

Medical/Respiratory Intensive Care Unit (MRICU) Curriculum Temple University Internal Medicine Residency Program

Adapted from the Michigan State University Critical Care Curriculum dated January 2004

I. Educational Purpose and Goals

The critical care rotation exposes residents to patients with a broad variety of unstable, life-threatening medical illnesses. Residents will learn the basic tenets of stabilization of critically ill patients, and understand the differential diagnoses and appropriate diagnostic work ups of such patients. Additionally, residents will learn to recognize medical futility, the appropriate setting for withdrawal of care and do not resuscitate orders. They will function within multidisciplinary teams to provide care that is timely, appropriate, and takes into account patient or family preferences.

II. Principle Teaching Methods

A. Supervised direct patient care

- i. **MRICU team:** Each team consists of a pulmonary/critical care attending, one pulmonary/critical care fellow, two upper year residents, two interns (occasionally from the emergency medicine division) and two fourth year medical students. A doctorate level pharmacologist, nutritionist, respiratory therapist, and critical care nurse round as vital members of the critical care team. The MRICU is a closed unit, and the pulmonary/critical care attending approves all admissions.
- ii. **First encounter:** Patients most commonly are admitted via the emergency department, transferred from the general medical floor secondary to worsening clinical status, or occasionally as a transfer from an outside hospital. Once the patient has been accepted by the pulmonary and critical care attending the resident on the admitting team performs the initial evaluation. This initial evaluation is expected to include a complete history and physical exam, review of appropriate medical records, radiologic studies, and laboratory data. The resident is responsible for discussing the admission with the attending within two hours via telephone or in person, and the attending is responsible for confirming the history and physical within 24 hours of admission.
- iii. **Follow up patient care:** The MRICU team will conduct work rounds on their assigned patients in the morning after picking up sign-out from the night coverage team from 7 am until 8:30am. During this time the residents will examine the patient, develop an assessment and plan, and document this plan on the chart in the form of a written note.
- iv. **Attending rounds:** The pulmonary/critical care attending will round with the entire team on all patients on the service. The resident or intern will present the patient and the proposed plan for the day to the team. The attending will exam the patient, analyze the data and finalize the patient's care plan for the day. It is during this time that the attending

will provide bedside teaching. The teaching points will include but not be limited to physical exam findings pertinent to critical care, patient/ventilator interactions, interpretation of pressure tracings from CVP monitoring, pulmonary artery catheters, and arterial lines.

Educational content will also include medical knowledge, the association of findings and data with underlying pathology, modeling productive respectful interactions with patients, the principles of clinical decision making, the application of medical literature to clinical scenarios, ethics and professionalism, and the appropriate utilization of health care resources. Bedside teaching promotes the direct observation by the attending of the patient interaction and physical examination by the resident.

v. Radiology review: The entire team reviews all radiologic studies with an attending radiologist on a daily basis. This affords additional education in interpretation of chest x-rays, computed tomography of the chest, abdomen, and brain. All radiology studies are digitized and can be viewed from any desktop computer in the hospital as well as at a viewing station in each intensive care unit in the hospital.

vi. Discussion outside of attending rounds: The fellow and the attending are available by phone 24 hours a day to discuss changes in a patient's condition or to answer any questions that may arise. Additionally, the fellow and/or the attending are available to come into the hospital at any hour if required to care for the patient.

vii. Procedures: The intensive care unit affords the residents to perform a wide variety of procedures. These procedures include central line placement, peripheral intravenous lines, thoracentesis, paracentesis, nasogastric intubation, placement of pulmonary artery catheters, arterial lines, Foley catheter insertion, lumbar puncture, and arthrocentesis. Ultrasound guidance is used for the placement of central lines and each resident is individually instructed on its proper use.

