# University of Iowa - Des Moines Internal Medicine
# Residency Program Curriculum

## A. Overview

Our goal is to provide a coherent, integrated and progressive educational program to cover the broad field of internal medicine. On completing this program, graduating residents will demonstrate the ability to care for patients with a wide variety of clinical problems. This ability is the hallmark of a competent internist and will be necessary whether one's career goal is the practice of general internal medicine or further training in a subspecialty area of internal medicine.

The curriculum is structured to assure each resident has the opportunity to acquire the necessary knowledge base, learn important clinical management and interpersonal skills, and develop the professional attitudes and behaviors necessary to become a proficient general internist.

The first year resident curriculum provides intensive experience in general medicine. Seven months of inpatient medicine rotations are completed. In addition, there is a one-month critical care medicine experience. During a one-month emergency medicine rotation, residents will have the opportunity to consult with surgery and pediatric residents and will regularly interact with other non-internal medicine specialist physicians.

The second year resident curriculum is highlighted by a core of consultative subspecialty rotations. In addition, residents are introduced to a more intensive experience in the ICU and the CCU. There is a one month ambulatory medicine rotation and a one month general medicine consult rotation. Second year training helps residents become highly proficient in the technical and clinical skills needed to manage critically ill patients and to develop the skills necessary to become a proficient practice-based general internist. There are two elective months provided during the second year.

The third year resident curriculum assures residents are well-versed in general, subspecialty and acute care medicine. Residents assume major supervisory and teaching responsibilities for junior residents and medical students at the three teaching hospitals of the residency program. Residents complete the core of subspecialty consult rotations and have an additional geriatrics experience during the third year. Residents also participate in a supervised board review course and receive additional instruction and assistance in preparing a required grand rounds presentation in the third year. There are two months of elective time available to allow residents to pursue a variety of clinical activities of their choosing.

A significant amount of time is available in the curriculum for second and third year residents to complete elective rotations. This allows each resident to pursue additional training in areas that will be of maximal benefit to them upon graduation. Options include additional training in any of the subspecialty areas, general internal medicine inpatient or outpatient areas, adolescent medicine or geriatrics. A variety of research electives are also available. Residents may choose from a variety of training experiences in subspecialties other than internal medicine.

These allow residents to become familiar with those aspects of care in each specialty area that are appropriately diagnosed and managed by general internists and those that should be referred to, or managed jointly with, other specialists.

The residency program curriculum recognizes the need for gradually increasing a resident's patient care responsibilities over the three years of training. With each year of training the degree of professional and administrative responsibilities will increase progressively. This progression includes responsibilities in such areas as patient care, leadership, teaching, organization and administration within the program.

## Components of Curriculum

*1. Teaching Rounds*

Patient teaching rounds are an essential part of the inpatient teaching services. These rounds are to be scheduled and conducted on a formal basis at least three days per week for a minimum of 4 1/2 hours per week. These rounds will include discussion of current patient care decisions, commensurate with the needs of the patients on the service. Teaching rounds must include direct bedside interaction. These bedside sessions are to include personal evaluation of the history and physical examination by the teaching attending physician. However, teaching rounds will also focus on issues more general than the immediate management of patients assigned to the residents' care. Discussion of such points as interpretation of clinical data, pathophysiology, differential diagnosis, specific management decisions, disease prevention and the appropriate use of technology will be included. The incorporation of evidence and patient values in clinical decision making will be emphasized.

*2. Teaching Conferences*

The noon conference series is structured to cover key topics from the core curriculum. It covers areas of general internal medicine, medical subspecialty areas, and related specialty areas such as neurology, psychiatry, dermatology, ophthalmology, rehabilitation medicine, otolaryngology, orthopedics, urology and gynecology. The conferences will include basic science information addressing disease pathophysiology and will review recent advances in biomedical research and clinical medicine. The conferences will also address preventive medicine, health promotion, cultural, occupational, environmental and behavioral issues. Cases may be chosen for discussion at conference that apply this information. Residents will be required to demonstrate their understanding of the material and develop their problem solving and critical thinking skills during these conferences.

Other important teaching conferences include Grand Rounds, Morning Report, Clinical Pathologic Conference (CPC), Morbidity and Mortality Conference (M&M), Journal Club and the non-clinical Socioeconomic Conference Series. The residency program will monitor resident attendance at the following required teaching conferences: Noon Conference, Grand Rounds, CPC and M&M Conferences, Journal Club, and the monthly Core Curriculum Non-Clinical Socioeconomic Conference. Residents must attend at least 60% of these required conferences each year.

*3. Specific Training Experiences*

Residents will be exposed to a wide spectrum of diseases in various stages of acuity during their clinical rotations. This will assure a broad based experience in general internal medicine in inpatient, ambulatory and other settings. Adequate numbers of patients of both sexes, over a broad range of age, representing a large spectrum of socioeconomic status will be available.

