

TO: Class of 2014

FROM: Christopher Lynn, M.D.  
Clinical Clerkship Director

RE: Required Internal Medicine Clerkship  
Course Requirements and Handbook

On behalf of our Chairman and the faculty/staff in the Department of Medicine, I would like to welcome you to the Internal Medicine Clerkship.

The attached materials are indexed to allow easy reference. I encourage you to read all of this material at the beginning of your clerkship and review it frequently if questions develop.

As you move from the classroom oriented education of the first two years, it is important to recognize that you will now be called on to use this information and acquire additional knowledge in order to care for your patients. This knowledge will not be "given" to you. You must acquire the personal motivation and self-study habits necessary for a lifetime of learning.

The faculty looks forward to working with you during your clerkship. We are here to help you reach your goal of becoming a physician.

The Clerkship Office is located in the Ruppert Health Center, Room #0007, Office AA. If you have any questions, call Melissa Hansen at 383-5022 between 8:30 a.m. – 5:00 p.m.

## **DEPARTMENT OF MEDICINE FACULTY**

### **CARDIOLOGY**

Dalynn Badenhop, PhD, Professor  
Mark Burket, M.D., Professor  
William Colyer, Jr., M.D., Associate Professor  
Christopher Cooper, M.D., Professor  
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Ehab Eltahawy, M.D., Assistant Professor  
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Lucy Goodenday, M.D., Professor  
Blair Grubb, M.D., Professor  
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### **DERMATOLOGY**

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Raymond Bourey, M.D., Associate Professor  
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### **GASTROENTEROLOGY**

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### **GENERAL INTERNAL MEDICINE**

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Srini Hejeebu, D.O., Assistant Professor  
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Ruby Nucklos, M.D., Assistant Professor  
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Larry Krill, M.D., Associate Professor  
Bryan Hinch, Assistant Professor  
Lauren Sweetser, M.D., Assistant Professor  
Muhammad Bawany, M.D., Assistant Professor  
Yousel Al Ahwel, M.D., Assistant Professor  
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### **GERIATRICS**

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Anu Garg, M.D., Assistant Professor

### **HEMATOLOGY/ONCOLOGY**

Iman Mohamed, M.D., Professor  
Roland Skeel, M.D., Professor  
Mary R. Smith, M.D., Professor  
Peter White, M.D., Professor  
Cherian Verghese, M.D., Assistant Professor  
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### **INFECTIOUS DISEASE**

Julie Westerink, M.D., Professor  
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### **NEPHROLOGY**

Deepak Malhotra, M.D., Professor  
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Shobha Ratnam M.D., Assistant Professor  
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### **PULMONARY**

Dan Olson, M.D., Ph.D., Professor  
Jeffrey Hammersley, M.D., Associate Professor  
James Willey, M.D., Professor  
Ragheb Assaly, M.D., Associate Professor  
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D. A. Hernandez, M.D., Assistant Professor

### **RHEUMATOLOGY**

Bashar Kahaleh, M.D., Professor

### **ST. VINCENT MERCY MEDICAL CENTER**

DME: Vijay Mahajan, M.D.  
Mahmood Darr, M.D.  
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Brian Savage, M.D.

Numerous volunteer faculty in subspecialties

## THE REQUIRED INTERNAL MEDICINE CLERKSHIP

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## I. Educational Course Objectives



### Internal Medicine Clerkship Educational Course Objectives

At the end of the 10 week Internal Medicine Clerkship, medical students will be able to:

