American University of Beirut Medical Center
Faculty of Medicine
Department of Internal Medicine
Residency Training Program

Residency Training Program Curriculum

Approved by the Program Evaluation Committee: 2019
Internal Medicine Residency Training Program Curriculum

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I. MISSION STATMENT

The mission of Internal Medicine Residency Program is to provide the highest quality of education and training for physicians in Lebanon, and to enable all physicians the opportunity to excel in the field of Internal Medicine.

II. OVERVIEW

The Internal Medicine Residency Program at AUBMC follows the guidelines and policies of the Accreditation for Graduate Medical Education International (ACGME-i). The following is a list of the competencies:

1. Patient Care
2. Medical Knowledge
3. Practice Based Learning and Improvement
4. Interpersonal and Communication Skills
5. Professionalism
6. Systems Based Practice

The house staff evaluation process is competency based.

A. ACGME-I CORE COMPETENCIES

1. PATIENT CARE

Residents are expected to provide patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, treatment of disease and at the end of life.

Gather accurate, essential information from all sources, including medical interviews, physical examinations, medical records and diagnostic/therapeutic procedures.

Make informed recommendations about preventive, diagnostic and therapeutic options and interventions based on clinical judgment, scientific evidence, and patient preference.

Develop, negotiate and implement effective patient management plans and integration of patient care.

Perform competently the diagnostic and therapeutic procedures considered essential to the practice of internal medicine.
2. **MEDICAL KNOWLEDGE**

Residents are expected to demonstrate knowledge of established and evolving biomedical, clinical and social sciences, and the application of their knowledge to patient care and the education of others.

Apply an open-minded, analytical approach to acquiring new knowledge. Access and critically evaluate current medical information and scientific evidence.

Develop clinically applicable knowledge of the basic and clinical sciences that underlie the practice of internal medicine.

Apply this knowledge to clinical problem-solving, clinical decision-making, and critical thinking.

3. **INTERPERSONAL AND COMMUNICATION SKILLS**

Residents are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams.

Provide effective and professional consultation to other physicians and health care professionals and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues.

Use effective listening, nonverbal, questioning, and narrative skills to communicate with patients and families.

Interact with consultants in a respectful, appropriate manner. Maintain comprehensive, timely, and legible medical records.

4. **PROFESSIONALISM**

Residents are expected to demonstrate behaviors that reflect a commitment to continuous professional developmental, ethical practice, an understanding and sensitivity to diversity and a responsible attitude toward their patients, their profession, and society.

Demonstrate respect, compassion, integrity, and altruism in relationships with patients, families, and colleagues.

Demonstrate sensitivity and responsiveness to the gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behavior and disabilities of patients and professional colleagues.

Adhere to principles of confidentiality, scientific/academic integrity, and informed consent. Recognize and identify deficiencies in peer performance.
5. **PRACTICE-BASED LEARNING AND IMPROVEMENT**

Residents are expected to be able to use scientific evidence and methods to investigate, evaluate, and improve patient care practices.

Identify areas for improvement and implement strategies to enhance knowledge, skills, attitudes and processes of care.

Analyze and evaluate practice experiences and implement strategies to continually improve the quality of patient practice.

Develop and maintain a willingness to learn from errors and use errors to improve the system or processes of care.

Use information of technology or other available methodologies to access and manage information, support patient care decisions and enhance both patient and physician education.

6. **SYSTEMS-BASED PRACTICE**

Residents are expected to demonstrate both an understanding of the contexts and systems in which health care is provided, and the ability to apply this knowledge to improve and optimize health care.

Understand access and utilize the resources, providers and systems necessary to provide optimal care.

Understand the limitations and opportunities inherent in various practice types and delivery systems, and develop strategies to optimize care for the individual patient.

Apply evidence-based, cost-conscious strategies to prevention, diagnosis, and disease management.

Collaborate with other members of the health care team to assist patients in dealing effectively with complex systems and to improve systematic processes of care.
B. INTERNAL MEDICINE RESIDENCY PROGRAM OVERVIEW

1. Categorical Program

The categorical Internal Medicine Residents complete a three-year training period that starts with the internship year and concludes with the senior residency year. Currently the training of the residents takes place in the following settings: the inpatient wards (at AUB-MC and Makassed General Hospital (MGH)), the inpatient consultation services, the emergency room, the critical care units which include cardiac care unit (CCU), respiratory care unit (RCU) and intensive care unit (ICU) and the outpatient department where residents get most of their ambulatory experience (continuity clinics), in addition to their participation in subspecialty clinics.

**Internship**

During this first year, interns receive exposure to a variety of inpatient and ambulatory experiences throughout general internal medicine and the subspecialties of internal medicine. Rotations in this year are four weeks in duration. Interns also attend continuity clinic one half-day per week.

The typical intern year of 13 rotations includes:
- General Medicine wards – four rotations
- Neurology ward - one rotation
- Ambulatory medicine – two rotations
- Cardiac Care Unit (CCU) – one rotation
- Medical Intensive Care Unit (MICU) – one rotation
- Elective consultation service –one rotation
- Emergency medicine – one Rotation
- Vacation- one rotation
- Night float- one rotation

**Junior Residency**

After receiving the foundation from internship, the junior resident (JR) year includes the opportunity to lead ward teams and to gain greater experience in critical care and emergency medicine.

The typical JR year of 13 rotations of four weeks duration includes:
- General medicine wards – three rotations
- Ambulatory medicine – one rotation- covering ICU duties every fourth
- Emergency medicine – one rotation
- Medical intensive care unit – one and a half rotations
Internal Medicine Residency Training Program Curriculum

- Cardiac Care unit – one and a half rotations
- Electives – four and a half rotations – One and half rotations include covering CCU duties every forth
- Scholar Rotation (Working on a Research project) – 2 to 4 weeks, included in the four elective’s rotations, optional
- Vacation – one rotation

Senior Residency
For our residents, the senior residency (SR) year is meant to provide greater experiences in general medicine and also has significant elective time. The typical SR year of 13 rotations of four weeks duration each includes:
- General medicine wards – 4.5 rotations
- Respiratory Care Unit – 2 to 4 weeks rotation
- Ambulatory medicine – one rotation
- Night float – one rotation
- Scholar Rotation – (Working on a Research project) 2 to 4 weeks rotation included in the four elective’s rotations, optional
- Geriatrics – 2 to 4 weeks rotation
- Electives – four and a half rotations
- Vacation – one month

2. Preliminary Program

The preliminary year is a one year program that provides interns with a solid foundation in internal medicine. The preliminary year program usually has a more variable structure that includes additional rotations in the emergency department and inpatient wards. The schedule however should not have more than three rotations in the emergency department and not more than one month of float (divided). The vacation and elective rotations are fixed (1 rotation each). There is no continuity clinic for preliminary interns.

C. PRINCIPAL LEARNING ACTIVITIES AND EVALUATION METHODS

1. Noon Conferences (NC)

Core curriculum (CC) lectures focus on themes of the various medical specialty topics. Faculty Staff Members who are experts in their field give didactic sessions that cover commonly encountered issues. Core curriculum sessions are held twice per week on Mondays and Thursdays regularly after the in-service exam. Lunch is provided half an hour before this activity.
The Department of Medicine hosts Grand Rounds every Tuesday from noon to 1:00pm. Local, regional or international speakers are invited to present topics of internal medicine. All residents on inpatient floor teams, as well as those on ambulatory block rotations and electives are expected to attend. Senior residents also present grand rounds starting after the in-service exam.

Morbidity and Mortality: held three times per year, prepared by chief residents and Department Chair. This is a joint effort between the department of Internal medicine and other departments (Surgery, Radiology, Emergency department...). A case, with an adverse outcome, is thoroughly reviewed and discussed. Faculty members from various disciplines are invited to attend, especially if they were involved in the care of the patient. The discussion focuses on system-related deficiencies and suggestions for improvement.

Introductory Lecture Series start at the beginning of the academic year and focuses on: Punctuality, resident responsibilities on the floor as a leader and a teacher, importance of Documentation, teaching activities to attend throughout the year…etc

Board Review sessions, started at the beginning of the year as preparation for the in-service exam, held on Mondays, Tuesdays and Thursdays at noon alternating with core curriculum lectures. They are designed for internists as a comprehensive review of internal medicine as preparation for the in-training exam.

2. Attending Rounds (AR)

Attending rounds are scheduled daily on each inpatient regular floor. It is a one to two-hour round led by the attending physician with the medical team (interns, resident/ Team leader, and students). Clinical cases are presented to and discussed with the attending physician who can comment on the management plan. Bedside teaching is regularly included in the rounds at least twice per week. In addition, on a daily basis one to two charts should be reviewed by the attending with peer to peer, resident, interns and students’ evaluations.

3. Directly Supervised Procedures - (DSP)

Residents learn to perform procedures under the supervision of an attending or fellow. For example, in the Medical Intensive Care Unit the Pulmonary/Critical Care attending or fellow observe and/or assist the placement of central venous lines and arterial lines. Specific procedures like Pleural tap, abdominal tap, Lumbar puncture, ABG’s withdrawal, IV-line insertion used in patient care varies by rotation (pulmonary elective, neurology elective, Respiratory care unit, regular inpatient floor…). By the end of each year, residents are expected to be certified in a specific set of procedures.

4. Morning report (MR)

Four morning reports are schedules each week (7h30AM- 8h30AM). All residents
who are on inpatient teams are required to attend the AM report. Each resident is required to prepare at least two reports per month. They are held in the presence of the Medical Chief Resident and one faculty member. This is an interactive, evidence based discussion to assess diagnosis and approach to initial management of acute patient issues on the inpatient wards. Once every two weeks, the float resident and interns present overnight admitted cases focusing on decision making and management.

5. **Medical Jeopardy (MJ)**

Medical Jeopardy is held once a month (last Friday of the rotation) at 7:30 AM instead of the morning report. Residents form teams and compete against each other for various prizes using a medical game format (run by the chief resident).

6. **Journal Club (JC)**

Journal Club activity starts in September and is held every other Friday at 1pm. Junior and senior residents, critically appraise a selected article using a specific format, supervised by a faculty member and the Medical Chief Resident.

7. **Ambulatory report (AmR):**

PGY1 residents are asked to choose cases encountered in the outpatient setting and present the approach to such cases using the available evidence. These interactive sessions are mentored by the Medical Chief Resident.

8. **Radiology Sessions (XR):**

Prepared by the medical chief residents and a senior resident from the radiology department. Residents, interns and students on the floors attend these sessions every other Wednesday at 1pm. They consist of a general overview, followed by a radiology Quiz, then discussion of relevant radiology cases encountered on the floors, in addition to other interesting cases prepared by the radiology resident. The sessions focus on interpretation of radiological findings with their clinical correlation.

9. **EKG Sessions (EKG):**

Prepared by a cardiology faculty member. Residents, interns and students on the floors attend these sessions every other Wednesday at 1pm. They consist of systematic ECG Readings. By the end of these sessions, residents are able to recognize common arrhythmias and EKG changes and initiate appropriate investigations and treatment.

10. **Chairman rounds:** Once per week, on Tuesdays at 3:30 pm. The Department Chair or Professors round with a randomly selected medical team checking two to three cases and discussing mainly documentation issues as well as the case presentation,
approach and management. The resident in charge is evaluated by the chairman or the professor.

11. List of Evaluation Methods

CR- Chairman’s round evaluation
DSP – Directly Supervised Procedures
GA – Global assessment by attending (myevaluation.com)
NE – Nursing evaluation
PDR–Program Director’s Review (or associate program directors) (twice annually)
PRE—Peer evaluation
PTE – Patient-to-Resident Evaluation
MCX – Mini-CEX (Direct Observation Assessment Tool)
MR- Morning Report Evaluation
ISE – In-service examination
PL – Procedure Log

D. OVERVIEW OF RESIDENT RESPONSIBILITIES AND LONGITUDINAL EDUCATIONAL GOALS

1. Patient Care

Residents are expected to:

- Provide patient care that is compassionate, appropriate and effective for the promotion of health, prevention of illness, treatment of disease, and care at the end of life
- Gather accurate, essential information from all sources, including medical interviews, physical examination, records, and diagnostic/therapeutic procedures
• Make informed recommendations about preventive, diagnostic, and therapeutic options, and interventions that are based on clinical judgment, scientific evidence, and patient preferences
• Develop, negotiate, and implement patient management plans
• Perform competently the diagnostic procedures considered essential to the practice of general internal medicine

Ensuring that patient care is compassionate, appropriate and effective for the treatment of health problems and the promotion of health is accomplished primarily by:

• **Attending rounds:** Faculty members are assigned to floor teams and round with them daily. In addition to their teaching capacities, it is their responsibilities to monitor and mentor residents individually to ensure adequate patient care, from taking history, to generating a diagnosis, to managing and eventually discharging patients. Faculty members rounding on the floors have to review at least 1 chart daily and fill peer to peer, resident, interns, and students’ evaluations.