B. Conference schedule

- i. Multidisciplinary critical care conference
 - a) Frequency: weekly
 - b) Attendees: Open to all residents, those on ICU rotations are required to attend
 - c) Content: general critical care topics (twice/month), critical care morbidity/mortality (one/month), or case presentation with review of literature (one/month)
 - d) Presenter: Faculty or invited outside speaker on general critical care topics, and MRICU team for morbidity/mortality or case presentation
 - e) Format: All presentations followed by group discussion led by the critical care attending
- ii. Critical care attending conference
 - a) Frequency: 3 days per week
 - b) Attendees: All MRICU team members

- c) Content: Critical care topic chosen by the residents and attending
- d) Presenter: Critical care attending
- e) Format: Informal lecture setting with dialogue encouraged between presenter and attendees
- iii. Pulmonary/Critical care fellow lecture series
 - a) Frequency: 3 times per week
 - b) Attendees: All MRICU team members
 - c) Content: “Hands on” topics in critical care (i.e. adjustment of ventilator settings, management of hypotension, etc)
 - d) Presenter: pulmonary/critical care fellow
 - e) Format: informal small group session
- iv. Grand rounds
 - a) Frequency - Once/week
 - b) Attendees - All residents
 - c) Presenter - An invited speaker, typically with a national reputation in his field of expertise
 - d) Content - A formal presentation of a focused topic, typically highlighting new or emerging knowledge in the field of internal medicine

C. Reading list: a comprehensive, evidenced based critical care text was written by the faculty and edited by two senior faculty members (*Critical Care Study Guide and Text*, Criner GJ and D’Alonzo GE (eds) New York: Springer, 2002) and is used as the textbook for the rotation. The table of contents is listed below. Multiple copies of this text are located in the MRICU and on call rooms for the residents to use. Additionally, pertinent and important literature is provided to the residents by the pulmonary/critical care attending and fellow.

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| 1. Airway Management | 18. Hepatic Failure |
| 2. Oxygenation Without Intubation | 19. Pathophysiology of the Sepsis Syndromes |
| 3. Blood Gas Sampling | 20. Acute Renal Failure |
| 4. Hemodynamic Monitoring | 21. Bleeding Diathesis |
| 5. Drainage Tube Management | 22. Nutrition Assessment and Nutrition Support in Intensive Care Unit Patients |
| 6. Implantable Devices for Cardiac Pacing and Defibrillation | 23. Oxygen Content, Delivery, and Uptake |
| 7. Enteral Feeding Tubes | 24. Circulatory Shock |
| 8. Common Procedures in the Intensive Care Unit: Thoracentesis, | 25. Neuromyopathies in the Critically Ill |
| 9. Lumbar Puncture, Paracentesis, and Pericardiocentesis | 26. Disorders of Thermoregulation |
| 10. Noninvasive Monitoring in the Intensive Care Unit | 27. Infections in the Intensive Care Unit |
| 11. Endoscopy in the Intensive Care Unit | 28. Critical Care Endocrinology |
| 12. Radiologic Imaging in the Critically Ill Patient | 29. Evaluation and Management of Toxicologic Emergencies |
| 13. Neurologic Illness and Critical Care | 30. Metabolic Disturbances of Acid-Base and Electrolytes |
| 14. Respiratory Failure | 31. Special Problems in the Critically Ill Trauma Patient |
| 15. Heart Failure | 32. Ethics in Critical Care |
| 16. Cardiac Arrhythmias | 33. Psychologic Dysfunction in the Intensive Care Unit Patient |
| 17. Gastrointestinal Hemorrhage | |

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| 34. Host Defenses | 43. Advanced Cardiopulmonary Resuscitation |
| 35. Mechanical Ventilation | 44. Antimicrobials |
| 36. Noninvasive Ventilation | 45. Use of Analgesics and Sedatives in Critical Care |
| 37. Weaning from Mechanical Ventilation | 46. Prophylactic Regimens in the Intensive Care Unit |
| 38. Mechanical Hemodynamic Support | 47. Use of Neuromuscular Blocking Agents in the Intensive Care Unit |
| 39. Pharmacologic Hemodynamic Support of Shock States | 48. Hypertensive Crisis |
| 40. Antiarrhythmic Drug Management | |
| 41. Dialysis | |
| 42. Use of Blood Products | |

III. Work Schedules: The four MRICU teams share divided responsibility for admitting patients

- A. Overnight Call: Each resident and intern working together will take call every fourth night. They will accept patients from 5pm until 7am.
- B. Nighttime coverage: The on call team will cover their sister team's (sharing the same attending) patients during the night. The other MRICU teams are covered by a moonlighting senior internal medicine resident.
- C. The team pre-call will admit new patients from 7am until 12 noon.
- D. The team that is two nights from an overnight call will admit new patients from 12 noon until 5pm.
- E. Service cap: Each MRICU attending team can not have more than 18 patients on their service (9 patients per resident/intern team)
 - i. When the cap is exceeded an additional resident is called in to cover the overflow patients.
- F. Duty hour accommodations
 - i. One day off per week averaged over the length of the rotation: Each resident/intern team is provided one weekend per block free from clinical duties. Additionally, if the team is not on call for the weekend day their patients are covered by their sister team.
 - ii. The post call team will round with the MRICU team and sign-out to their sister team by 11am. Any work that needs done on their patients will be done by the sister team.