	<b>EPO</b>	<b>Clerkship objective</b>
1	S1, S2, S3, S5	Interview patients collecting pertinent data concerning the patients' presenting problems
2	S4, S5	Perform a complete or focused physical examination as appropriate and distinguish normal from abnormal findings
3	K1 to K8; S5, S7, S8	Synthesize information to develop a reasonable differential diagnosis and be prepared to present to preceptor
4	K1 to K8; S5, S7, S8	Following an assessment of all assigned patients, students will describe the chief problems and a plan for treatment.
5	K1 to K8; S1 to S5	Prepare a complete H & P for a new patient admitted to the service and chart the results.
6	K1 to K8; S1 to S5; S7, S8	Periodically re-evaluate patients' status including interpretation of new history and physical exam findings
7	K1 to K8; S1 to S5; S7, S8, S11	Accurately prepare case reports based on patient encounters and research into the primary diagnoses
8	K5; S7, S8	Use and interpret laboratory and radiographic tests used in diagnosing common disease
9	K9	Assess appropriate pain management and make recommendations for changes in treatment
10	K1 to K8; S10	Recognize and manage situations related to common diseases that are potential emergencies
11	K10 to K16; P1, P6, P7	Identify ethical problems which arise in patient treatment and care
12	K10 to K16	Use ethical principles to reach a resolution in a presented case
13	K10 to K16	Apply knowledge of ethical principles to prepare a Clinical Ethics Case Consultation.

14	K10 to K16; P1, P6, P7	Recognize how race, culture and/or spirituality may influence choice of treatment and health care decision-making.
15	S11	Utilize self-directed learning in evaluation and management of patients.
16	P1 to P7	<p>All students participating on this clerkship will meet or exceed the institutional standards for professional behaviors as evidenced by</p> <ul style="list-style-type: none"> <li>• adhering to the dress code consistent with clerkship standards.</li> <li>• being punctual for all educational experiences (i.e. exams, clinics, rounds, small group sessions, appointments at the clinical skills center).</li> <li>• fulfilling all educational assignments and responsibilities on time.</li> <li>• displaying honesty in all interactions and situations.</li> <li>• contributing to an atmosphere conducive to learning and is committed to advance scientific knowledge.</li> <li>• establishing and maintaining appropriate boundaries in all learning situations.</li> <li>• using professional language being mindful of the environment.</li> <li>• establishing effective rapport.</li> <li>• being respectful at all times of all parties involved.</li> <li>• resolving conflict in a manner that respects the dignity of every person involved.</li> <li>• respecting the diversity of race, gender, religion, sexual orientation, age, disability and socioeconomic status.</li> <li>• exhibiting humanism in all interactions.</li> <li>• protecting patient confidentiality.</li> <li>• being aware of and adapting to differences in individual patients including those related to culture and medical literacy.</li> <li>• recognizing personal limitations and seeking appropriate help.</li> <li>• accepting constructive feedback and making changes accordingly.</li> <li>• exhibiting independent and self-directed learning.</li> </ul>

## **Required Clinical Experiences:**

To help learners achieve these educational course objectives, requirements for both patient type (diagnostic category) and students' level of involvement have been established. These clinical experiences will be complimented by assigned readings and didactic sessions related to diagnosis and management of patients in each category.

### ***Patient type:***

During this clerkship, students are required to recognize symptoms that may signify disease in the following categories, distinguish normal from abnormal findings on physical exam, formulate a differential diagnosis based on signs and symptoms, use and interpret common tests used in diagnosing disease and develop a systematic approach to management of these common diseases. This provides the core of the internal medicine experience. All categories are required and considered essential as part of an introduction to internal medicine. The minimum number of patients in each category is defined.

Patients are seen in both inpatient and ambulatory settings. All students complete 6 weeks of General Medicine inpatient service. Students are involved with patients admitted to acute care inpatient services with a wide variety of medical diagnoses. Students are required to evaluate **at least 16** patients over the 6 week experience. In addition to participating in General Medicine Service, students spend 3 weeks in a variety of ambulatory sites. During this experience, students work with preceptors who care for a wide spectrum of patients with medical diagnoses including both new patients and patients returning for follow up care. Students are required to assess **at least 8** patients during this experience. Students must log all patient encounters and logs will be monitored to ensure adequate experience.