• **Morning Report:** During the structured morning report, patient case presentations are critiqued by attending physicians so as to ensure that residents are able to:
  - Conduct accurate, comprehensive medical interviews and physical exams
  - Generate an acceptable differential diagnosis
  - Make proper diagnostic and therapeutic decisions
  - Execute appropriate investigational and/or interventional strategies based on both available evidence and patient preference

<table>
<thead>
<tr>
<th>Principle Educational Goals</th>
<th>Learning Activities</th>
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<tbody>
<tr>
<td>Interview patients more skillfully</td>
<td>DPC, AR, AmR, MR</td>
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<tr>
<td>Examine patients more skillfully</td>
<td>DPC, AR</td>
</tr>
<tr>
<td>Define and prioritize patients’ medical problems</td>
<td>DPC, AR, MR</td>
</tr>
<tr>
<td>Generate and prioritize differential diagnoses</td>
<td>DPC, AR, MR</td>
</tr>
<tr>
<td>Develop rational, evidence-based management strategies</td>
<td>DPC, AR, MR</td>
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Patient Care Progressive Responsibilities

**PGY-1**

- Medical interviewing: Able to discern complete and relevant history
- Be able to perform a thorough and accurate physical exam on patients with common medical problems
- Gather essential information from other sources such as medical records and radiology
- Integrate the past and current clinical information to arrive at a problem oriented, prioritized, differential diagnosis
- Be able to initiate a correct therapeutic and diagnostic plans plan for common medical problems
- Understand the indications, contraindications, and risks of commonly ordered medications, medical tests, and procedures
- Perform the required internal medicine procedures with supervision until certified to perform alone
- Be able to prioritize patients’ problems so that daily patient care duties can be completed in an accurate and timely manner
- Understand appropriate monitoring and follow-up of patients, which includes laboratory data, test results, and medication use

**PGY-2**

All of the above and additionally:

- Be able to obtain a precise, logical and efficient history
- Be able to elicit subtle findings on physical examination
- Be able to use diagnostic procedures and therapies appropriately
- Be able to interpret results of diagnostic tests and procedures properly
- Be able to analyze clinical data to make informed decisions about patient management
- Develop and carry out patient care plans
- Ability to use information technology to assist in patient care
- Weigh alternatives for diagnosis and treatment giving consideration to patient preferences, risks, benefits, and cost
- Counsel and educate patients about pertinent health issues, tests, and treatments
- Manage multiple medical problems at once
- Be able to choose an appropriate care location for inpatient conditions
- Be able to perform most ABIM-required internal medicine procedures without supervision
PGY-3

All of the above and additionally:

- Be competent in the care of patients with the majority of internal medicine problems
- Communicate effectively with patients and families regarding treatment plans and results of testing and thoroughly educate them
- Demonstrate the ability to devote an appropriate amount of time to diagnostic reasoning and treatment as related to the complexity of the problem(s)
- Reason well in ambiguous situations
- Perform all ABIM-required internal medicine procedures without supervision
- Function as a consultant

2. Medical Knowledge

Residents are expected to:

- Demonstrate knowledge of established and evolving biomedical, clinical and social sciences, and demonstrate the application of that knowledge to patient care and education of others.
- Apply an open-minded and analytical approach to acquiring new biomedical and clinical knowledge.
- Develop applicable knowledge of the basic clinical and behavioral sciences that underlie the practice of internal medicine.
- Apply this knowledge in developing critical thinking, clinical problem-solving, and clinical decision-making skills in specific cases under their care.
- Access and critically evaluate current medical information and scientific evidence and modify knowledge base accordingly.

Teaching Attendings are selected for their demonstrated compassionate approach and clinical skills to demonstrate those behaviors in their rounds and other resident contacts. All residents take the In-service examinations each year; their progress is monitored and discussed over three years.

<table>
<thead>
<tr>
<th>Principle Educational Goals</th>
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<tbody>
<tr>
<td>Expand clinically applicable knowledge base of the basic and clinical sciences underlying the care of medical inpatients</td>
<td>DPC, AR, MR, NC, AmR, XR, EKG</td>
</tr>
</tbody>
</table>
Access and critically evaluate current medical information and scientific evidence relevant to patient care

DPC, AR, JC, NC, AmR

Medical Care Progressive Responsibilities

**PGY-1**

- Demonstrate satisfactory knowledge of common medical conditions, sufficient to manage urgent complaints with supervision
- Complete 20 out of 43 assigned Johns Hopkins Ambulatory Curriculum modules
- Begin to identify patterns of patient presentation for common medical problems
- Be able to use various educational resources to seek information about patients' diseases
- Demonstrate knowledge of common procedural indications, contraindications, risks, and benefits
- Be able to apply learned medical knowledge to diagnosis, treatment, and prevention of disease
- Ability to apply pathophysiology to patient care
- Attend conferences to continuously learn and reinforce medical knowledge and skills

**PGY-2**

All of the above and additionally:

- Complete an additional 15 out of 43 assigned Johns Hopkins Modules
- Demonstrate advancement in knowledge and analytical thinking in order to develop well-formulated differential diagnoses for patients with uncommon diseases as well as patients with multiple problems
- Demonstrate knowledge of epidemiology and social and behavioral science and be able to apply that knowledge to the care of the patient
- Ability to perform a literature search
- Understand the indications, contraindications and risks of commonly used medications and procedures
- Demonstrate leadership and teaching skills in managing daily rounds and outpatient sessions
- Attend and participate in conferences such as Morning Report to continuously learn and reinforce medical knowledge and skills
- Independently present up-to-date scientific evidence to support hypotheses
Develop knowledge of statistical principles such as sensitivity, specificity, predictive values, number needed to treat and odds ratios

PGY-3

All of the above and additionally:

- Complete an additional 15 out of 43 assigned Johns Hopkins Modules
- Regularly display self-initiative to stay current with new medical knowledge
- Demonstrate continued advancement in medical knowledge
- Demonstrate an investigatory and analytic approach to clinical situations

3. Practice Based Learning and Improvement

Residents are required to be able to efficiently access scientific literature and demonstrate competency in the application of appropriate methodology and analytical tools to improve their personal patient care practices while minimizing the possibility of making significant medical errors. Available resources at AUBMC include:

- On-line access to all major and most minor on-line journals and publications
- On-line access to Uptodate reference
- On-line access to select medical texts
- On-line access to NEJM knowledge +
- 24-hour access to the offerings of the Saab Medical Library
- 24-hour pharmacist coverage hospital-wide
- PACS system which provides on-line access to current and past radiographic imaging inclusive of formal radiologist readings
- On-line access to Electronic Health Records which include current and past dictated reports (History and physical exam, consultant reports, radiology results, Lab Results, Pathology results, Procedures done, etc…)

These modalities are available to the house staff at every computer on every floor involved in patient care. Residents receive ongoing feedback regarding their performance from attendings, nursing, pharmacists, and the in-house information technology group. Formal evaluations are performed by program director and associate program directors every six months.
Residents also are required to participate in independent clinical research with faculty under the Fellowship and Residency Research Program (FRRP).

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<thead>
<tr>
<th>Principle Educational Goals</th>
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<tbody>
<tr>
<td>Identify and acknowledge gaps in personal knowledge and skills in the care of patients</td>
<td>DPC, AR, MR, NC, AmR</td>
</tr>
<tr>
<td>Develop and implement strategies for filling gaps in knowledge and skills</td>
<td>JC, MR, AmR, DPC</td>
</tr>
</tbody>
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Practice-Based Learning and Improvement Progressive Responsibilities:

**PGY-1**

- Be self-motivated
- Be able to formulate clinical questions in the day-to-day care of patients
- Be able to locate scientific literature to assist in medical decision-making
- Be able to identify ones limitations of knowledge and skills and seek help when needed
- Accept feedback and develop self-improvement plans when appropriate
- Start to develop skills in teaching

**PGY-2**

- All of the above and additionally:
- Be able to formulate, search, and answer clinical questions using the literature
- Use an evidence-based approach to providing patient care
- Demonstrate continual self-evaluation to correct deficiencies and develop new skills
- Demonstrate teaching initiative and skills

**PGY-3**

- All of the above and additionally:
- Be able to appraise and assimilate scientific literature into daily practice
- Appropriately integrate evidence-based medicine with expert opinion and professional judgment
• Effectively and efficiently utilize consultation services to improve both patient care and self-knowledge
• Be able to analyze personal practice patterns systematically, and look to continuously improve
• Demonstrate use of teaching skills to create an effective learning environment for students and junior house staff

4. Interpersonal and Communication Skills:

Residents are expected to:

• Demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of healthcare teams
• Provide effective and professional consultation to other physicians and healthcare professionals and sustain therapeutic and ethically sound professional relationships with patients, their families, and colleagues
• Use effective listening, verbal and nonverbal, questioning, and narrative skills to communicate with patients and families
• Interact with consultants in a respectful, timely, and appropriate fashion
• Maintain comprehensive, timely, and legible medical records

History and physical exam, progress notes, consultation notes… are reviewed by their respective attending physicians, the residents in charge and regularly by the medical chief residents. Timely completeness of medical records are tracked and feedback given to residents when needed.

Interaction with patients and family members are observed by the respective attending physicians, senior residents, program directors as well as nurses and patients’ themselves to ensure residents’ communication skills are adequate and acceptable.

Residents also consistently interact with other healthcare professionals including the nursing staff, nursing administrators, and clinical case managers who participate in the "360-degree" resident evaluations on a regular basis.

<table>
<thead>
<tr>
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<tr>
<td>Communicate effectively with patients and families</td>
<td>DPC, AR, NC</td>
</tr>
<tr>
<td>Communicate effectively with physician colleagues at all levels</td>
<td>DPC, AR, NC</td>
</tr>
<tr>
<td>Communicate effectively with all non-physician members of the health care team to assure comprehensive and timely care of hospitalized patients</td>
<td>DPC</td>
</tr>
<tr>
<td>Present patient information concisely and clearly, verbally and in writing</td>
<td>DPC, AR, MR, NC</td>
</tr>
<tr>
<td>Teach colleagues effectively</td>
<td>DPC, AR, JC, MR, NC, AmR</td>
</tr>
</tbody>
</table>

Interpersonal Communication Progressive Responsibilities

**PGY-1**

- Be able to perform an accurate, thorough yet concise oral presentations regarding patient care
- Use effective listening, narrative, and non-verbal skills to elicit information from patients
- Be able to use medical terminology appropriately
- Prepare written notes (admission notes, transfer notes, progress notes, discharge summaries, etc.), which are legible and timely
- Establish rapport with patients from a variety of backgrounds
- Demonstrate proficiency in use of verbal and nonverbal skills in interactions with colleagues, nursing, and ancillary staff
- Be able to effectively communicate uncomplicated diagnostic and therapeutic plans to patients and their advocates.
- Be able to work as team members with medical students, senior residents, and attending physicians as well as with other members of the healthcare team
- When working with medical students, be able to observe students, demonstrate skills and give constructive feedback

**PGY-2**

All of the above and additionally:
• Progressively assume a leadership role, facilitating interactions between team members, including establishing expectations, and overseeing patient care
• Be able to engage patients in shared decision-making or ambiguous or controversial scenarios
• Understand the role of being a patient advocate
• Effectively discuss informed consent, resuscitation status, and death and dying with patients and families
• Should be able to negotiate most "difficult" patient
• Provide effective education and counseling to patients and families regarding health and illness
• Demonstrate an effective working relationship with other members of the healthcare team including nurses and ancillary staff

PGY-3

All of the above and additionally:

• Be able to successfully negotiate nearly all difficult patient encounters with minimal direction
• Be able to function as team leaders with decreasing reliance on attending physicians
• Be able to function as a consultant, including completion of appropriate documentation and verbal communication with the requesting physician, whether serving as a consultant for general internal medicine or when on an elective
• Be able to coordinate and communicate care with consultants
• Be able to demonstrate the development of long term professional relationships with patients

5. Professionalism

Residents are expected to:

• Demonstrate behaviors that reflect a commitment to continuous professional development, ethical practice, an understanding and sensitivity to diversity, and a responsible attitude towards their patients, their profession, and society
• Demonstrate respect, compassion, integrity, and altruism in their relationships with patients, families, and colleagues
- Demonstrate sensitivity and responsiveness to patients and colleagues, including gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities
- Adhere to principles of confidentiality, scientific/academic integrity, and informed consent
- Recognize, identify and modify deficiencies in peer performance when in a supervising position

Residents should behave professionally towards patients, families, colleagues, and all members of the Healthcare team. This is evaluated by:

- Residents evaluations of one another (PGY-1 of PGY2-3 and PGY-2+3 of PGY-1) to help evaluate peer interactions
- 360-degree evaluations by nurses to help evaluate residents’ relationships with the nursing staff
- 360-degree evaluation by patients to help evaluate the residents interaction with their patients
- Residents also attend and participate in the Salim el Hoss professionalism ethics & conferences

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<thead>
<tr>
<th>Principle Educational Goals</th>
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<tbody>
<tr>
<td>Behave professionally toward patients, families, colleagues, and all members of the health care team</td>
<td>AR, DPC, MR, NC</td>
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Professionalism Progressive Responsibilities

**PGY-1**

- Demonstrate respect and compassion in interactions with patients and their families, colleagues, and other members of the health care team
- Demonstrate respect, compassion, integrity, and honesty
- Be responsible for the safety and wellbeing of patients, colleagues and staff
- Appropriately maintaining patient confidentiality
- Responding in a timely manner to staff needs including pages and abnormal lab tests
- Following directions
- Completing tasks assigned
- Maintaining a professional appearance
• Being punctual
• Showing responsibility for meeting program requirements

PGY-2

All of the above and additionally:

• Display initiative and leadership in his/her daily role as a resident physician
• Demonstrate commitment to ethical principles including but not limited to patient confidentiality, informed consent, and business practices
• Demonstrate sensitivity to patient culture, gender, age, preferences, and disabilities
• Demonstrate progress in meeting some or most program requirements including the completion of scholarly projects
• Display initiative in career planning after the completion of residency
• Exhibit concern for the educational development of fellow residents and students
• Provide leadership
• Willing to help colleagues

PGY-3

All of the above and additionally:

• Be able to act appropriately in the role of a medical consultant
• Demonstrate progress in meeting all program requirements
• Function as team leader with decreasing reliance on attending physicians
• Being a self-directed learner
• Function as a role model

6. Systems-Based Practice:

Residents are required to develop an understanding of healthcare systems within which they operate, as well as the legitimate time and monetary constraints inherent to such systems. Likewise they are required to employ the tools and techniques with which they are provided during initials orientation to control costs and ensure equitable allocation of resources while attempting to negate detrimental impact on patients and/or patient families.