IV. Educational Resources

- A. Patients: Temple University Hospital is located in and serves the poor, urban, largely minority population of North Philadelphia. The hospital is also a referral center for the tri-state area accepting patients in need of tertiary level critical care. The pulmonary division also has an active lung transplant program, lung volume reduction surgery and pulmonary hypertension programs, and these patients are often cared for in the MRICU. Encountered patients present with the broad spectrum of common, and occasionally rare, disease processes prevalent in a large, diverse, urban community. The majority of patients cared for speak English, although 11% of admitted patients list Spanish as their primary language.
- B. Medical library - The medical library at Temple University, across the street from the hospital, is available to the residents during its normal business hours.

Available in its holdings are basic textbooks of internal medicine and subspecialty medicine, basic textbooks of other specialties outside of internal medicine, current and bound journals reflecting the broad spectrum of medical literature, and searchable computer-based databases for finding and retrieving information from the published medical literature. Library staff is available to assist and educate in carrying out literature searches. The library provides remote internet access to a large amount of full text journal at no cost.

C. Internet-based computer resources - Residents have immediate internet access at all nurses' stations, in call rooms, and in a devoted resident library. Much of the medical library's resources are available remotely. Additionally, residents have free access to the on-line text Up-to-Date via institutional subscription.

D. Critical care database - The Pulmonary/Critical Care division maintains a database of power point presentations and other supporting materials (pertinent articles) from all presentations that are part of the curriculum. Residents can access the database and review presentations or topics.

E. Evidence based medicine text - The program provides every resident with a copy of *Key Topics in Evidence-based Medicine* by McGovern, Valori, Summerskill, and Levi (Oxford: BIOS Scientific Publishers, 2001).

F. EKG interpretation tutorial – The internal medicine program has designed a web-based interactive tutorial in EKG interpretation consisting of two parts, a didactic portion covering the basic elements of EKG interpretation and an applied portion with one hundred electrocardiograms indexed by clinical case and diagnoses. Medical residents are assigned a unique logon and password to access the web-based tutorial, allowing a site administrator to track completion of the tutorial by individual users. Because the tutorial organizes the didactic information by concept (e.g. rate, block, myocardial ischemia, etc.) and indexes the electrocardiograms by diagnosis, users can take a self-directed approach to their learning.

G. Basic and advanced cardiac life support - Residents are expected to achieve and maintain certification in basic and advanced cardiac life support. Basic and advanced cardiac life support classes are offered via the hospital throughout the year free of charge.

H. Dialogues

- i. Physician consultants – Residents routinely engage the assistance of consultants from within and outside of the specialties of internal medicine in the course of their patient care. Along with their care, these consultants are expected to be readily accessible to residents to answer questions about the basic science, up to date interpretation of medical literature, and accepted evidence-based and consensus management algorithms for diagnoses in their field.

- ii. Case managers and social workers – Residents routinely engage the expertise of case managers and social workers to navigate the often-complex systems of health care delivery. These professionals educate the residents about the third-party payer system, services available to uninsured or underinsured patients, access to mental health and substance abuse treatment, discharge guidelines, and resource management in the course of their interactions.
- iii. Clinical pharmacists – A clinical pharmacist at the PharmD level rounds with the team daily and is available to guide pharmacologic therapy and answer questions regarding appropriate dosing adjustments and drug interactions. This person is a valuable asset in the critical care setting.
- iv. Nutritionist – A clinical nutritionist also rounds with the team daily providing guidance for both enteral and parenteral nutrition as well as following a patient’s nutritional status. This person provides valuable education on critical care nutrition.
- v. Physical therapists – Although many patients are too ill to participate in physical therapy, there are a significant number of patients that do benefit from physical therapy in the ICU setting. A physical therapist dedicated to the ICU is available to provide guidance in these unique situations.
- vi. Respiratory therapists – Many of the patients in the MRICU depend on invasive or non-invasive mechanical ventilation. Experienced respiratory therapists round with the MRICU team and are present in the unit throughout the day to help educate the housestaff on the various modalities of mechanical ventilation.

