American College of Chest Physicians available under education link of http://www.chestnet.org:

Site for acid base tutorials & cases, blood gas cases and fluid and electrolyte cases is http://www.anesthesiamcq.com. Click on tutorials to get to these.

Calculator for ICU: http://www.sfar.org/s/article.php3?id_article=60:

- Practice–Based Learning and Improvement: objectives accomplished via direct patient care, attending rounds, morning report, and journal club; evaluated by attending, fellow, nurse, and peer evaluations.
  - PGY 1, 2, & 3 residents will:
    - Utilize available resources to make timely and appropriate diagnostic and management decisions.
    - Emphasize the use of evidence based medicine.
    - Learn to target areas for self-improvement, analyze patient care experiences, and implement strategies to improve future quality of care.
      - PGY-2 residents will also:
        - manage a team so that patient care, work and teaching are completed effectively.
        - voluntarily discuss or research relevant literature to support decision-making.
      - PGY 3s will accomplish all the above, and also display the ability to apply knowledge of study design and statistics to relevant literature.

- Interpersonal and Communication Skills: objectives accomplished via attending rounds, direct patient care, radiology conference, journal club; evaluated by attending, fellow, nurse, and peer evaluations.
  - PGY 1, 2, & 3 residents will demonstrate ability to:
    - Interact with other physicians (including consultants), nursing and clerical staff, and patient and their families in a professional, respectful, and effective manner.
    - Keep complete and timely medical records, which reflect the thought process in addition to the SOAP elements.
    - Verbally present in an organized fashion to the attending.
    - Staff all admissions by telephone with fellow (or attending, if fellow not available) at the time of admission, and discuss all patients seen in any setting.
      - PGY 2 residents will also demonstrate ability to discuss risk and benefits of various therapeutic and diagnostic maneuvers
- PGY 3 residents will accomplish all of the above, and demonstrate ability to handle the most difficult interpersonal patient and family encounters with minimal supervision.

- **Professionalism:** objectives accomplished in all patient care and educational activities; evaluated by attending, fellow, nurse, and peer evaluations.
  - PGY 1, 2, & 3 residents should demonstrate:
    - Professionalism with colleagues and hospital staff, especially regarding admissions or transfers.
    - Respect in interactions with patients and families, including sensitivity and responsiveness to their race, gender, age, and other defining characteristics.
    - Ability to uphold patient confidentiality and informed consent, and put the patient's interest ahead of their own.
    - Truth-telling and trustworthiness. Recognize and notify attending and patients (when appropriate, in conjunction with the attending) when mistakes are made.
      - PGY 3 residents will also be able to teach these concepts to junior members of the team.

- **Systems Based Practice:** objectives accomplished via direct patient care and attending rounds; evaluated via peer, nursing, fellow, and attending evaluations.
  - PGY 1, 2, & 3 residents should:
    - Access and utilize necessary resources within the system and community to provide optimal patient care, including the application of evidence-based medicine, cost-conscious strategies, and communication with the outpatient provider and transferring team.
    - Advocate for quality patient care and assist patients in dealing with the healthcare system, if needed.
    - Display the ability to work well within their core clinical team.
      - PGY-2 should also demonstrate the ability to coordinate a multidisciplinary approach to patient management with other health professionals.
      - PGY-3 residents should strive to contain costs and conserve limited resources while preserving a high quality of care, and recognize opportunities to improve the health care system.

**Expectations:**
- Attendance, punctuality, and completion of above objectives and reading.
- Notify appropriate Chief Resident (CMR) ASAP in the event of acute illness or personal/family emergency requiring absence or tardiness so that coverage can be arranged.
- Transfer summaries required on every patient transferred to a team.
- Attend MICU orientation given by faculty.
  - All ICU consults, admissions and request for transfers into the ICU should be discussed with the fellow.
- Attend MICU attending and/or fellow.
- Resident, fellow, and attending should discuss expectations and curriculum at the beginning of the month. Residents are required to have 1 day off in every 7 during the rotation.
- Attending, fellow and housestaff will evaluate each other via www.new-innov.com. Attendings should meet with housestaff individually mid-month to give them necessary feedback and suggestions for improvement.

**Contact:** Becky Highbaugh at 852-5841 for concerns or questions about the rotation.