These systems based practices include, but are not limited to:
a. Early identification of patients with the potential for discharge within 24–48 hours
b. Discussion of pertinent discharge issues with attending physicians on the evening prior to the anticipated discharge date
c. Conveying the discharge plan to patients as well as affiliated staff the evening prior to the anticipated discharge date
d. Preparation and provision of appropriate patient/facility discharge instructions and transfer of care documents as completely as possible the evening prior to the anticipated discharge date
e. Use of clear, simplified "layman’s" terms when preparing instructions meant to be understood by patients
f. Ensuring patient understanding of any pharmaceutical or therapeutic modifications instituted during the course of admission

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<thead>
<tr>
<th>Principle Education Goals</th>
<th>Learning Activities</th>
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<tbody>
<tr>
<td>Understand and utilize the multidisciplinary resources necessary to care optimally for</td>
<td>DPC, NC, MR</td>
</tr>
<tr>
<td>hospitalized patients</td>
<td></td>
</tr>
<tr>
<td>Collaborate with other members of the healthcare team to assure comprehensive patient</td>
<td>DPC</td>
</tr>
<tr>
<td>care</td>
<td></td>
</tr>
<tr>
<td>Use evidence-based, cost-conscious strategies in the care of hospitalized patients</td>
<td>DPC, AmR, MR, JC, NC</td>
</tr>
</tbody>
</table>

Systems Based Practice Progressive Responsibilities:

**PGY-1**

- Meet requirements of medical practice at AUB-MC including: timely notes, timely evaluations of attendings, peers and others
- Display sensitivity to costs and be able to incorporate fundamental cost-effective analysis into care approaches, minimizing unnecessary care
- Assist patients in dealing with system complexity
- Be able recognize system problems
PGY-2

All of the above and additionally:

- Work well with their core team that includes other physicians, nurses, therapists and other healthcare professionals to assess, coordinate and improve patient care
- Be able to guide patients and families through the complex healthcare environment
- Demonstrate effective and timely participation in the system-approach to outpatient follow-up in order to improve the quality of patient care delivery in the outpatient setting
- Demonstrate a basic understanding of the methods of controlling healthcare costs and appropriate allocation of resources

PGY-3

All of the above and additionally:

1. Demonstrate the ability to adapt to change
2. Be able to effectively coordinate care with other healthcare providers as needed
3. Demonstrate familiarity of utilization of resources that assist with patient care and disposition
4. Develop an understanding of medical delivery systems, including alternative care resources, ambulatory care resources, rehabilitation resources and continuing care resources
5. Be able to practice effective allocation of health care resources that does not compromise the quality of care
6. Provide improvement opportunities for the healthcare system
III. ROTATION CURRICULA

A. GENERAL MEDICAL FLOOR

The purpose of this rotation is to introduce and familiarize the resident in managing patients with a variety of diseases in general internal medicine as well as subspecialties which need inpatient level of care. The inpatient team takes care of patients with both general medical and subspecialty problems across the full age range from adolescence to the elderly. Residents develop diagnostic and therapeutic management plans in collaboration with the attending physician and a teaching attending. Residents are expected to gain the essential knowledge, skills and attitudes expected of physicians managing a hospitalized patient in a general medical ward. Core competencies in the general medical ward include the most common and fundamental elements of inpatient medical care without exhaustively listing every clinical entity encountered.

Currently we have 9 general medical teams:
- Seven teams at AUBMC: team 9 South, team 9 North, Team 5 South, team 10 south, Team 10 North and 2 teams on the 8th floor.
- Two teams at Makassed General Hospital (MGH)

Description of Rotation

- The General medical (GM) team consists of one attending physician, one second-year resident (PGY2) or Third year resident (PGY3) and 1-3 first-year residents (PGY1). Medical students are also part of the team (3-6 per team).
- PGY2-3s are in charge of leading the morning round, assigning the cases to the students and interns, setting a plan of care for the day, coordinating the sign-out rounds, as well as teaching the juniors. They take in-hospital calls every third till 8h00pm.
- Each resident presents 1-2 morning reports per month.
- The PGY1s alternate admissions from 7:30 am to 2:00 pm and supervise students’ work. They also are in charge of the critical patients on the floor. The on-call PGY1 admits patients from 2:00 pm till 8 pm.
- When on call, PGY2 and PGY3 residents respond to all cardiac arrests on the floors, and participate in ACLS resuscitation efforts.
- The float team takes charge of admissions overnight. The float resident is second call on all patients and responds to cardiac arrests. The float interns are first call in 5S, BMT unit, team 10 and are in charge of all critical patients on the floors.
- Structure of the day at AUB-MC
  - 6:45-7:30: Float Sign out and pre-round
  - 7:30-9:30: Multidisciplinary Morning Management Round*
  - 9:30-10:30: Morning Report
  - 10:30-13:00: Attend to patient care*
  - 13:00- 14:00: Teaching Activity
14:00-15:30: Attend to patient care*
15:30-17:00: Afternoon Chart Round/Sign out Round/Teaching Round*

*The attending of the month can choose to meet with the team during the morning round, between rounds or during the afternoon round to perform either bedside teaching or case presentation and discussion.

- Structure of the day at MGH
  7:00-7:30: sign out and pre-round
  7:30-9:30: Morning round*
  9:30-10:30: Morning Report
  10:30-12:00: Attend to patient care*
  12:00-13:00: Teaching Activity**
  13:00-16:30: Attend to patient care* and sign out round*

*The attending of the month can choose to meet with the team during the morning round, between rounds or during the afternoon round to perform either bedside teaching or case presentation and discussion.
**Residents rotating in MGH attend teaching activities daily in MGH except for Tuesdays when they attend medical grand rounds in AUBMC.

**PRINCIPAL LEARNING ACTIVITIES**

Noon Conferences (NC)
Attending Rounds (AR)
Directly Supervised Procedures - (DSP)
Morning report (MR)
Medical Jeopardy (MJ)
Journal Club (JC)
Ambulatory report (AmR)
Radiology Sessions (XR)
EKG Sessions (EKG)
Chairman rounds (Chair)

**Principle Evaluation Methods**

CR- Chairman’s round evaluation
DSP – Directly Supervised Procedures

GA – Global assessment by attending (myevaluation.com)

NE – Nursing evaluation

PDR – Program Director’s Review (or associate program directors) (twice annually)

PRE – Peer evaluation

PTE – Patient-to-Resident Evaluation

MR – Morning Report Evaluation

ISE – In-service examination

PL – Procedure Log

Goals of the Rotation

-To deliver compassionate and evidence-based care for common internal medicine conditions such as insulin therapy, management of abnormal blood glucose levels, elevated blood pressure, pneumonia, COPD…
- To be able to manage patients with multiple co-morbidities
- To develop skills in coordination of care, and transition of care from the inpatient setting to the outpatient setting
- To initiate workup and management of fever, anemia, acute renal failure, impaired level of consciousness…
- To demonstrate understanding of the risks and costs of different testing and interventional strategies.
- To develop skills in performance of common procedures including central venous catheter placement, endotracheal intubation, thoracentesis, abdominal paracentesis…
- To develop teaching skills.
- To improve medical knowledge and patient care related skills

The major responsibility of the PGY1 resident is to pre-round independently on their patients and seek advice from their supervising senior resident when necessary. The PGY1 resident will formulate his/her own differential diagnosis, management plan, and discuss these aspects with the rest of the team during rounds. The responsibility of the senior resident (PGY2 or PGY 3) is to supervise and teach junior residents (PGY1) and medical students and communicate with the attending when further guidance is needed. These situations include when there is sudden unexpected worsening of a patient’s condition, when a patient is transferred to a higher level of care and when a patient arrests. The senior resident is also responsible of making sure that the team is punctual to all teaching activities.
## I. Patient Care

<table>
<thead>
<tr>
<th>Principal Educational Goals</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to take a complete medical history and perform a careful and accurate physical examination.</td>
<td>DPC, RWR, MR</td>
<td>MR, GA</td>
<td>PGY1</td>
</tr>
<tr>
<td>Ability to write concise, accurate and informative histories, physical examinations and progress notes</td>
<td>DPC, AR, Chair, RWR, CC</td>
<td>GA, Chair</td>
<td>PGY1</td>
</tr>
<tr>
<td>Define and prioritize patients’ medical problems and generate appropriate differential diagnoses.</td>
<td>DPC, AR, RWR, MR</td>
<td>GA, PRE, MR</td>
<td>PGY1</td>
</tr>
<tr>
<td>Develop rational, evidence-based management strategies.</td>
<td>DPC, AR, CC, RWR, MR</td>
<td>GA, MR</td>
<td>PGY2</td>
</tr>
<tr>
<td>Ability to perform basic procedures: venipuncture, arterial puncture, placement of central venous lines, lumbar puncture, abdominal paracentesis, thoracentesis, arthrocentesis, nasogastric intubation, and endotrachael intubation.</td>
<td>DSP</td>
<td>PL, PDR</td>
<td>Refer to promotion criteria and list of procedure</td>
</tr>
<tr>
<td>Participation and later* leadership of discussions of end-of life issues with families.</td>
<td>DPC, AR, RWR, CC</td>
<td>GA, PRE</td>
<td>PGY1, PGY2,<em>PGY3</em></td>
</tr>
</tbody>
</table>

## II. Medical Knowledge

<table>
<thead>
<tr>
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<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand clinically applicable knowledge base of the basic and clinical sciences underlying the care of medical patients.</td>
<td>AR, RWR, DPC, CC, MR</td>
<td>GA, MR, PRE, ISE</td>
<td>PGY1</td>
</tr>
<tr>
<td>Access and critically evaluate current medical information and scientific evidence relevant to patient care.</td>
<td>AR, RWR, DPC, CC, MR</td>
<td>GA, MR, PRE, ISE</td>
<td>PGY1</td>
</tr>
</tbody>
</table>
### III. Practice- Based Learning and Improvement

<table>
<thead>
<tr>
<th>Principal Educational Goals</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate effectively with patients and families.</td>
<td>AR, RWR, DPC, CC</td>
<td>GA, PRE, patient evaluation</td>
<td>PGY 1 2</td>
</tr>
<tr>
<td>Communicate effectively with physician colleagues at all levels.</td>
<td>AR, RWR, DPC, CC</td>
<td>GA, PRE</td>
<td>PGY 1 2</td>
</tr>
<tr>
<td>Communicate effectively with all non-physician members of the health care team to assure</td>
<td>AR, RWR, DPC, CC</td>
<td>GA, PRE, NE</td>
<td>PGY 1 2</td>
</tr>
</tbody>
</table>
comprehensive and timely care of hospitalized patients.  
Present information concisely and clearly both verbally and in writing on patients.

