

Clinical Base Year Internal Medicine Wards Curriculum

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Educational Purpose

The purpose of this rotation is to provide residents with the knowledge and skills necessary to care for patients admitted to the hospital with common medical problems. The resident will gain knowledge about the diagnosis and management of specific disease processes and will also become familiar with the social, economic, and ethical issues unique to the practice of inpatient medicine. In addition, the resident will gain the experience necessary to determine appropriate disposition for patients being discharged from the hospital.

Goals and Objectives

- I.** From working with fellow and attending physicians in all areas of practice, residents are expected to learn to integrate the medical aspects of disease with the socio-economic, emotional, ethical, religious, occupational, environmental, medico-legal, and behavioral aspects of disease and disease prevention.
- II.** On a personal level, the resident will learn the boundaries of personal responsibility, the skills needed to function effectively as a member of a health-care team, and to incorporate quality improvement, risk management, and cost effectiveness into the decision-making process. The resident is strongly encouraged to observe the fellows and attending physicians for the qualities that make for effective leadership.
- III.** By the end of the inpatient medicine rotations, the resident will have the knowledge and skill to care for patients presenting with a broad array of medical problems. These include, but are not limited to, the following:

Undifferentiated syndromes:

- Syncope
- Shortness of breath
- Chest pain
- Abdominal pain (non-surgical and pre-surgical)
- Delirium
- Upper and lower gastrointestinal bleed
- Fever in the immunocompetent and immunocompromised host

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Problems/Diagnoses

- Deep vein thrombosis
- Pulmonary embolism
- Acute and chronic pancreatitis
- Diabetic ketoacidosis
- Hyperosmolar hyperglycemia (with and without coma)
- Complications of liver disease
 - Encephalopathy
 - Spontaneous bacterial peritonitis
 - Variceal bleeding
 - Alcohol withdrawal
- Infective endocarditis
- Acute renal failure
- Catheter-related bacteremia
- Asthma and chronic obstructive pulmonary disease
- Cellulitis
- Pyelonephritis
- Osteomyelitis
- Meningitis
- Pneumonia
- Hyponatremia
- Hyperkalemia
- Hypercalcemia
- Acid-base disturbances
- Hypertensive urgency
- Acute pain management
- Atrial fibrillation with rapid ventricular rate
- Unstable angina
- Congestive heart failure

IV. By the end of the inpatient medicine rotations, the resident should be familiar with other important aspects of the care inpatients such as:

- End of life care and decision making
- Uses and limitations of alternatives to hospitalization:
 - Home infusion therapy
 - Subacute nursing facility
 - Acute rehabilitation unit
 - Chronic care facility
 - Hospice (inpatient and outpatient)
- Medical futility
- DNR status
- The roles of other members of the health care team:
 - Social worker
 - Physical and occupational therapists

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- Nurse
- Case manager
- Discharge planning
- Equipment needs
- Medications and instructions
- Follow up
- Communication with:
 - Patient
 - Family members
 - Primary care provider
 - Members of the inpatient health care team
- Interaction with consultants:
 - Understanding when to obtain a consult
 - Asking a clear and specific clinical question
 - Ongoing communication with consultants

- V. At the beginning of each inpatient medicine rotation, the resident should identify problems or areas in which she/he wishes to gain further knowledge. The attending physician and upper level residents should be made aware of these areas and theses should be addressed in patient rounds and in teaching sessions.
- VI. Residents should become familiar with the concept of evidence based medicine. Residents are encouraged to seek answers to clinical questions from pertinent medical literature when possible.

Teaching and Educational Opportunities**I. Structured Activities****a. Supervised Direct Patient Care:**

- i. Residents encounter patients admitted to the general medicine services at Ruby Memorial Hospital. The population is obtained from the teaching service outpatient clinics, the emergency department at the hospital, as well as referrals from across the state of WV, southwestern PA, and southeastern Ohio. Faculty supervise admission histories, physical exams, daily management, and discharge plans.
- ii. Management rounds are conducted daily. The management team includes one attending physician, one PGY2 or PGY3 resident and 2-3 PGY1 residents, with participating medical students (MS3's and MS4's). Management rounds emphasize fundamental skills for management of hospitalized patients while incorporating issues such as resource utilization.