The etiology, pathogenesis, usual and unusual presentations, and natural history of various diseases will be emphasized. Residents will be given an opportunity to develop advanced skills in diagnosis, differential diagnosis, judgment and resource use with a goal towards exemplary cost effective medical care.

Emphasis will also be placed on proper interviewing, communication and interpersonal skills to help develop a high level of history-taking proficiency. Residents will also be given an opportunity to develop a high level of physical examination skills. Proper supervision and evaluation of these functions with appropriate feedback to residents will be provided.

## The ACGME Core Competencies and the Curriculum

The Accreditation Council for Graduate Medical Education has established six areas of competency which residents must develop proficiency in during training. In brief, the six competencies and their working definitions are:

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 examinations, 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.

2. **Medical Knowledge:** Residents are expected to demonstrate knowledge of established and evolving biomedical, clinical and social sciences, and demonstrate the application of this knowledge to patient care and education of others.

    - Apply an open-minded and analytical approach to acquiring new knowledge.
    - Develop clinically applicable knowledge of the basic and clinical sciences that underlies the practice of internal medicine.

- Apply this knowledge in developing critical thinking, clinical problem solving, and clinical decision-making skills.
- Access and critically evaluate medical information and scientific evidence and modify knowledge base accordingly.

3. **Practice-Based Learning:** Residents are expected to be able to use scientific methods and evidence to investigate, evaluate, and improve their patient care practices.

    - Identify areas for improvement and implement strategies to improve their knowledge, skills, attitudes, and processes of care.
    - Analyze and evaluate their practice experiences and implement strategies to continually improve their 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 technology or other available methodologies to access and manage information and support patient care decisions and their own education.

4. **Interpersonal and Communication Skills:** Residents are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with their patients, families, and other health care team members.

    - 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 other colleagues.
    - Use effective listening, nonverbal communication, questioning and narrative skills to communicate with patients and families.
    - Interact with consultants in a respectful and appropriate fashion.
    - Maintain comprehensive, timely, and legible medical records.

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 toward their patients, their profession and society.

    - Demonstrate respect, compassion, integrity, and altruism in their relationships with patient, families, and colleagues.
    - Demonstrate sensitivity and responsiveness to patients and colleagues including gender, age, culture, religion, sexual preferences, socioeconomic status, beliefs, behaviors and disabilities.
    - Adhere to principles of confidentiality, informed consent, and scientific/academic integrity.
    - Recognize and identify deficiencies in peer performance.

6. **Systems-Based Practice:** Residents are expected to demonstrate an understanding of the contexts and systems in which health care is provided, and demonstrate the ability to apply this knowledge to improve and optimize health care.

    - Understand, access and utilize the resources and providers 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 each 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.

The rotation descriptions that are part of this written curriculum contain information detailing how residents will be evaluated in each of the six competency areas, specific to each rotation. These methods will be used by faculty to develop the verbal feedback recommendations and final written evaluation that will be provided to each resident at the end of the rotation.

## B. R1 Experiences

1. Ambulatory Medicine
2. Cardiology Consult Service, VAMC
3. Emergency Medicine, IMMC
4. Gastroenterology Inpatient Service, IMMC
5. General Medicine Inpatient Service, BMC
6. General Medicine Inpatient Service, IMMC
7. General Medicine Inpatient Service, VAMC
8. Hematology-Oncology, VAMC, or Endocrinology
9. ICU, IMMC
10. Pulmonary Inpatient Service, IMMC

## C. R2 Experiences

1. Ambulatory Medicine, IMMC
2. Cardiovascular Medicine (CCU), IMMC
3. Consultation Service, IMMC
4. Endocrinology
5. ICU – Critical Care Medicine, IMMC
6. ICU, VAMC
7. Infectious Disease
8. Nephrology
9. Neurology
10. VA R2 Inpatient Resident (Team C)
11. VA Senior Supervising Resident

## D. R3 Experiences

1. Board Study
2. Broadlawns Medicine Service Senior Resident
3. Dermatology
4. General Medicine Inpatient Service, IMMC
5. Geriatrics
6. Gynecology, BMC
7. Hematology-Oncology, IMMC
8. Research, Publications, and Presentation
9. Rheumatology
10. VA ICU
11. VA Senior Supervising Resident

## E. Elective Rotation Options

1. Adolescent Medicine
2. Allergy-Immunology
3. Anesthesiology
4. Cardiology Elective, Iowa Heart Center
5. Community GIM
6. BMC Emergency Medicine
7. GI Consult Service
8. BMC Gynecology
9. Outpatient Gynecology Intensive, IMMC
10. Hospice Experience
11. Occupational Medicine
12. Ophthalmology
13. Orthopedics, VAMC
14. Otolaryngology
15. Pathology
16. Psychiatry
17. Public Health
18. Pulmonary Medicine
19. Radiology, IMMC
20. Research
21. Sports Medicine, Des Moines Orthopedic Surgeons
22. Urology, VAMC