<table>
<thead>
<tr>
<th>Principal Educational Goals</th>
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<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand and utilize the multidisciplinary resources necessary to care optimally for hospitalized patients.</td>
<td>AR, RWR, DPC</td>
<td>PRE, GA, NE</td>
<td>PGY 2</td>
</tr>
<tr>
<td>Use evidence-based, cost-conscious strategies in the care of hospitalized patients.</td>
<td>AR, RWR, DPC, CC, journal club, MR</td>
<td>PRE, GA, journal club, MR</td>
<td>PGY 2</td>
</tr>
<tr>
<td>Understanding when to ask for help and advice from senior residents and attending physicians.</td>
<td>RWR, AR, DPC</td>
<td>PRE, GA</td>
<td>PGY1</td>
</tr>
<tr>
<td>Effective collaboration with other members of the health care team, including residents at all levels, medical students, nurses, clinical pharmacists, occupational therapists, physical therapists, nutrition specialists, patient educators, pathologists, respiratory therapists, enterostomy nurses, social workers, case managers, discharge planners, clinical pharmacists and providers of home health services.</td>
<td>AR, RWR, DPC</td>
<td>PRE, GA, NE</td>
<td>PGY 1 2</td>
</tr>
<tr>
<td>Knowing when and how to request medical subspecialist, and how best to utilize the advice provided.</td>
<td>AR, RWR, DPC</td>
<td>PRE, GA</td>
<td>PGY 2</td>
</tr>
</tbody>
</table>
Knowing when and how to request ethics consultation, and how best to utilize the advice provided.

| **AR, RWR, DPC, palliative care rounds, CC** | **PRE, GA** | **PGY 2 3** |

Consideration of the cost-effectiveness of diagnostic and treatment strategies.

| **AR, RWR, DPC** | **PRE, GA** | **PGY 2** |

Willingness and ability to teach medical students and PG-1 residents

| **AR, RWR, DPC, Teaching workshops** | **PRE, GA** | **PGY 2/3** |

Leadership of team, including PG-1 residents, medical students, nurses, clinical pharmacists, case manager, and social worker.

| **AR, RWR, DPC, Teaching workshops** | **PRE, GA, NE** | **PGY 2/3** |

V. Professionalism

<table>
<thead>
<tr>
<th><strong>Principal Educational Goals</strong></th>
<th><strong>Learning Environments</strong></th>
<th><strong>Evaluation Methods</strong></th>
<th><strong>Expected Year of Proficiency</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interact professionally towards patients, families, colleagues, and all members of the health care team.</td>
<td>AR, RWR, DPC</td>
<td>PDR, PRE GA, patient evaluation</td>
<td>PGY 1</td>
</tr>
<tr>
<td>Acceptance of professional responsibility as the primary care physician for patients under his/her care</td>
<td>AR, RWR, DPC</td>
<td>PDR, PRE , GA</td>
<td>PGY 2</td>
</tr>
<tr>
<td>Appreciation of the social context of illness.</td>
<td>AR, RWR, DPC, palliative care rounds</td>
<td>PRE GA</td>
<td>PGY 2 3</td>
</tr>
<tr>
<td>Understand ethical concepts of confidentiality, consent, autonomy and justice.</td>
<td>AR, RWR, DPC, CC, palliative care rounds</td>
<td>PRE, GA</td>
<td>PGY 2 3</td>
</tr>
</tbody>
</table>
### VI. Interpersonal and Communication Skills

<table>
<thead>
<tr>
<th>Principal Educational Goals</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate effectively with patients and families.</td>
<td>AR, RWR, DPC, CC</td>
<td>PRE, GA, NE, patient evaluation</td>
<td>PGY 2</td>
</tr>
<tr>
<td>Communicate effectively with physician colleagues at all levels.</td>
<td>AR, RWR, DPC</td>
<td>PDR, PRE, GA, NE</td>
<td>PGY 1</td>
</tr>
<tr>
<td>Communicate effectively with all non-physician members of the health care team to assure comprehensive and timely care of hospitalized patients.</td>
<td>AR, RWR, DPC</td>
<td>PDR, PRE, GA, NE</td>
<td>PGY 2</td>
</tr>
<tr>
<td>Present information concisely and clearly both verbally and in writing on patients.</td>
<td>AR, RWR, DPC, Chair, MR</td>
<td>PDR, PRE, GA, Chair, MR</td>
<td>PGY 1</td>
</tr>
</tbody>
</table>
A. Rotation Specific Objectives and Goals

PGY 1:

1) Interns will develop the skills to evaluate, diagnose and manage patients requiring hospitalization on the Internal Medicine service under the supervision of residents and teaching attending physicians.

Teaching methods:

- Supervised bedside encounters
- Call duties with residents
- Working rounds with residents
- Attending rounds
- Noon Conferences
- Grand Rounds

Evaluation Methods:

- Attending observation
- GA
- PRE
- NE
- Medical record review
- Morning report attendance
- Noon conference attendance

Interns will:

- Recognize common clinical presentations and cardinal manifestations of disease to formulate initial clinical impression and a prioritized patient care plan
• Demonstrate comprehensive evaluation, presentation, documentation and basic decision-making skills including history taking, physical examination, laboratory evaluation, diagnosis and patient management
• Effectively employ medical knowledge to manage patients at the time of admission and during hospitalization under the supervision of resident and attending physician
• Appropriately select, order and interpret laboratory tests and other ancillary resources necessary for the evaluation and management of inpatients
• Recognize the requirement for consultation from another specialty or a subspecialty service and learn to apply recommendations appropriately to the care of the patients
• Recognize the appropriate timing of and learn to carry out, when indicated, end-of-life care/difficult situation discussions with patients and their families under supervision of the attending physician

2) Interns will learn to perform diagnostic and therapeutic procedures as indicated for the care of their patients

Interns will:

• Plan and perform in a safe manner the appropriate diagnostic and therapeutic procedures necessary for the evaluation and management of inpatients and learn to obtain informed consent

Teaching methods:

• Perform procedures under direct supervision of resident and attending

Evaluation methods:

• PL
• PDR

3) Interns will develop the skills to teach medical students

Interns will:

• Participate actively in all the teaching activities directed towards medical students on the team and demonstrate proficiency in teaching
Teaching methods

- Teaching workshops
- Observation of resident/attending
- Bedside encounters with students
- Work rounds with students
- Call duty with students
- Attending rounds

Evaluation methods:

- PDR
- GA
- PRE

4) Interns will learn to effectively employ interpersonal and communication skills in a professional manner

Interns will:

- Demonstrate exemplary attitude and develop effective communication skills towards patients, their families, colleagues and members of the multidisciplinary medical team including support staff, and learn to apply these skills to improve patient care and own performance by asking supervisors for feedback

Teaching methods:

- Observation of resident/attending
- Bedside patient encounters
- Case presentations
- Meetings with patients’ families
- Multidisciplinary rounds

Evaluation methods:

- GA
Internal Medicine Residency Training Program Curriculum

- PRE
- PDR
- NE
- Patient evaluation

PGY 2 & 3:

1) The resident will demonstrate the skills and proficiency required to independently evaluate, diagnose and manage patients requiring hospitalization on the Internal Medicine service.

Residents will:

- Recognize common clinical presentations and cardinal manifestations of disease to consider a broad differential diagnosis, formulate initial clinical impression, and employ a prioritized patient care plan.
- Demonstrate independent and comprehensive evaluation, presentation, documentation and patient management skills, including history taking, physical examination, laboratory evaluation, diagnosis and patient care, including longitudinal care plan to transition to outpatient care.
- Effectively apply medical knowledge to independently manage patients at the time of admission and during hospitalization and exhibit the ability for independent decision-making and patient care plans for a larger number of patients.
- Appropriately select, order and interpret laboratory tests and utilize other ancillary resources in an independent manner necessary for the evaluation and management of inpatients.
- Recognize the appropriate requirement for consultation from another specialty or a subspecialty service, communicate effectively with consultants, and apply recommendations appropriately to the care of patients.
- Recognize acute deterioration and manage appropriately.
- Recognize the appropriate timing of and learn to carry out when indicated, end-of-life care and difficult situation discussions with patients and their families.

Teaching methods:

- Bedside patient encounters
- Attending rounds
- Resident morning report
- Noon Conference
- Grand Rounds

Evaluation methods:

- Attending observation
- GA
- PRE
- PDR
- NE
- Medical record review
- Noon conference attendance

2) The resident will demonstrate the skills to safely and independently perform diagnostic and therapeutic procedures and teach junior trainees as needed

Residents will:

- Perform the appropriate diagnostic and therapeutic procedures necessary for the evaluation and management of inpatients in a safe manner, obtain informed consent prior to procedures and teach junior trainees

Teaching methods:

- Observation of procedure
- Perform procedure under supervision of fellows and/or attending

Evaluation methods:

- Attending observation
- PL
- PDR

3) The resident will effectively teach more junior colleagues and peers including interns and medical students in the capacity of the General Medicine team leader
Residents will:

- Demonstrate proficiency in teaching junior trainees including interns and medical students on the team, as well as peers and colleagues during scholarly activities, including giving constructive feedback to more junior trainees
- Function as an effective General Medicine team leader, applying leadership skills to teach and to deliver excellent patient care

Teaching methods:

- Observation of attending
- Bedside encounters with interns
- Bedside encounters with students
- Work rounds with interns/students
- Call duty with interns/students
- Attending rounds
- Noon conferences
- Teaching workshop

Evaluation methods:

- Attending observation
- PRE
- GA
- PDR

4) The resident will effectively utilize interpersonal and communication skills in a professional manner and, in doing so, improve patient care and set an example to junior trainees on the team

- Demonstrate exemplary attitude and effective communication skills towards patients, their families, colleagues and members of the multidisciplinary medical team including support staff, and learn to apply these skills to improve patient care and own performance by asking supervisors for feedback and by providing junior trainees with constructive feedback

Teaching methods:

- Observation of attending
- Attending round
• Bedside patient encounters
• Case presentations
• Meetings with patients’ families
• Multidisciplinary rounds
• Teaching Workshop

Evaluation methods:

• Attending observation
• PRE
• GA
• PDR
B. AMBULATORY PROGRAM

The ambulatory curriculum consists of a geriatrics rotation (1 month in PGY1 and 1 month in PGY3), continuity clinics (1 afternoon per week throughout the 3 years), outpatient department rotation (1 month in PGY1, 1 month in PGY2 and 1 month in PGY3), Makhzoumi Clinic Foundation for the PGY3 residents, as well as electives.

While on subspecialty consultation service during electives, the resident will have 2 half-day clinics with a subspecialist per week.

Residents also are exposed to family medicine clinics once or twice per month during OPD and geriatrics rotations (for PGY1s) and twice per week during OPD rotation (for PGY 3s).

Also, residents are required to pass 50 John Hopkins’s modules on ambulatory topics by the time of graduation.

Interns are required to present an ambulatory report once per year about a case encountered in the outpatient department and review the differential diagnosis, the approach, and the management as per the literature.

Overall Educational Purpose
1) Provide an educational experience in Ambulatory General Internal Medicine (GIM) and Medicine subspecialties, emphasizing the diagnosis and management of both chronic and acute problems encountered in a GIM practice.
2) Foster continuity of care by providing comprehensive, coordinated care.
3) Develop an appreciation for the importance of the physician-patient relationship, patient advocacy, case management and continuity of care.
4) Develop an understanding of the economic issues related to medical care and practice in a cost-effective and efficient manner.
5) Understand the social and psychiatric implications of illness.
6) Obtain knowledge of disease prevention and screening measures for individual patients and populations.

Continuity Clinic

Goals:
1) Ongoing longitudinal care for a panel of GIM patients, with the scope of all problems encountered in GIM.
2) Close mentoring relationship with a faculty member.
3) Increased independence in the care of the patient as clinical experience is gained.
4) Function as a “junior partner,” being fully integrated into the GIM practices.
5) Viewed as a primary provider by patients.
**Organization:**
1) Residents are paired with one faculty preceptor for their entire training, and together, they provide longitudinal care for a panel of patients. This allows for close and continuous observation of the residents’ skills by the preceptor.
2) Continuity clinic time is a protected time, in that residents sign out their pagers to a covering physician on their clinic day.
3) Residents will have two-hours clinic session per week. Clinic time is fixed throughout the 3 years of training.
4) Schedules will have a blend of new and returning patients, with an increasing number of patients as residents gain clinical experience. Patients have a wide variety of medical complaints and concerns.
4) The preceptor will discuss each case with the resident, see patients, review history and physical findings as needed and formulate a plan of care with the resident.
5) After finalization of all cases, the preceptor will discuss with the residents the approach to one ambulatory problem (preferably from the John Hopkins’s modules curriculum).

**Outpatient Department Rotation**

**Goals:**
1) Residents will learn the management of common problems encountered in GIM practice.
2) Residents will be able to perform problem-focused evaluations in an efficient manner.
3) Residents will learn how to perform pre-operative evaluations in the ambulatory setting.
4) Residents will be provided an educational experience in the ambulatory practice of medicine sub-specialties.
5) Case presentation and review of a topic important to GIM practice.
6) Obtain increased skills in detection and management of psychiatric issues in GIM practice.
7) Exposure to several different GIM faculty, as well as subspecialty faculty.
8) Provide an educational experience in GIM community practice settings. This will provide exposure to community medicine physicians and role models, different practice models and practice styles and aid in future career planning.
9) Supervise and aid students in developing history and physical exam skills

**Organization:**
This is a four-week rotation at AUBMC outpatient department three times during the 3 years of training.
It entails evaluation of patients with acute medical problems, preoperative evaluation, urgent care or emergency room follow-ups and patients referred from other services for evaluation of medical problems. GIM faculty (typically physicians other than the resident’s continuity preceptor) discuss and see patients with the residents.

Residents continue participating in Continuity Clinics weekly.