b. Small Group Discussions

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- i. Morning Check-In Rounds: Held daily at 7:00 a.m., the General Medicine ward team assigned to accept patients admitted overnight patients, attends. Check-in begins with the Interns/Resident on Night Float presenting all new admissions to the attending physician and their team. Brief discussions follow emphasizing history, physical, differential diagnosis, and management decisions.
- ii. Morning Report: Held daily Mon – Thur 8:00 – 8:45 am in the HSC. All ward interns, sub-interns, residents and all residents on electives are required to attend. Morning Report includes learning exercises organized by the Chief Resident. The other sessions are resident-led and focus on inpatient and outpatient medicine knowledge.
- iii. Teaching Attending Rounds are scheduled for a minimum of three days per week, for a minimum contact time of 4.5 hours per week and are combined with Management Rounds. Residents present cases and demonstrate requested skills at a bedside evaluation. This mandatory conference involves critical critique and discussion assimilating basic science knowledge, clinical data, pathophysiology, and evidence based principles. The bedside component includes confirmation of residents' history and physical examination skills by the teaching attending physician. The teaching attending assesses and models communication skills.
- iv. Journal Club: This conference is conducted once or twice monthly. The format includes presentations on critical reading of the medical literature and evidence-based medicine, followed by resident presentation of articles from current medical literature.

c. Didactic Sessions

- i. Noon Curriculum Conference: This daily lecture (M – F) series covers fundamental clinical and scientific topics pertinent to hospital and outpatient-based medicine, as well as special topics addressing the Core Competency curriculum. Topics are drawn largely from the major specialty disciplines and are repeated in an 18-month cycle to ensure adequate opportunity for all residents to attend core conferences.
- ii. Medical Emergencies Noon Conference Series: These didactics repeat yearly during the initial 8-10 weeks of the academic year, and review the management of urgent medical symptoms.
- iii. Board Review: The Chief Resident coordinates these discussions and reviews the board questions each month. Faculty facilitators are present at these discussions. Residents are encouraged to read the topic of interest prior to the Board Review session.
- iv. Morbidity and Mortality conference: Residents on the inpatient teaching services present and discuss all deaths. Findings from all autopsy reports are also presented and discussed, including a review of pathological materials. Residents also present important cases of morbidity. While this conference is primarily focused on practice-based learning and

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improvement, it also covers fundamental medical knowledge including basic and clinical sciences relating to the selected cases.

- v. Grand Rounds/Clinicopathologic Conference: In traditional fashion, faculty Grand Rounds are held weekly on Friday mornings from 8-9 am.

Rotation Structure

	Monday	Tuesday	Wednesday	Thursday	Friday	Sat/Sun
7:00 – 8:00 AM	Morning Check-In Rounds	Morning Check-In Rounds	Morning Check-In Rounds	Morning Check-In Rounds	Morning Check-In Rounds	Morning Check-In Rounds
8:00 – 8:45 AM	Morning Report	Morning Report	Morning Report	Morning Report	Grand Rounds or CPC	Patient Care
8:00-10:00 AM	Patient Care	Patient Care	Patient Care	Patient Care	Patient Care	Managing Attending Rounds
10:00-11:45 AM	Managing Attending Rounds	Managing Attending Rounds	Managing Attending Rounds	Managing Attending Rounds	Managing Attending Rounds	Patient Care
12:00-1:00 PM	Noon Conf.	Noon Conf.	Noon Conf.	Noon Conf.	Noon Conf.	

Rotation Specific Competency Objectives

a. Patient Care

- i. History taking. Residents at all levels of training will collect a thorough history by soliciting patient information and by consulting other sources of primary data in a logical and organized fashion. History taking will be hypothesis driven. Interviewing will adapt to the time available, use appropriate nonverbal techniques, and demonstrate consideration for the patient. The resident will inquire about the emotional aspects of the patient's experience while demonstrating flexibility based on patient need.
- ii. Physical Exam. Residents at all levels of training will perform a comprehensive physical exam, describing the physiological and anatomical basis for normal and abnormal findings.
- iii. Charting. Residents at all levels of training will record data in a legible, thorough, systematic manner.
- iv. Procedures.
 - 1. Residents will demonstrate knowledge of: procedural indications, contraindications, necessary equipment, specimen handling, patient after-care, and risk and discomfort minimization. They will

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participate in informed consent and assist patients with decision making. They will correctly identify the meaning of test results. Residents will initially observe and then perform procedures prior to the completion of the first training year.