<b>Diagnostic category</b>	<b>Minimum Number of Patients to be seen</b>	<b>Comments/Explanation</b>
Cardiovascular Disease	2	Includes CHF, ischemic heart disease, arrhythmia, hypertension, or peripheral vascular disease
Endocrinologic Disease	2	Includes hyper/hypothyroidism, diabetes mellitus, or adrenal disease
Pulmonary Disease	2	Includes COPD, asthma, interstitial lung disease
Hematologic/Oncologic Disease	2	Includes anemia, hematologic malignancy, or solid organ malignancy
Infectious Disease	2	Includes sepsis, endocarditis pneumonia, meningitis, urinary infection or HIV
Rheumatologic Disease	2	Included rheumatoid arthritis, degenerative arthritis, or SLE
Gastroenterologic Disease	2	Include peptic ulcer disease, esophagitis, cirrhosis or inflammatory bowel disease
Nephrologic Disease	2	Includes renal failure, electrolyte disturbance, acid-based disturbance, nephritic syndrome, or renal calculi

***Level of involvement:***

In addition to seeing patients in the diagnostic categories listed above, how the students are engaged in the encounter is also an important factor in helping students achieve the objectives for this clerkship. Level of involvement is likely to include various types of interaction with patients and the health care team and should be monitored to ensure a complete experience. Levels of involvement will be indicated for logged patient encounters. The logs will be reviewed mid-block to ensure that students have a range of experiences in both in-patient and/or out-patient settings.

Level of involvement during patient encounters will be logged using the following categories:

- Independently gathered history information\*
- Observed patient interview
- Independently performed physical exam\*
- Observed physical exam
- Presented patient case\*
- Wrote patient note\*



- Opportunity to discuss laboratory or test results\*
- Opportunity to offer and discuss differential diagnosis\*
- Opportunity to offer and discuss management options\*
- Observed procedure
- Performed procedure (not required for this clerkship)

For the levels of involvement marked with an \*, the following numbers are considered to be the **minimum** expected for this clerkship and should be reflected in the logs:

Activity:	Elicit History information	Perform Physical Exam	Present patient	Recommend or discuss dx, tx, management	Interpret tests	Write notes
Frequency:	24	24	24	24	24	16

### **Other Clerkship Experiences:**

In addition to required clinical experiences (patient type and level of involvement), successful completion of the clerkship requires student participation in a variety of additional experiences. These experiences are coordinated through the Department of Internal Medicine and include lecture/discussions and presentations.

Students will be required to present a patient case for discussion and explain the pathophysiology and plans for treatment.

## II. Educational Program Objectives



### The University of Toledo College of Medicine Educational Program Objectives

#### Introduction

In recent years, it has become a necessity for medical schools to articulate the objectives of their educational program and to align course instruction and evaluation with these explicit program objectives. To that end, the Curriculum Committee of The University of Toledo's College of Medicine (UT/COM) has adopted the following objectives for the four-year program leading to the medical degree.

The competencies described in the Educational Program Objectives reflect three domains, knowledge, skills, and attitudes. Student development is measured and documented with respect to competence in each domain over the course of the four-year educational program.

#### **Part I: A UT/COM graduate physician will be knowledgeable**

*The UT/COM faculty have designed an exceptional curriculum in which knowledge is acquired and applied through an integrated organization across four-years. UT/COM students have the opportunity to learn through direct contact with content experts, through problem-based and problem-solving formats, and experientially through supervised interactions with real and simulated patients.*

Before graduation, a student will have demonstrated, to the satisfaction of the faculty, knowledge in the following 16 categories. Knowledge will be assessed by the students' ability to define, describe and explain facts and concepts, as well as at higher levels of cognition, as measured by the ability to apply, analyze and integrate content.

- K1 Knowledge of the normal structure and function of the body and each of its organ systems
- K2 Knowledge of molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis
- K3 Knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative and traumatic) of maladies and ways in which they operate on the body (pathogenesis)
- K4 Knowledge of altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various disease and conditions