**Topics Expected to be covered**
- Comprehensive health maintenance in the outpatient setting
  - Fatigue
  - Anorexia, weight loss
  - Dysphagia
  - Headache
  - Dyspnea
  - Cough, hemoptysis
  - Edema
  - Polyuria, polydipsia
  - Chest pain
  - Palpitations
  - Abdominal pain
  - Nausea, vomiting
  - Diarrhea
  - Back pain
  - Joint pain
  - Dizziness and vertigo
  - Syncope
  - Vision loss, diplopia
  - Hearing loss
  - Paralysis
  - Gait imbalance
  - Sensory loss
  - Memory loss
  - Rash
  - Bleeding, bruising
  - Physical examination abnormalities
  - High blood pressure
  - Hypoxia
- Tachycardia
- Fever
- Obesity / low weight
- Jaundice
- Breast mass
- Abdominal mass
- Heart murmur
- Wheezing/ronchi/rales
- Anasarca
- Ascites
- Hepatomegaly
- Lymphadenopathy
- Splenomegaly
- Ecchymosis, petechia
- Motor weakness
- Sensory loss
- Ataxia and nystagmus
- Memory loss/cognitive changes
- Rash

**Laboratory test abnormalities**
- Hyperglycemia,
- Elevated Hb A1c
- Anemia
- Elevated PT and PTT
- Electrolyte abnormalities
- Abnormal liver function studies
- Elevated total protein/ globulins
- Proteinuria
- Stool occult blood positive
- Elevated PSA
- Abnormal thyroid functions
- Abnormal mammogram
- Abnormal CXR
- Acid-base imbalance
- Renal failure
- Abnormal DEXA
- Abnormal CT/MRI radiographic studies

**Learning Environments:**
- Ambulatory report (AMR)
- CC Continuity Clinic
- Geriatric wards and Geriatrics OPD on Fridays
- GMC General Medicine Clinic (during Ambulatory block)
- GR Grand Rounds
- JC Journal Club
- John Hopkins outpatient module (JH)
- NC Noon Conferences
- SAC Subspecialty ambulatory clinics
- EKG and Radiology sessions

**Evaluation Methods:**
- Continuity Clinic preceptor evaluation
- ER physician evaluation
- Geriatrics Attending Evaluation
- ISE In-service exam
- Journal Club Evaluation
- PDR Program Director Review
- Resident’s self-Evaluation RSE

**Patient Care**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take a complete or symptom-directed history, including family, social and</td>
<td>CC</td>
<td>CC preceptor evaluation</td>
<td>PGY-1</td>
</tr>
<tr>
<td>sexual history</td>
<td>GMC</td>
<td>ER physician evaluation</td>
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<tr>
<td></td>
<td>SAC</td>
<td>Geriatrics Attending Evaluation</td>
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<td></td>
<td>ER</td>
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<tr>
<td></td>
<td>Geriatrics wards</td>
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</tr>
<tr>
<td>Objective</td>
<td>Learning Environment</td>
<td>Evaluation Method</td>
<td>Year to be mastered</td>
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</tr>
<tr>
<td>Perform a complete or symptom-directed physical exam</td>
<td>CC GMC SAC ER Geriatrics wards</td>
<td>CC preceptor evaluation CR ER physician evaluation Geriatrics Attending Evaluation</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Generate a cost-effective evaluation and management plan</td>
<td>CC GMC SAC ER Geriatrics wards</td>
<td>CC preceptor evaluation CR ER physician evaluation Geriatrics Attending Evaluation</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Communicate the assessment and management plan to patient and family members and negotiate the treatment plan with the patient</td>
<td>CC GMC SAC ER Geriatrics wards</td>
<td>CC preceptor evaluation CR ER physician evaluation Geriatrics Attending Evaluation</td>
<td>PGY 2</td>
</tr>
<tr>
<td>Document the evaluation in the medical record in a clear and organized manner</td>
<td>CC GMC SAC ER Geriatrics wards</td>
<td>CC preceptor evaluation CR ER physician evaluation Geriatrics Attending Evaluation</td>
<td>PGY 1</td>
</tr>
</tbody>
</table>

**Medical Knowledge**
### Able to apply new medical knowledge to ambulatory care

| CC  | GMC | SAC | AMR | GR | ER | Geriatrics wards | NC  | JC  | JH  | CC preceptor evaluation | CR | ER physician evaluation | Geriatrics Attending Evaluation | ISE | Journal Club Evaluation | PGY-3 |

### Obtain a basic understanding of epidemiology and biostatistics to enable critical review of medical literature

| AMR | JC  | JH  | NC  | ISE | Journal Club Evaluation | PGY-3 |

### Obtain knowledge in screening guidelines, preventive medicine and immunizations

| GMC | NC  | AMR | JH  | CC  | Geriatrics wards | ISE | CC preceptor evaluation | Geriatrics Attending Evaluation | PGY-2 |

### Able to research an ambulatory topic, find supporting information in medical literature and present to colleagues

| AMR | CC preceptor evaluation | PGY-1 |

### Practice-Based Learning and Improvement

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
</tr>
</thead>
</table>

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P. BouKhalil, S. Abi Doumeh, A. Berjawi, J. Mhanna. 2019  Page 45
| Analyze lab test results and develop follow-up plan | CC | GMC | SAC | ER | Geriatrics wards | CC preceptor evaluation | ER physician evaluation | Geriatrics Attending Evaluation | PGY-1 |
| Analyze own practice/documentation | CC | GMC | SAC | ER | Geriatrics wards | RSE | | | PGY-2 |
| Demonstrate teaching skills for patient education | CC | ER | GMC | SAC | Geriatrics Wards | CC preceptor evaluation | ER physician evaluation | Geriatrics Attending Evaluation | PGY-2 |
| Utilize evidence from studies and apply research and statistical methods to clinical care | AMR | JH | JC | CC | NC | Journal Club Evaluation | CC preceptor evaluation | | PGY-2 |

### Interpersonal and Communication Skills

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
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</table>

P. BouKhalil, S. Abi Doumeth, A. Berjawi, J. Mhanna. 2019
<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate effectively with patients and families</td>
<td>CC GMC SAC Geriatrics Wards ER</td>
<td>CC preceptor evaluation ER physician evaluation Geriatrics Attending Evaluation</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Communicate effectively with support staff in outpatient clinics</td>
<td>CC GMC SAC Geriatrics Wards</td>
<td>CC preceptor evaluation Geriatrics Attending Evaluation</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Communicate effectively with physician colleagues at all levels</td>
<td>CC GMC SAC ER Geriatric Ward</td>
<td>CC preceptor evaluation Geriatrics Attending Evaluation ER physician evaluation</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Present patient information concisely and clearly, verbally and in writing</td>
<td>CC GMC SAC AMR ER Geriatric Ward</td>
<td>CC preceptor evaluation Geriatrics Attending Evaluation ER physician evaluation</td>
<td>PGY-1</td>
</tr>
</tbody>
</table>

**Professionalism**
Demonstrate altruistic behavior

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC GMC SAC ER</td>
<td>CC preceptor evaluation</td>
<td>Geriatrics Attending Evaluation ER physician evaluation</td>
<td>PGY 1</td>
</tr>
<tr>
<td>Geriatric Ward</td>
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</table>

Understand and respect patient confidentiality

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
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<tbody>
<tr>
<td>CC GMC SAC ER</td>
<td>CC preceptor evaluation</td>
<td>Geriatrics Attending Evaluation ER physician evaluation</td>
<td>PGY 1</td>
</tr>
<tr>
<td>Geriatric Ward</td>
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</table>

Respect other colleagues

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
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<tbody>
<tr>
<td>CC GMC SAC ER</td>
<td>CC preceptor evaluation</td>
<td>Geriatrics Attending Evaluation ER physician evaluation</td>
<td>PGY 1</td>
</tr>
<tr>
<td>Geriatric Ward</td>
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</table>

Systems-Based Practice

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environment</th>
<th>Evaluation Method</th>
<th>Year to be mastered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate the ability to mobilize</td>
<td>CC GMC SAC ER</td>
<td>CC preceptor evaluation</td>
<td>PGY 1</td>
</tr>
</tbody>
</table>
| resources within AUBMC to optimize health care delivery | Geriatric Ward | Geriatrics Attending Evaluation  
ER physician evaluation |
|--------------------------------------------------------|----------------|------------------------------------------------------------------|
| Demonstrate the ability to work as a member of a larger health care team | CC GMC SAC ER  
Geriatric Ward | CC preceptor evaluation  
Geriatrics Attending Evaluation  
ER physician evaluation |
|--------------------------------------------------------|----------------|------------------------------------------------------------------|
| Demonstrate the ability to identify and manage a panel of primary care patients | CC GMC SAC ER  
Geriatric Ward | CC preceptor evaluation  
Geriatrics Attending Evaluation  
ER physician evaluation |

**Rotation Specific Objectives and goals**
**GOAL:** The residents will learn the initial evaluation, diagnosis, management and follow-up of patients with commonly encountered acute and chronic general medical conditions and deliver health maintenance care

**LEARNING OBJECTIVES**
- **M**- manage
- **C**- co-manage with subspecialist
- **R**- refer

**Evaluation Methods**
- CC preceptor evaluation

<p>| OUTPATIENT MANAGEMENT OF                  |  | Evaluation Methods |
|------------------------------------------|  |--------------------|
| Hypertension                             | M or C  | Geriatrics Attending Evaluation |
| Hyperlipidemia                           | M       | ER physician evaluation |
| Diabetes mellitus                        | M or C  |                     |
| Upper respiratory tract infection        | M       |                     |
| Pneumonia                                | M       |                     |
| Urinary tract infection                  | M       |                     |
| Sexually transmitted diseases           | M       |                     |
| Gastroenteritis                          | M       |                     |
| Peptic ulcer disease                     | M or C  |                     |
| GERD                                     | M or C  |                     |</p>
<table>
<thead>
<tr>
<th>Condition</th>
<th>M or C</th>
<th>R</th>
<th>M or R</th>
<th>C or R</th>
<th>M</th>
<th>C or R</th>
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<tbody>
<tr>
<td>Diarrhea/constipation</td>
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<td>Coronary artery disease</td>
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<td>Congestive heart failure</td>
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<td>Asthma and COPD</td>
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<td>Thyroid disorders</td>
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<td>Chronic non-malignant pain</td>
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<td>Fibromyalgia</td>
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<td>Rheumatoid arthritis and SLE</td>
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<td>Anticoagulation</td>
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<td>Musculoskeletal complaints</td>
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<td>Rash</td>
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</table>

**WOMEN’S HEALTH**

<table>
<thead>
<tr>
<th>Condition</th>
<th>M or C</th>
<th>R</th>
<th>M or R</th>
<th>C or R</th>
<th>M</th>
<th>C or R</th>
<th>M</th>
<th>C or R</th>
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</thead>
<tbody>
<tr>
<td>Medical problems in pregnancy</td>
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<tr>
<td>Dysfunctional uterine bleeding</td>
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<tr>
<td>Contraception</td>
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<td></td>
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<tr>
<td>Menopause-associated issues</td>
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<tr>
<td>Osteoporosis</td>
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<tr>
<td>Breast mass</td>
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</table>
C. FLOAT ROTATION

General Description

This float rotation is designed to familiarize the residents and interns in managing inpatients with a variety of diseases in general internal medicine as well as subspecialties. The float team takes care of patients with both general medical and subspecialty problems across the full age range from adolescence to the elderly. While on float rotation, residents and interns are only required to present one morning report (overnight admitted cases).