- v. Medical Decision Making, Clinical Judgment, and Management Plans.
All residents will demonstrate improving skills in assimilating information that they have gathered from the history and physical exam.

- 1. Residents will be able to identify patients' problems and develop a prioritized differential diagnosis. Abnormal findings will be interrelated with altered physiology. They will understand their limitation of knowledge and seek the advice of more advanced clinicians. Residents will begin to develop therapeutic plans that are evidenced or consensus based. Residents will establish an orderly succession of testing based on their history and exam findings. Specific organ dysfunction will be anticipated based on known side effects of therapy. Additionally, residents will understand the correct administration of drugs, describe drug-drug interactions, and be familiar with expected outcomes.

- vi. Patient counseling

- 1. Residents will be able to describe the rationale for a chosen therapy and will be able to describe medication side effects in lay terms. They will assess patient understanding and provide more information when necessary. Residents will demonstrate the ability to be a patient advocate.

b. Medical Knowledge

- 1. Residents will consistently apply current concepts in the basic sciences to clinical problem solving. They will use information from the literature and other sources including electronic databases. PGY-1 residents will demonstrate satisfactory knowledge of common medical conditions, sufficient to manage urgent complaints with supervision. Residents must exhibit sufficient content knowledge of common conditions to provide care with minimal supervision by completion of the PGY1 year.

c. Interpersonal and Communication Skills

- 1. Residents will develop and refine their individual style when communicating with patients. They will strive to create ethically sound relationships with patients, the physician team and supporting hospital personnel. They will create effective written communications through accurate, complete, and legible notes. They will exhibit listening skills appropriate to patient-centered interviewing and communication. Residents will recognize verbal and nonverbal cues from patients.
 - 2. Residents will also exhibit team leadership skills through effective communication as manager of a team. Residents will respond to

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feedback in an appropriate manner and make necessary behavioral changes.

d. Professionalism

1. Residents will demonstrate integrity, accountability, respect, compassion, patient advocacy, and dedication to patient care that supercedes self-interest. Residents will demonstrate a commitment to excellence and continuous professional development. They will be punctual and prepared for teaching sessions. Residents will demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, and informed consent. Residents are expected to show sensitivity and responsiveness to patients' culture, age, gender and disabilities.

e. Practice Based Learning and Improvement

1. Residents will use hospital and University library resources to critically appraise medical literature and apply evidence to patient care. They will use hand-held computers, desktop PC's and Internet electronic references to support patient care and self-education. They will model these behaviors to assist medical students in their own acquisition of knowledge through technology.

f. Systems Based Practice

1. Residents will be sensitive to health care costs while striving to provide quality care. They will begin to effectively coordinate care with other health care professionals as required for patient needs.

Methods of Evaluation**a. Resident Performance**

- i. Faculty complete web-based electronic resident evaluation forms provided by the Internal Medicine Residency office. The evaluation is competency-based. The evaluation is shared with the resident, is available for on-line review by the resident at their convenience, and is internally reviewed by the residency office. The evaluation is part of the resident file and is incorporated into the semiannual performance review for directed resident feedback.
- ii. Senior residents and interns participating in the night float rotation are evaluated in a similar fashion using a web-based system.
- iii. Residents electronically record completed procedures on the E*Value system. The supervising physician verifies the resident understands the procedure's indications, contraindications, complications and interpretation.

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- iv. Chart audits are conducted on at least one resident-generated document each rotation, with specific feedback given to the resident on data-gathering and documentation skills.
- b. Program and Faculty Performance
 - i. Using the E*value system upon completion of the rotation, residents complete a service evaluation commenting on the faculty, facilities and service experience. Evaluations are reviewed by the program and attending faculty physicians receive anonymous annual copies of aggregate completed evaluations. Collective evaluations serve as a tool to assess faculty development needs. The Education Committee reviews results annually.

Curriculum Timeline

Approved by Education Committee September 19, 2007