I. Simulation center - Within the last year, Temple University School of Medicine has opened an on-site clinical simulation center with an educational mission that includes augmenting the clinical experiences of residents and fellows. Curricular projects utilizing the available state-of-the-art simulation resources are in active development, but have not yet been applied at the time of this writing.

J. Program directors - Issues may arise in the course of clinical care that the resident feels are best discussed with an individual outside the health care team (e.g. interpersonal conflicts, breaches of professionalism). The program directors invite the residents and maintain easy accessibility for them to discuss any such issues. At all times, the program directors will model superlative interpersonal interactions, professional behavior, and ethical conduct.

V. Methods of Evaluation

A. Resident Performance - Evaluation of the resident occurs by:

- i. Faculty
 - a) Rotation - Each resident on a MRICU service is evaluated by each teaching attending who works with him for more than one week. For time spent together exceeding two weeks, additional

feedback at the mid-point of the time together is expected. The evaluation is communicated both verbally in a face-to-face meeting between the attending and resident and on a written, competency-based form developed along internal medicine RRC guidelines. The written evaluation is filed in the resident's folder and remains available to the resident to review. Additionally, each of those evaluations is reviewed by the program director, deputy program director, or associate program director in the presence of the resident in a biannual meeting. Because the teaching attending is also the attending of record for the majority of patients cared for by the resident on the MRICU service, opportunities for evaluation occur not only in didactic sessions and discussions, but also on bedside rounds, in review of all of the resident's admission and daily progress notes, and in direct observation of the resident addressing and examining patients and interacting with colleagues in the course of the delivery of medical care.

- b) Procedures - In the discussion of medical care, the attending assures that the resident understands the indications, contraindications, and patient after-care of a proposed procedure. The attending reviews appropriate informed consent and assistance in patient decision-making. By direct observation, the attending confirms that the resident is able to complete the procedure with efficiency, skill, techniques to minimize patient discomfort, and attention to the safety of the patient, the resident, and other medical staff. Review of the chart assures that timely documentation of successful and unsuccessful procedures is recorded. Residents will also be instructed on how to handle common complications of commonly performed procedures in the MRICU. Residents document their procedures either in a logbook or electronically. The attending provides confirmation of the above observations in the logbook by his signature. A past electronic evaluation documentation system did not provide for the attending's confirmation of direct observation, but a newly purchased system will. A review of each resident's success in completing and documenting procedures occurs in the resident's biannual meeting.
- ii. Peers - Residents are encouraged to provide evaluations on the other residents with whom they work on service. These evaluations include assessments of medical care, interpersonal and communication skills, professionalism, and collegiality, and may remain confidential if desired by the submitting resident.
- iii. Medical students - The medical students on a MRICU service complete a written evaluation at the end of the rotation on each of the residents with whom they worked. These evaluations include assessments of the resident's enthusiasm, teaching, role modeling, contribution of the resident to the student's professional growth, and provision of feedback to the student. The evaluation is reviewed by the medicine clerkship director,

filed in the resident's folder, available for the resident to review, and reviewed by the program director, deputy program director, or associate program director in the presence of the resident in the resident's biannual meeting.

B. Teaching Attending Performance - Evaluation of the teaching attendings occurs by:

- i. Residents - Residents evaluate their teaching attending in a written format for each rotation and may provide verbal feedback in their face-to-face evaluation meeting. The written evaluation may remain confidential, but is most commonly returned to the attending for review. The program director reviews all evaluations and annually provides to each MRICU attending an aggregate summary of his evaluations.
- ii. Students - The medical students on a MRICU service evaluate their teaching attending in a written format and may provide verbal feedback in their face-to-face evaluation meeting. The written evaluations may remain anonymous. The clerkship director collects the evaluations and returns a copy of each to the attending.
- iii. Fellows – The fellow on the MRICU service provides a written evaluation of the attending. The evaluation is commonly available to the attending for review. The Pulmonary/Critical Care fellowship director reviews each evaluation and addresses any problems if one should arise.