Structure of the rotation

- The float rotation is a 1 month – rotation divided into 2 week – rotation
- Only PGY-1 and PGY-3 rotate in Float, and recently an In-House Physician was added
- The float duty is from 7h30pm till 7h30am daily except on Saturday
- The float resident (PGY3) co-signs medical students orders on the 9th floor
- The In-House physician co-signs medical students orders on the Basile floor
- The float resident alternate admissions with the In-House physician overnight (who sees them alone)
- The In-House Physician holds the code pager
- The interns are first call on critically ill patients
- One float intern is first call on 5S and BMT
- The second float intern is first call on team 10
- The float interns alternate admissions
- Med4 students are first call on 9N, 9S and haematology oncology floor except for BMT patients
- The interns and resident can call the faculty physician in charge for acute situations that need decision making by the attending

Goals of the Rotation

- The interns and resident gain experience in managing hospitalized patients independently.
- The interns and resident learn the skill to prioritize the tasks; time management and systems based practice.
- The resident will perform or assist in performing procedures (if certified) such as abdominal paracentesis, thoracentesis, central line placement…
- The resident and intern will teach the juniors on call when responding to a patient complaint or called for second opinion

Legends for learning activities

DPC  Direct patient care
DSP  Directly supervised procedures
Faculty supervision
Legends for evaluation methods:

PRE Peer evaluation  
PL Procedure Log

I. Patient Care
Goal
Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to learn the following:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform a comprehensive history and physical examination</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-1</td>
</tr>
<tr>
<td>Formulate and carry out effective management plans</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-3</td>
</tr>
<tr>
<td>Clearly and succinctly document patient management in the medical record</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-1</td>
</tr>
<tr>
<td>Competently perform invasive procedures</td>
<td>DSP, PL</td>
<td></td>
<td>PGY-3</td>
</tr>
</tbody>
</table>

II. Medical Knowledge
Goal
1. By the end of this rotation residents should be able to demonstrate knowledge of established and evolving fundamental disorders related to inpatient care. They are expected to:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competently manage patients with disorders related to inpatient care</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-3</td>
</tr>
</tbody>
</table>
Accurately interpret laboratory and basic imaging studies

Learn current literature and standard of care guidelines

III. Practice- Based Learning and Improvement

Goal

1. Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

Residents are expected to develop skills and habits to be able to:

<table>
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<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify deficiencies in knowledge base and develop independent reading program to address these gaps</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY 1</td>
</tr>
<tr>
<td>Effectively perform a literature search to answer clinical questions</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-3</td>
</tr>
<tr>
<td>Facilitate the learning of interns and other health care providers</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-3</td>
</tr>
</tbody>
</table>

IV. Systems Based Practice

Goal

1. Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents should
incorporate considerations of cost awareness and risk-benefit analysis in patient care.
They are expected to:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate the ability to mobilize resources (nutritionists, consultants, etc) to optimize health delivery</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-3</td>
</tr>
<tr>
<td>Demonstrate the ability to work as a member of a larger health care team</td>
<td>DPC, PRE</td>
<td></td>
<td>PGY-3</td>
</tr>
</tbody>
</table>

V. Professionalism

Goal
1. Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents will be expected to provide accurate, complete and timely documentation</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Treat all patients, health care providers &amp; hospital employees with respect and integrity</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Maintain patient confidentiality at all times</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-1</td>
</tr>
</tbody>
</table>

VI. Interpersonal and Communication Skills

Goal
1. Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.
Residents are expected to:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate accurately and compassionately with patients and their families</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-3</td>
</tr>
<tr>
<td>Clearly communicate transfer of care to other providers</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Professionally interact with entire health care team</td>
<td>DPC</td>
<td>PRE</td>
<td>PGY-1</td>
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</tbody>
</table>
D. GERIATRIC ROTATION

Rotation Specific Objectives and goals

The geriatric rotation is an inpatient and outpatient rotation that exposes the resident to the common problems encountered in the diagnosis and management of diseases in the elderly patients. Geriatric Patients range from those needing preventive health maintenance and counseling to those with frailty and multi-system chronic disease. Residents enhance the skills learned during their Internal Medicine residency program, applying their expanding geriatrics knowledge base.

Description of Rotation

- The geriatric rotation is a one month rotation during which the medical team is constituted of one PGY3 Internal medicine resident and 2 PGY1 residents
- The Residents will have the chance to see patients in two different institutions: AUBMC (American university of Beirut Medical Center) and AWZ (Ain w Zein Medical Center)
- On Mondays and Thursdays and every other Wednesday, the team will go to EWZ medical Centre.
  - During these days, the residents report to AWZ at 9 am, and see inpatients in the chronic care center (3 patients each). To Note that the patients are distributed to the team members by the geriatric fellow making sure that each chronic patient is seen by the medical team at least once per month.
  - On Thursdays, Residents participate in a weekly outpatient multidisciplinary Geriatric Assessment Clinic where patients are referred for evaluation of cognitive impairment, falls, depression, incontinence, failure to thrive, and other geriatric syndromes. During these rounds, many chronic cases are discussed in the presence of the geriatrics attending, Pharmacists, dietician and social worker. All medical and non-medical problems are discussed trying to solve pending issues concerning management and any financial obstacles delaying the medical plan and treatment. The residents learn to work effectively in an outpatient team format, and communicate recommendations to patients, families, and referring physicians.
  - Medical grand rounds or Journal Club are scheduled on Mondays, and residents should attend these activities.
- On Tuesdays and Fridays and every other Wednesday, medical team round with the attending physician on geriatric patient in AUBMC.
  - The residents round on inpatients floor where they can see and examine elderly patients under the care of geriatric team, then they finalize the cases with the attending physician.
  - Geriatric team can see and examine patients for which geriatric consultations are
needed mainly for palliative care/ end-of-life care management for patients with end stage diseases.

- Geriatric Medical team attend the rheumatology conference which is scheduled on Tuesdays at noon.

- The attending physician schedules meetings each block for the rotating medical team. During these meetings, many topics will be discussed in details such as:
  - Urodynamics: The resident will learn how to correlate physiological abnormalities with the history and physical findings in patients with complex causes of incontinence
  - Wound Care: The resident can develop expertise in superficial debridement of wounds, and become familiar with state-of-the-art management of chronic wounds.
  - Mental Status Assessment: The residents become familiar with the different methods on how to assess cognitive skills, mental status and recognize the importance of spending time with the patient and family members discussing outcomes and diagnoses. The residents learn more how to use the Major Depression Scale mainly in EWZ where it should be calculated and documented for each patient seen on the floor or in OPD.
  - Physical therapy and rehabilitation: the residents become familiar with appropriate Physical, Occupational and Speech Therapy interventions. They get the chance to visit the physical therapy centre in AUBMC where the geriatric physician explains the different physiotherapy techniques and their indications.

- The residents should attend to the continuity clinic if it happens to be scheduled on the days when they are available in AUBMC (Tuesdays, Fridays, and every other Wednesdays)

- The attending physician with whom the team rotates distributes reading materials to the team and assigns 2-3 topics for them to prepare. During the rotation, each team member is supposed to prepare 2 presentations, one of which is a journal club to be presented in EWZ

- On Fridays, the intern and resident will see patients in the OPD from 9 am till 12 pm and finalise with the geriatrics attending

**Goals of the Rotation**

Upon completion of the geriatrics rotation, residents will be able to:

- Discuss the characteristics of elderly patients that make their health needs different from those of younger adults.
- List the ways in which confusion, sensory loss, depression, fear, and instability contribute to loss of independence and offer suggestions to preserve independent functioning.
• Describe and discuss the differential diagnosis, work-up and management of commonly presenting geriatric conditions, including but not limited to memory impairment, gait instability, anorexia, behavioral changes, health maintenance issues and fatigue.
• Appropriately manage polypharmacy in the elderly and understand the different drug dosing in elderly patients.
• Describe the decubitus ulcers preventive and therapeutic interventions.
• Appropriately prescribe nutritional interventions specific to the needs and swallowing ability of the patient.
• Describe and discuss the pre- and post-operative care of the elderly adult and ways to prevent complications common in the elderly.
• Discuss the ethical aspects of end-of-life care related to cost, risk, and benefit, and the emotional problems of caregivers coping with depressing or terminal situations.

Legends for learning activities:

OPD Outpatient Clinics  
DPC Direct patient care  
AR Attending rounds/didactics  
RC Rheumatology conference  
JC Journal Club  
DSP Directly supervised procedures  
DPC Direct Patient Contact  
GCS Geriatric Consultation  
MDR Multidisciplinary Rounds

Evaluation Methods:

GA: Global assessment by attending (myevaluation.com)
PRE: Peer evaluation (360° evaluation)
NE: Nursing evaluation (360° evaluation)
ISE: In-service examination
PL: Procedure log

I. Patient Care
Goal

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to learn the following:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
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</thead>
<tbody>
<tr>
<td>Perform a comprehensive history and physical examination</td>
<td>DPC, OPD, AR, GCS</td>
<td>GA, PRE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Formulate and carry out effective management plans</td>
<td>DPC, OPD, AR, RC, JC, GCS</td>
<td>GA, PRE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Clearly and succinctly document patient management in the medical record</td>
<td>OPD, AR, GCS</td>
<td>GA, PRE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Competently perform invasive procedure</td>
<td>DSP, GCS</td>
<td>GA, PRE, PL</td>
<td>PGY-1,2,3</td>
</tr>
</tbody>
</table>

Rotation Specific Objectives and goals:

The residents will:

a. Understand the role of comprehensive geriatric assessment in patient management
b. Acquire familiarity with common, standardized geriatric assessment tools; know when to use them and how to interpret the results.
c. Become Knowledgeable of the types of, eligibility for, and how to refer to common community resources (home health, in-home support services, adult day health care, meals on wheels, Lifeline™, durable medical equipment suppliers, etc.)
d. Become Knowledgeable of the continuum of long-term care in the community – senior centers, adult day, health care, assisted living, skilled nursing.
e. Understand the principles of medication management in the elderly: minimization of “polypharmacy,” age-associated side effects, age-associated changes in pharmacodynamics and pharmacokinetics, potential drug interactions
f. Demonstrate the ability to appropriately select, apply, and interpret common, standardized geriatric assessment instruments
g. Demonstrate the ability to thoughtfully incorporate functional and psycho-social problems into the assessment and plans.
h. Demonstrate proficiency in communicating within the physician-patient-caregiver triad
i. Demonstrate the incorporation of psychosocial concerns into the assessment and care planning, including adequacy of caregiver support, caregiver well-being, and need for community services or durable medical equipment.

Since geriatric rotation is a four-week elective, the educational goals are the same for residents at each level of training.

II. Medical Knowledge

Goal

2. By the end of this rotation residents should be able to demonstrate knowledge of established and evolving fundamental geriatric disorders including dementia, depression, risk of falls, urinary incontinence, delirium, osteoporosis, polypharmacy, and importance of end-of-life and palliative care in addition to role of physiotherapy in elderly patients.

3. They are expected to:

<table>
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<th>Learning Environments</th>
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</thead>
<tbody>
<tr>
<td>Competently manage disorders in elderly patients</td>
<td>DPC, OPD, AR, RC, GCS, JC, MDR</td>
<td>GA, PRE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Accurately interpret laboratory, Imaging, MDS (Major Depression Scale), and MMS (Mini Mental exam scale)</td>
<td>DPC, GCS, OPD, AR, RC, JC, MDR</td>
<td>GA, PRE, ISE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Learn current geriatric literature and standard of care guidelines</td>
<td>OPD, GCS, AR, JC</td>
<td>GA, PRE, ISE</td>
<td>PGY-1,2,3</td>
</tr>
</tbody>
</table>
III. Practice- Based Learning and Improvement

Goal

2. Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

3. Residents are expected to develop skills and habits to be able to:

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<tbody>
<tr>
<td>Identify deficiencies in knowledge base and develop independent reading program to address these gaps</td>
<td>DPC, OPD, AR, RC, GCS, JC</td>
<td>GA, PRE, ISE</td>
<td>PGY 1,2,3</td>
</tr>
<tr>
<td>Be receptive and responsive to constructive criticism</td>
<td>DPC, OPD, AR, RC, GCS, MDR</td>
<td>GA, PRE, ISE</td>
<td>PGY 1,2,3</td>
</tr>
<tr>
<td>Seek help in situations in which they would benefit from the assistance of an upper year resident or attending.</td>
<td>opd, AR, RC</td>
<td>ARD</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Effectively perform a literature search to answer clinical questions</td>
<td>OPD, AR, RC</td>
<td>ARD</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Facilitate the learning of interns and other health care providers</td>
<td>OPD, AR, RC, GCS, MDR</td>
<td>GA, PRE</td>
<td>PGY-1,2,3</td>
</tr>
</tbody>
</table>

IV. Systems Based Practice

Goal

2. Residents must demonstrate an awareness of and responsiveness to the larger
context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents should incorporate considerations of cost awareness and risk-benefit analysis in patient care.

3. They are expected to:

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</thead>
<tbody>
<tr>
<td>Communicate accurately and compassionately with patients and their families</td>
<td>DPC, OPD, AR, GCS, MDR</td>
<td>GA</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Clearly communicate transfer of care to other providers</td>
<td>DPC, OPD, GCS, MDR</td>
<td>PRE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Professionally interact with entire health care team</td>
<td>DPC, OPD, AR, GCS, MDR</td>
<td>GA, PRE, NE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Utilize hospital resources to deliver effective, efficient, high quality patient care.</td>
<td>DPC, OPD, GCS, AR, MDR</td>
<td>GA, PRE, NE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Remain sensitive to health care costs while providing high quality care.</td>
<td>DPC, OPD, GCS, AR, MDR</td>
<td>GA, PRE, NE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Demonstrate awareness of the insurance status of their patients and its impact on their care options</td>
<td>DPC, OPD, GCS, AR, MDR</td>
<td>GA, PRE, NE</td>
<td>PGY-1,2,3</td>
</tr>
</tbody>
</table>

V. Professionalism

   Goal

   2. Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to:
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<tbody>
<tr>
<td>Provide accurate, complete and timely documentation</td>
<td>DPC, OPD, GCS</td>
<td>PRE, GA</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Treat all patients, health care providers &amp; hospital employees with respect and integrity</td>
<td>DPC, OPD, AR, GCS, MDR</td>
<td>GA, PRE, NE</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Maintain patient confidentiality at all times</td>
<td>DPC, OPD, AR, GCS</td>
<td>GA</td>
<td>PGY-1,2,3</td>
</tr>
</tbody>
</table>

The residents should

- In nearly all situations, put the needs of their patients ahead of their own and 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.
- Act as patient advocates.
- Manage work efficiently to allow attendance at educational conferences.
- Acknowledge errors and work to minimize them.
- Act as a role model for medical students.
- Be willing to challenge the accepted plan of care when their professional judgment differs from that of other providers.
- Recognize situations in which junior colleagues would benefit from their assistance.
- Act as a role model for interns and fellow residents.

VI. Interpersonal and Communication Skills

**Goal**

2. Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.
3. Residents are expected to:

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</thead>
<tbody>
<tr>
<td>Demonstrate the ability to mobilize resources (nutritionists, consultants, etc) to optimize health delivery</td>
<td>OPD, AR, Cs, MDR</td>
<td>GA</td>
<td>PGY-1,2,3</td>
</tr>
<tr>
<td>Demonstrate the ability to work as a member of a larger health care team</td>
<td>OPD, AR, CS, MDR</td>
<td>GA, PRE</td>
<td>PGY-1,2,3</td>
</tr>
</tbody>
</table>

Residents/Interns will:

1. Develop effective and respectful relationships with patients, students, peers, supervisors, and other medical and administrative workers.

2. Be effective listeners in medical and professional encounters, including recognizing verbal and non-verbal cues from the people with whom they interact.

3. Write legibly in all situations.

5. Remain quickly, reliably, and easily accessible by beeper when on duty.

6. Provide effective and detailed sign-out to allow covering physicians to knowledgeably and efficiently continue their patients’ care.

7. Continually communicate to their patients in understandable terms the nature of their care, including diagnoses, the level of certainty regarding those diagnoses, the diagnostic and therapeutic plan, indications for and adverse effects of prescribed medications, and follow-up after hospitalization.

8. Develop skills for dealing with difficult patients and stressful situations.

9. Develop skills for handling situations of unprofessional behavior by other health care professionals.

PGY-3 residents will:

1. Model effective and respectful relationships with patients, students, peers, supervisors, and other medical and administrative workers.
2. Model skills for dealing with difficult patients and stressful situations.

3. Model skills for handling situations of unprofessional behavior by other health care professionals.

4. 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. MEDICAL INTENSIVE CARE UNIT

The Intensive Care Unit at the American University of Beirut Medical Center is a total of 12-bed unit serving critically ill medical and surgical patients. In addition, all intubated patients in the neuro-intensive care unit are under the care of the MICU team.
During the Medical Intensive Care Unit (MICU) rotation the intern and the resident learn how to care for critically ill patients. House staff are exposed to a wide spectrum of problems, including acute hypoxia, acute respiratory distress syndrome, acid-base imbalances, liver and renal failure, acute stroke, intracranial hemorrhage, status epilepticus and coma. All categorical house staff spend at least 2 months during their training rotating in the MICU. During their rotation, interns and residents work closely with the Pulmonary and Critical Care attending and fellow as well as a multidisciplinary team that includes a respiratory therapist, pharmacist, nutritionist, social worker and physical therapist.

Description of Rotation

- The MICU team consists of one attending physician, one pulmonary & critical fellow and 5-7 house staff, two second-year residents (PGY2) and 3 to 4 first-year residents (PGY1).
- PGY2s take in-hospital overnight calls every fourth night (Cross-covered by a PGY-2 resident rotating in OPD, and a PGY-3 resident rotating in RCU). PGY1s take in-hospital overnight calls every 4 or 5 nights (cross-covered by 1 PGY1 in the RCU rotation).
- The on-call team will cover MICU, RCU, and patients in Neuro ICU under the care of MICU team, making the total number of patients overnight of maximum of 26.
- The MICU team admits patients with medical diagnoses requiring acute care.
- The PGY1s (excluding the on- and post-call PGY1s) alternate admissions from 7:30 am to 1:00 pm. The on-call PGY1 admits patients from 2:00 pm till 7:30 am the next day. The post-call resident does not admit patients.
- The pre-call second-year resident admits patients from 7:30 am till 5:00 pm. The on-call second or third-year resident takes care of the admissions from 5:00pm till 7:30 am the next day.
- The post-call house staff sign out to the on-call team at 11 am for PGY 2 and 3 residents, and at 12:00 pm for PGY 1 residents and then leave the hospital.
- When on call, PGY1 and PGY2/3 residents respond to all cardiac arrests at the MICU, and participate in ACLS resuscitation efforts. PGY2 residents direct and coordinate ACLS protocols, when required.
- The PGY2 residents hold the RRT pager.
Goals of the rotation

- To deliver compassionate and evidence-based care for critically ill patients admitted to the MICU service. During the rotation in Critical Care, the resident is expected to learn about common critical care problems, including acute respiratory failure, sepsis, various forms of shock (cardiogenic, septic), ARDS, acute coronary syndromes, gastrointestinal bleeds, and surgical issues in Critical Care.
- To understand appropriate triage of critical care patients from the emergency department and inpatient floors.
- To learn about diagnostic modalities including airway management, arterial blood gas analysis, invasive and noninvasive hemodynamic monitoring and therapeutic possibilities, including mechanical ventilation, fluid and vasopressor/inotropic medication, nutritional support, and sedation/analgesia.
- To use non-invasive and invasive testing appropriately, demonstrating understanding of the risks and costs of different testing strategies.
- To develop skills in performance of MICU procedures including central venous catheter placement, cardioversion, and Pulmonary artery catheterization, endotracheal intubation, Chest Tube Insertion (assisting the Pulmonary fellow or attending), drawing arterial blood, arterial line insertion, etc.

Evaluation Methods

AE - Attending Evaluations (attending-to-Resident)

PDR—Program Director’s Review (twice annually)

PRE—Peer evaluation (360° evaluation)

NE – Nursing evaluation (360° evaluation)

PTE – Patient-to-Resident Evaluation (360° evaluation)

GA – Global assessment by attending (myevaluation.com)

Chart review / Chart Checklist done by the chief resident (Violation is considered if more than 5 deficiencies were found in the same chart)

ISE – In-service examination

PL – Procedure log
Legends for learning activities:

DPC: Direct patient care
RWR: Resident work rounds
AR: Attending rounds/didactics
IC: ICU conference
DSP: Directly supervised procedures
XRR: X-ray rounds

I. Patient Care

Goal
Residents must be able to provide patient care that is compassionate, appropriate, care of patients with critical illness. They will be encouraged to observe or participate in all procedures required in the care of their patients, including, but not limited to central venous access, arterial blood monitoring, thoracentesis, intubation and mechanical ventilation, interpretation of chest x-rays and data interpretation.

<table>
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</thead>
<tbody>
<tr>
<td>Perform a comprehensive history and physical examination</td>
<td>DPC, WR, AR</td>
<td>GA, PRE, AE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Formulate and carry out effective management plans</td>
<td>DPC, RWR, AR, XRR, CC</td>
<td>GA, PRE, AE</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Clearly and succinctly document patient management in the medical record</td>
<td>RWR, AR</td>
<td>GA, PRE, AE Chart Checklists</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Competently perform invasive procedures</td>
<td>DSP, HCC</td>
<td>GA, PRE, PL, AE, *PGY-1</td>
<td>*PGY-1</td>
</tr>
<tr>
<td>Effectively evaluate and manage patients with critical medical illness,</td>
<td>DPC, RWR, AR</td>
<td>GA, PRE, AE</td>
<td>PGY2</td>
</tr>
<tr>
<td>including those on mechanical ventilation and vasopressors</td>
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<td></td>
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</tbody>
</table>
Specific Objectives and Conditions:

1) PGY-1 residents will be expected to acquire accurate and relevant patient histories, perform thorough physical exams and develop prioritized differential diagnoses, under direct and indirect attending supervision. The PGY-1 resident will be expected to present cases during ICU rounds and to participate in the development of an evidence-based diagnostic and therapeutic plan. He/she will also be expected to perform accurate medication reconciliation and learn how to minimize unnecessary care, including tests.

2) PGY-2 residents will learn how to stabilize patients with urgent or emergent medical conditions. They will also be expected to acquire accurate and relevant patient histories, perform thorough physical exams and develop prioritized differential diagnoses, under indirect attending supervision. They will be expected to learn how to gather subtle sensitive information that may not be volunteered by the patient. They are expected to present cases during ICU rounds and to independently develop evidence-based diagnostic and therapeutic plans. Additionally, they will learn how to modify a differential diagnosis and care plan, based on clinical course and data as appropriate. Additionally, PGY-2 residents will also be expected to oversee the care provided by PGY-1 residents. He/she will also be expected to perform accurate medication reconciliation, minimize unnecessary care including tests, and learn how to manage an interdisciplinary team.

II. Medical Knowledge

Goal

4. By the end of this rotation residents should be able to demonstrate knowledge of the basic physiological principles that underlie critical illness. They are expected to:

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<tbody>
<tr>
<td>Competently manage critically ill patients</td>
<td>DPC, RWR, AR, CC</td>
<td>GA, PRE</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Accurately interpret laboratory, ECG, chest X-ray</td>
<td>DPC, RWR, AR, CC</td>
<td>GA, PRE, ISE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Access and critically evaluate current medical information and scientific evidence relevant to medical critical care including standard of care guidelines</td>
<td>RWR, AR, CC</td>
<td>GA, PRE, ISE</td>
<td>PGY-2</td>
</tr>
</tbody>
</table>
B. Specific Objectives and Conditions

PGY 1:
Demonstrate appropriate knowledge for the diagnosis and treatment of common critical care conditions, including sepsis, pneumonia, COPD/asthma exacerbations, delirium, upper and lower gastrointestinal bleeding, diabetic ketoacidosis/hyperosmolar nonketotic coma, ARDS. Demonstrate knowledge of the appropriate use medications, including antibiotics for hospital-acquired and community-acquired pneumonia, insulin drips, IV sedatives (benzodiazepines, opiates, propofol), vasopressors. Demonstrate knowledge of appropriate preventive measures for common ICU complications, including stress ulcer prophylaxis, VTE prophylaxis, VAP prevention, pressure sore prevention and line-infection prevention. Demonstrate understanding of basic ventilator management (rate, mode, pressure support, etc). Understand the physiologic and pathophysiologic principles of invasive hemodynamic monitoring including indications.

PGY 2:
Demonstrate management of the ventilator for common conditions, including asthma, COPD, pneumonia, CHF and ARDS. Demonstrate understanding of scientific evidence behind treatment of common critical care conditions. Demonstrate knowledge of the indications and contraindications for common critical care procedures, including central line placement, dialysis, arterial line placement, thoracentesis, intubation, and non-invasive ventilation.

III. Practice-Based Learning and Improvement

Goal

4. Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

5. Residents are expected to develop skills and habits to be able to:

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<tbody>
<tr>
<td>Identify deficiencies in personal knowledge and skills in the care of patients with critical medical illness *and develop independent reading program to address these gaps</td>
<td>DPC, RWR, AR, CC, XRR, IC</td>
<td>GA, PRE, ISE</td>
<td>PGY 1 *PGY-2</td>
</tr>
</tbody>
</table>
Effectively perform a literature search to answer clinical questions

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<tbody>
<tr>
<td>RWR, AR, IC</td>
<td>ARD</td>
<td>PGY-1</td>
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Facilitate the learning of interns and other health care providers

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<tbody>
<tr>
<td>RWR, AR, MC, XRR</td>
<td>GA, PRE</td>
<td>PGY-2</td>
<td></td>
</tr>
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</table>

### IV. Systems Based Practice

**Goal**

4. Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents should incorporate considerations of cost awareness and risk-benefit analysis in patient care. Critical Care testing is very costly to the healthcare system, and we expect the residents to judiciously use these resources.

5. They are expected to:

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<tbody>
<tr>
<td>Communicate accurately and compassionately with patients and their families</td>
<td>DPC, RWR, AR</td>
<td>GA, NE</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Clearly communicate sign out and transfer of care to other providers</td>
<td>DPC, RWR</td>
<td>PRE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Understand and utilize the multidisciplinary resources necessary to care optimally for critically ill medical patients</td>
<td>DPC, RWR, AR</td>
<td>GA, PRE, NE</td>
<td>PGY-1</td>
</tr>
</tbody>
</table>
A. Specific Objectives and Conditions

PGY I:
work with nurses, social workers, respiratory therapists, physicians, and other ancillary personnel in an effective manner.
Participate actively in improving health systems to optimize patient care.
Be active in any quality-improvement initiatives in place.
Work with and within the local and regional medical system to deliver optimal patient care.

PGY II:
Collaborate with other members of the health care team to assure comprehensive care for patients with critical medical illness.
Use evidence-based, cost-conscious strategies in the care of patients with critical medical illness.

V. Professionalism

Goal

3. Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

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<tbody>
<tr>
<td>Residents will be expected to provide accurate, complete and timely documentation</td>
<td>DPC, RWR</td>
<td>Chart Checklists</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Treat all patients, health care providers &amp; hospital employees with respect and integrity</td>
<td>DPC, RWR, AR</td>
<td>GA, PRE, NE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Maintain patient confidentiality at all times</td>
<td>DPC, RWR, AR</td>
<td>GA</td>
<td>PGY-1</td>
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</tbody>
</table>
VI. Interpersonal and Communication Skills

Goal

4. Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.