C. Program Performance - Residents may provide verbal or written feedback regarding the residency program at any time to their MRICU attending or to a program director, deputy program director, or associate program director. The program director and deputy program director maintain a bi-monthly interactive feedback session soliciting resident concerns. Additionally, at the biannual meeting with each resident, the program director, deputy program director, or associate program director actively solicit resident comments about the program as part of the meeting's agenda. Residents may also report concerns or problems directly to the institution's graduate medical education office.

VI. Tiered Objectives Organized by Competency

Note: Some objectives may address more than one competency. Such instances are identified with the additional competencies noted in italics following the item. Where tiered objectives are listed, it is expected that residents in each year will have mastered the competencies outlined for the previous levels of training.

A. Patient Care

- i. History taking
 - a) PGY-1 residents will:
 - (1) Efficiently elicit a thorough, hypothesis-driven history from the patient or patient's representative.
 - (2) Incorporate verbal and non-verbal techniques in their history taking to promote disclosure of relevant information and maintenance of patient comfort.
 - (3) Use translator services appropriately.

(1) Understand the indications, contraindications, necessary equipment, specimen handling, potential complications, and patient after-care of commonly performed procedures. Procedures will be performed with attention to the safety of the patient, the resident, and other medical staff.

Techniques to minimize patient discomfort will be utilized, (*medical knowledge*)

(2) Obtain appropriate informed consent and will assist in patient decision-making. Timely documentation of successful and unsuccessful procedures will be recorded in the chart, (*interpersonal and communication skills*)

(3) Understand the expected complications of the procedure being performed and know how to efficiently treat the most common complications. (*medical knowledge*)

(4) Focus primarily on learning the skills and techniques that lead to successful procedural outcomes.

(5) Achieve and maintain basic cardiac life support and advanced cardiac life support certification, (*medical knowledge*)

b) PGY-2 residents will:

(1) Hone their own procedural skills.

(2) Be willing and able to assist junior colleagues in skill acquisition. (*professionalism*)

(3) Thoroughly understand and know how to treat expected complications

c) PGY-3 residents will:

(1) Ensure that they have mastered the procedures required for certification by the ABIM. (*practice based learning and improvement*)

(2) Be willing and able to assist junior colleagues in skill acquisition. (*professionalism*)

vi. Medical decision making, clinical judgment, and management plans

a) PGY-1 residents will:

(1) Interrelate findings and disease processes, including the correct interpretation of

(a) symptoms and abnormalities on physical examination

(b) routine lab studies, including the basic metabolic panel, liver function tests, complete blood count, peripheral blood smear, coagulation studies, urinalysis, and arterial blood gases

(c) microbiologic studies, including gram stains and culture results

- (d) chest roentgenograms, abdominal plain films, computed tomography of the thorax and abdomen
 - (e) electrocardiograms
 - (f) pulmonary function tests
 - (2) Be able to create a focused, thorough, appropriately prioritized problem list.
 - (3) Be able to suggest a diagnostic and therapeutic plan of action based on their problem list that reflects the identified priorities while respecting patient preferences.
 - (4) Utilize evidence-based strategies or practice guidelines whenever applicable. Cost effective strategies will be emphasized. (*system-based practice*)
 - (5) Understand the risks and benefits of the proposed diagnostic studies and therapeutic interventions. Particular attention will be given to communicating to the patient those risks and benefits and ensuring that the patient has a clear understanding of the course of action, (*interpersonal and communication skills*)
 - (6) Understand how to evaluate the success of therapeutic interventions, including measurement of the desired response and recognition of complications.
 - (7) Begin to recognize when a patient requires admission to an intensive care unit
 - (8) Learn to recognize medical futility and communicate these findings to the patient (if able) and to family in a respectful manner.
- b) PGY-2 residents will:
- (1) be able to identify alternate strategies to the one they have proposed and discuss the risks and benefits of those strategies.
 - (2) be able to identify the limitations in the execution or interpretation of proposed diagnostic studies. (*medical knowledge*)
 - (3) not only have knowledge of the complications associated with therapeutic interventions, but also will anticipate them and know how to treat them.
 - (4) identify when consultation of an appropriate specialist can augment patient care, (*system-based practice*)
 - (5) anticipate when medical care can be completed in a non-critical care setting.
 - (6) be able to anticipate the likely condition of the patient at the conclusion of the hospital stay and identify and arrange for the resources necessary to ensure safe transition of care to the next setting. (*system-based practice*)

c) PGY-3 residents will make decisions in situations in which there is insufficient or ambiguous literature to make definitive recommendations in addition to fulfilling all of the above criteria.