5. Residents are expected to:

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<tbody>
<tr>
<td>Demonstrate the ability to mobilize resources (nutritionists, consultants, etc) to optimize health delivery</td>
<td>RWR, AR</td>
<td>GA</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Demonstrate the ability to work as a member of a larger health care team</td>
<td>RWR, AR</td>
<td>GA, PRE</td>
<td>PGY-2</td>
</tr>
</tbody>
</table>

A. Specific Objectives and Conditions

PGY1:

Are expected to participate in the communications with patients, families and hospital support staff regarding aspects of patient care. The PGY-1 resident will demonstrate empathy, compassion and a commitment to relieve pain and suffering. They will also learn how to appropriately communicate with consultants regarding their assessment and advise regarding the patient’s care.

PGY 2:

Are expected to communicate clearly and completely with patients, families and hospital support staff regarding all aspects of patient care, and demonstrate a shared decision-making approach with the patient/family. The PGY-2 resident should be able to effectively communicate with the primary care physicians, guide and support bedside presentations that focus discussion around the patient’s central concerns.
F. RESPIRATORY CARE UNIT

The Respiratory Care Unit at the American University of Beirut Medical Center is a total of 8-bed unit serving patients with chronic or acute respiratory illnesses. Housestaff are exposed to a wide spectrum of problems, including acute hypoxia, acute respiratory distress syndrome, acid-base imbalances, and coma in addition to specific respiratory diseases such as End-Stage COPD, severe Asthma, patients with failed extubation and patients planned for tracheostomy. PGY 1 and PGY 3 residents spend 1 month during their training rotating in the RCU. During their rotation, interns and residents work closely with the Pulmonary and Critical Care attending and fellow as well as a multidisciplinary team that includes a respiratory therapist, pharmacist, nutritionist, social worker and physical therapist.

Description of Rotation

- The RCU is staffed by a first year pulmonary/critical care fellow and a pulmonary/critical care attending, as well as one first-year resident (PGY1) and one junior/senior resident from the internal medicine residency.
- Rounds are conducted twice daily, seven days a week with the pulmonary fellow, attending, residents, nursing staff and respiratory therapist.
- Rounds are directed at diagnosis and treatment of each patient in the RCU, including a complete review of the patient’s clinical, social, family and non-medical issues, with the goal being a favorable outcome in all of these areas.
- Teaching is conducted at the bedside in a case oriented format. In addition, the pulmonary/critical care fellow and internal medicine residents are required to relate topics in a didactic fashion several times a week.
- PGY1s take in-hospital overnight calls every 4th or 5th night (cross-covered by 3 to 4 PGY1s in the MICU rotation).
- The RCU team admits patients with respiratory illness requiring acute or chronic care. The chronic cases are usually transferred from other units like MICU and Neuro ICU.
- The post-call house staff signs out the patients to the on-call team at 12:00 pm and then leave the hospital.
- PGY 1 and III residents rotating in RCU are responsible of admissions to RCU from 7:30 am to 4 pm. All admissions to the RCU should be seen by a PGY 2 or 3 resident. When the intern of the RCU is post-call, the resident sees the admission with the intern on-call. When the resident of the RCU is post-call, the intern should see the admission with the resident on-call. The on-call PGY1 (being either from the RCU or from the MICU team) admits patients from 4:00 pm till 7:30 am the next day. These cases are discussed and finalized with the pulmonary fellow and pulmonary attending.
During the day the PGY1 resident is the first call on patients admitted to RCU. The PGY 3 resident leads the AM and PM round, and has to follow up and help the PGY 1 resident with the to do list on patients.

If on call, the intern get the sign out from the MICU interns at 4 pm and will cover MICU, RCU, and patients in Neuro-ICU under the care of MICU team (critically ill, intubated...), making the total number of patients overnight of maximum of 26. Same for the senior resident, if he/her on-call, they get the sign out from the MICU residents at 4 PM and will cover MICU, RCU, and patients in Neuro-ICU under the care of MICU team (critically ill, intubated...), making the total number of patients overnight of maximum of 26.

When on call, PGY1 and MICU PGY2 or 3 residents respond to all cardiac arrests at the MICU/RCU/NICU and participate in ACLS resuscitation efforts. PGY2 or 3 residents direct and coordinate ACLS protocols, when required.

Goals of the rotation:
- To provide training in the assessment, diagnosis and management of a wide range of acute illness and conditions.
- Patients are admitted to the RICU from the community, the inpatient floors, or transferred from outside facilities. A wide range of medical diagnosis are seen in the RICU including (but not limited to) acute respiratory failure from restrictive and obstructive lung disease requiring mechanical ventilation, acute respiratory distress syndrome and acute lung injury resulting from a variety of causes including infection, surgical procedures, aspiration and trauma.

**Evaluation Methods**

AE - Attending Evaluations (attending-to-Resident)

PDR – Program Director’s Review (twice annually)

DSP – Directly Supervised Procedures

PRE—Peer evaluation (360° evaluation)

NE – Nursing evaluation (360° evaluation)

PTE – Patient-to-Resident Evaluation (360° evaluation)

GA – Global assessment by attending (myevaluation.com)
Chart review / Chart Checklist done by the chief resident (Violation is considered if more than 5 deficiencies were found in the same chart)

ISE – In-service examination

PL – Procedure log

Legends for learning activities:
DPC: Direct patient care
RWR: Resident work rounds
AR: Attending rounds/didactics
IC: ICU conference
DSP: Directly supervised procedures
XRR: X-ray rounds

I. Patient Care

Goal

Residents must be able to provide patient care that is compassionate, appropriate, care of patients with critical illness. They will be encouraged to observe or participate in all procedures required in the care of their patients, including, but not limited to central venous access, arterial blood monitoring, thoracentesis, intubation and mechanical ventilation, interpretation of chest x-rays and data interpretation.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Learning Environments</th>
<th>Evaluation Methods</th>
<th>Expected Year of Proficiency</th>
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</thead>
<tbody>
<tr>
<td>Perform a comprehensive history and physical examination</td>
<td>DPC, RWR, AR</td>
<td>GA, PRE, AE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Formulate and carry out effective management plans with the help of the pulmonary fellow</td>
<td>DPC, RWR, AR, XRR, IC</td>
<td>GA, PRE, AE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Clearly and succinctly document patient management in the medical record</td>
<td>RWR, AR</td>
<td>GA, PRE, AE Chart Checklists</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Competently perform invasive procedures under the supervision of the pulmonary fellow and the attending (A-lines, central lines, nasogastric and feeding tubes*)</td>
<td>DSP</td>
<td>GA, PRE, PL, AE</td>
<td>PGY-1</td>
</tr>
</tbody>
</table>
Effectively evaluate and manage patients with critical medical illness, including those on mechanical ventilation and vasopressors with the help of the pulmonary fellow | DPC, RWR, AR | GA, PRE, AE | PGY1

**Specific Objectives and Conditions:**

3) PGY-1 residents will be expected to acquire accurate and relevant patient histories, perform thorough physical exams and develop prioritized differential diagnoses, under direct and indirect attending supervision. The PGY-1 resident will be expected to present cases during RCU rounds and to participate in the development of an evidence-based diagnostic and therapeutic plan. He/she will also be expected to perform accurate medication reconciliation and learn how to minimize unnecessary care, including tests.

4) PGY-1 residents will also learn basics on how to stabilize patients with urgent or emergent medical conditions. They will also be expected to acquire accurate and relevant patient histories, perform thorough physical exams and develop prioritized differential diagnoses, under indirect attending supervision. They will be expected to learn how to gather subtle sensitive information that may not be volunteered by the patient. They are expected to present cases during RCU rounds and to independently develop evidence-based diagnostic and therapeutic plans. Additionally, they will learn how to modify a differential diagnosis and care plan, based on clinical course and data as appropriate.

**II. Medical Knowledge**

**Goal**

1. By the end of this rotation residents should be able to demonstrate knowledge of the basic physiological principles that underlie critical illness. They are expected to:

<table>
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<tbody>
<tr>
<td>Competently manage critically ill patients</td>
<td>DPC, RWR, AR, IC</td>
<td>GA, PRE</td>
<td>PGY-2</td>
</tr>
</tbody>
</table>
C. Specific Objectives and Conditions

The resident should:

- Gain a solid understanding of the pathophysiology and management of critical illness in the pulmonary disease states. This must include the skills to manage various etiologies of shock states, ventilation management in restrictive and obstructive respiratory failure, and the ability to perform critical care related procedures including the placement of invasive monitoring devices and critical care bronchoscopy.
- Make a special emphasis to the end-of-life issues that are frequently encountered in the ICU. The fellow and attending are actively involved in the exchange of information with patients, family, and health proxy’s as to the patient’s desire and decision.
- Demonstrate appropriate knowledge for the diagnosis and treatment of common critical care conditions, including: sepsis, pneumonia, COPD/asthma exacerbations, delirium, upper and lower gastrointestinal bleeding, diabetic ketoacidosis/hyperosmolar nonketotic coma, ARDS.
- Demonstrate knowledge of the appropriate use medications, including: antibiotics for hospital-acquired and community-acquired pneumonia, insulin drips, IV sedatives (benzodiazepines, opiates, propofol), vaspressors.
- Demonstrate knowledge of appropriate preventive measures for common ICU complications, including stress ulcer prophylaxis, VTE prophylaxis, VAP prevention, pressure sore prevention and line-infection prevention.
- Demonstrate understanding of basic ventilator management (rate, mode, pressure support, etc).
- Understand the physiologic and pathophysiologic principles of invasive hemodynamic monitoring including indications.
- Demonstrate management of the ventilator for common conditions, including asthma, COPD, pneumonia, CHF, and ARDS.
- Demonstrate understanding of scientific evidence behind treatment of common critical care conditions.
- Demonstrate knowledge of the indications and contraindications for common critical care procedures, including central line placement, dialysis, arterial line placement, thoracocentesis, intubation, and non-invasive ventilation.
III. Practice- Based Learning and Improvement

Goal

6. Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.

7. Residents are expected to develop skills and habits to be able to:

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<tr>
<td>Identify deficiencies in personal knowledge and skills in the care of patients with critical medical illness and develop independent reading program to address these gaps</td>
<td>DPC, RWR, AR, IC, XRR</td>
<td>GA, PRE, ISE</td>
<td>PGY1</td>
</tr>
<tr>
<td>Effectively perform a literature search to answer clinical questions</td>
<td>RWR, AR</td>
<td>AE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Facilitate the learning of interns and other health care providers</td>
<td>RWR, AR, IC, XRRR</td>
<td>GA, PRE</td>
<td>PGY-2</td>
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IV. Systems Based Practice

Goal

6. Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents should incorporate considerations
of cost awareness and risk-benefit analysis in patient care. Critical Care testing is very costly to the healthcare system, and we expect the residents to judiciously use these resources.

7. They are expected to:

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</thead>
<tbody>
<tr>
<td>Communicate accurately and compassionately with patients and their families</td>
<td>DPC, RWR, AR</td>
<td>GA, NE</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Clearly communicate sign out and transfer of care to other providers</td>
<td>DPC, RWR</td>
<td>PRE</td>
<td>PGY-1</td>
</tr>
<tr>
<td>Understand and utilize the multidisciplinary resources necessary to care optimally for critically ill medical patients</td>
<td>DPC, RWR, AR</td>
<td>GA, PRE, NE</td>
<td>PGY-1</td>
</tr>
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</table>

B. Specific Objectives and Conditions

PGY1:
Work with nurses, social workers, respiratory therapists, physicians, and other ancillary personnel in an effective manner.
Participate actively in improving health systems to optimize patient care.
Be active in any quality-improvement initiatives in place.
Work with and within the local and regional medical system to deliver optimal patient care.

V. Professionalism

Goal

4. Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:
Residents will be expected to provide accurate, complete and timely documentation

Treat all patients, health care providers & hospital employees with respect and integrity

Maintain patient confidentiality at all times

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<tr>
<th>VI. Interpersonal and Communication Skills</th>
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<tbody>
<tr>
<td><strong>Goal</strong></td>
</tr>
<tr>
<td>6. Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates.</td>
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<tr>
<td>7. Residents are expected to:</td>
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<tbody>
<tr>
<td>Demonstrate the ability to mobilize resources (nutritionists, consultants, etc) to optimize health delivery</td>
<td>RWR, AR</td>
<td>GA</td>
<td>PGY-2</td>
</tr>
<tr>
<td>Demonstrate the ability to work as a member of a larger health care team</td>
<td>RWR, AR</td>
<td>GA, PRE</td>
<td>PGY-2</td>
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</table>
Specific Objectives and Conditions

PGY1:

Are expected to participate in the communications with patients, families and hospital support staff regarding aspects of patient care. The PGY-1 resident will demonstrate empathy, compassion and a commitment to relieve pain and suffering. They will also learn how to appropriately communicate with consultants regarding their assessment and advise regarding the patient’s care.

PGY 2 and 3:

Are expected to communicate clearly and completely with patients, families and hospital support staff regarding all aspects of patient care, and demonstrate a shared decision-making approach with the patient/family. The PGY-2 resident should be able to effectively communicate with the primary care physicians, guide and support bedside presentations that focus discussion around the patient’s central concerns.