B. Medical Knowledge

- i. PGY-1 residents will:
 - a) be able to provide initial care/resuscitation for patients with medical emergencies such as:
 - (1) respiratory failure/acute dyspnea
 - (2) septic shock/life threatening infections
 - (3) GI bleeding/hypovolemic shock
 - (4) pulmonary embolism; including indications for thrombolytic therapy
 - (5) life threatening metabolic derangements such as diabetic ketoacidosis, hyperkalemia, and hypoglycemia
 - (6) cardiogenic shock
 - (7) acute renal failure and the indications for dialysis
 - (8) hepatic failure
 - (9) acute change in mental status
 - (10) anaphylaxis
 - (11) complications of mechanical ventilation
 - b) be able to recall the basic differential diagnosis for each item in their problem list with particular attention to those diagnoses that are immediately life threatening or which require immediate intervention.
 - c) recall the approach to therapy for common diagnoses, including the information that is necessary to guide clinical decision-making.
 - d) recall the typical presentations of diseases common to a medical respiratory intensive care unit
 - e) supplement their medical knowledge with information from sources including textbooks, review articles, and on-line databases. They will begin to understand and apply information from current medical literature, (*practice based learning and improvement*)
 - f) begin to understand when critical care is required in the management of a patient
 - g) begin to understand how and when to discuss medical futility with a patient and/or the patient's family
 - h) begin to learn how to recognize a potential organ donor and the ICU management of the organ donor
- ii. PGY-2 residents will demonstrate a progression in knowledge and analytical thinking in order to develop well-formulated differential diagnoses for multi-problem patients.
 - a) be able to recall an expanded differential diagnosis including common and uncommon causes of the patient's problems.

- b) recall the specific indications and contraindications for the treatment of common diagnoses.
 - c) recognize common complications of critical care and then initiate the appropriate therapy.
 - d) recognize the indications for transfer of patient care to an intensive care unit setting, (*system-based practice*)
 - e) be willing and able to discuss end of life issues with patients and their families in a respectful and sensitive manner.
 - f) begin to critically evaluate current medical literature as it applies to the care of their patients, (*practice based learning and improvement*)
 - g) recognize cultural barriers to treating disease and maintaining good health. These barriers will be addressed with sensitivity and with respect for the patient's beliefs, (*interpersonal and communication skills*)
- iii. PGY-3 residents will:
- a) be able to recall a comprehensive differential diagnosis, including rare causes of the patient's problems.
 - b) recall the various options for treatment of common diagnoses and understand the specific indications and contraindications for each of those options.
 - c) recognize presentations of common diseases usually cared for by non-medicine services. The resident will recall usual first line treatments for those diseases.
 - d) actively access and critically evaluate current medical literature as it applies to the care of their patients, (*practice based learning and improvement*)
 - e) recognize indications for critical care of a patient
 - f) recognize situations of medical futility and feel comfortable discussing end of life issues with the patient and/or the patient's family.

C. Practice Based Learning and Improvement

- i. PGY-1 residents will:
 - a) identify their own weaknesses compared to the skills of their peers.
 - b) be receptive and responsive to constructive criticism.
 - c) routinely reevaluate their clinical decision-making when unexpected negative outcomes are encountered.
 - d) recognize when they need assistance in the care of a patient and seek the appropriate level of assistance (upper year residents, fellows or attendings)
 - e) continuously seek to expand their medical knowledge, (*medical knowledge, professionalism*)
- ii. PGY-2 residents will:
 - a) reflect on the types of mistakes they have made in the care of their patients and look for common themes among those mistakes.

- b) understand how their personal beliefs, biases, emotions, response to stress, and approach to decision making may have an impact on the quality of the medical care they deliver.
 - c) recognize when they need assistance in the care of a patient and seek the appropriate level of assistance (upper year residents, fellows or attendings)
 - iii. PGY-3 residents, with the knowledge gained from self-reflection, will display vigilance for and develop strategies to overcome the types of mistakes they are prone to make based on their personal beliefs, biases, emotions, response to stress, and approach to decision making.
- D. Interpersonal and Communication Skills
- i. PGY-1 residents will:
 - a) develop effective and respectful relationships with patients, students, peers, supervisors, and other medical and administrative workers.
 - b) be effective listeners in medical and professional encounters, including recognizing verbal and non-verbal cues from the people with whom they interact.
 - c) communicate respect, empathy, and concern in their encounters.
 - d) write legibly in all situations.
 - e) remain quickly, reliably, and easily accessible by beeper when on duty. (*professionalism*)
 - f) provide effective and detailed sign-out to allow covering physicians to knowledgeable and efficiently continue their patients' care, (*system-based practice*)
 - g) effectively coordinate the transition of patient care from critical care to non-critical care settings, with particular attention given to communicating with the accepting physicians, (*system-based practice*)
 - h) develop skills for dealing with difficult patients and stressful situations.
 - i) develop skills for handling situations of unprofessional behavior by other healthcare professionals.
 - j) provide constructive feedback regarding the residency program, (*professionalism, system-based practice*)
 - ii. PGY-2 residents will:
 - a) model effective and respectful relationships with patients, students, peers, supervisors, and other medical and administrative workers.
 - b) model skills for dealing with difficult patients and stressful situations.
 - c) model skills for handling situations of unprofessional behavior by other healthcare professionals.

- d) be able to direct sensitive or difficult interactions with patients or their representatives, including the delivery of bad news or initiation of end-of-life discussions.
 - e) manage and direct the intern and students on the service to ensure timely and effective completion of the tasks of patient care.
 - f) anticipate duty hours issues and proactively develop a plan that ensures compliance of all team members with the requirements, (*system-based practice, professionalism*)
 - g) effectively educate the students and intern in such a way as to improve their understanding and practice of internal medicine and to promote their professional success, (*professionalism*)
- iii. PGY – 3 residents will demonstrate all of the above and assist their junior colleagues in refining their communication skills.

E. Professionalism

- i. PGY-1 residents will:
 - a) comply with all locally and nationally accepted standards of behavior for healthcare professionals, including but not limited to those mandated by law.
 - b) demonstrate a commitment to excellence in all activities.
 - c) put the needs of their patients ahead of their own.
 - d) ensure adequate attention to their own needs, particularly those of rest, sleep, and personal relationships, to optimize their readiness to provide the highest quality care for their patients.
 - e) take ownership of the well being of the patients assigned to their care, no matter how brief the assignment.
 - f) act as patient advocates.
 - g) show respect at all times for the unique and individual perspectives of patients, patient families, and other health care professionals.
 - h) be committed to participating in the organized curricular program offered by the residency. This participation includes attendance and, when appropriate, making contributions to enhance the education of others.
 - i) manage work efficiently to allow attendance at educational conferences.
 - j) respond to unpleasant patient or professional interactions with restraint, insight, and empathy. The betterment of patient care will remain the priority in all attempts at conflict resolution, (*interpersonal and communication skills*)
 - k) reflect on their own behavior after difficult or unpleasant interactions, (*practice based learning and improvement*)
 - l) act as a role model for medical students
- ii. PGY-2 residents will:
 - a) actively seek to provide feedback in a constructive fashion for the students and interns with whom they work, (*interpersonal and communication skills*)

- b) be willing to challenge the accepted plan of care when their professional judgment differs from that of other providers.
- c) act as a role model for interns and fellow residents.

F. System-based Practice

- i. PGY-1 residents will:
 - a) utilize hospital resources to deliver effective, efficient, high quality patient care.
 - b) remain sensitive to health care costs while providing high quality care.
 - c) provide timely dictation of the patient records assigned to them. Note that PGY-1 residents are not assigned charts for dictation until they have completed 6 months of their training, (*professionalism*)
 - d) be cooperative in complying with performance improvement initiatives developed by the hospital administration, (*practice based learning and improvement, professionalism*)
- ii. PGY-2 residents will:
 - a) identify resources at the time of discharge that will benefit the patient in their post-hospital care. The resident will work with the case manager and social worker to integrate these resources into the discharge plan.
 - b) identify areas where the process of patient care can be improved.
 - c) be participants in the improvement of hospital-based care and of residency education by actively contributing their insights, opinions, energies, and leadership, (*professionalism*)