- K5 Knowledge of the most frequent clinical, laboratory, radiographic, and pathologic manifestations of common diseases
- K6 Knowledge of the pharmacologic basis for therapeutics
- K7 Application of basic science knowledge to clinical problems
- K8 Knowledge of the use of study designs, statistical methods and the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies
- K9 Knowledge about relieving pain and ameliorating the suffering of patients
- K10 Knowledge of the theories and principles that govern ethical decision making and of the major ethical dilemmas in medicine, particularly those that arise at the beginning and end of life and those that arise from the rapid expansion of knowledge of genetics
- K11 Knowledge of principles and development of human behavior
- K12 Knowledge of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to symptoms, diseases, and treatments
- K13 Knowledge of the important non-biological determinants of poor health and of the economic, psychological, social and cultural factors that contribute to the development and/or continuation of disease.
- K14 Knowledge of the importance of recognizing and addressing gender and cultural biases in individuals involved in the delivery of health care as well as in the process of health care delivery
- K15 Knowledge of various approaches to the organization, financing, and delivery of health care
- K16 Knowledge of the challenges to medical professionalism posed by conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine

## **Part II: A UT/COM graduate physician will be skilled**

The UT/COM faculty designed an integrated curriculum in which clinical skills are learned in concert with the correlated medical knowledge. UT/COM students have the opportunity to learn verbal and written communication as well as procedural skills through direct contact with content experts, through laboratory-based practice with feedback, and experientially through supervised interactions with real and standardized patients.

As a result, before graduation a student will have demonstrated, to the satisfaction of the faculty, the following:

- S1 The ability to communicate effectively, both orally and in writing, with patients, patients' families, colleagues, and others with whom physicians must exchange information in carrying out their responsibilities.
- S2 The ability to demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities.
- S3 The ability to obtain an accurate medical history that covers all essential aspects of the history.
- S4 The ability to perform a physical examination that is both complete and accurate.
- S5 The ability to produce a written report of a patient encounter that is legible, organized, concise and accurate.
- S6 The ability to perform procedures using universal precautions. At a minimum, these procedures include venipuncture, intravenous line insertion, insertion of nasogastric tubes, insertion of urinary bladder catheters, suturing simple lacerations, and basic life support.
- S7 The ability to use knowledge of the most frequent clinical, laboratory, radiographic and pathological manifestations to interpret the results of commonly used diagnostic procedures.
- S8 The ability to construct appropriate common diagnostic and therapeutic strategies for patients with common conditions, both acute and chronic including medical, psychiatric, and surgical conditions, and those requiring short- and long-term rehabilitation.
- S9 The ability to identify factors that place individuals at risk for disease or injury, to select appropriate tests for detecting patients at risk for specific diseases or in the early state of disease, and to determine strategies for responding appropriately.
- S10 The ability to recognize patients with immediately life threatening conditions and to institute appropriate initial therapy.
- S11 The ability to retrieve (from electronic databases and other resources), manage, and utilize biomedical information for solving problems and making decisions that are relevant to the care of individuals and populations in order to stay abreast of ongoing scientific advances.

### **Part III: A UT/COM graduate physician will be professional**

UT/COM believes in the importance of molding the character of students and dedicates curricular and extracurricular time to the development of ethical standards and humanistic beliefs and behaviors.

As a result, before graduation a student will have met or exceeded the institution standards for the following:

- P1 Ethical, responsible, reliable and dependable behavior in all aspects of their professional lives and a commitment to patients, society and the profession.
- P2 Honesty and integrity in all interactions with patients, patients' families, colleagues and others with whom students interact in their professional lives.
- P3 The capacity to recognize and accept limitations in one's own knowledge and clinical skills, and a commitment to continuously improve one's knowledge and ability.
- P4 Professionalism in dress, grooming, manner of speech and personal interactions with colleagues, faculty, staff, patients, patients' families.
- P5 Compassionate treatment of patients, and respect for their privacy and dignity.
- P6 An awareness of the physicians' role in providing health care for members of traditionally underserved populations and of their responsibility to provide care to patients who are unable to pay.
- P7 Knowledge of, and respect for, the roles of other health care professionals, and of the need to collaborate with others in caring for individual patients and in promoting the health of defined populations.

### III. Learning Objectives for Patient Encounters

#### Cardiovascular Disease

##### Cardiovascular Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with cardiovascular disease (CHF, Ischemic heart disease, Arrhythmia, Hypertension, Peripheral Vascular Disease, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of cardiovascular disease.

#### Learning Objectives

##### Cardiovascular Disease

After having primary responsibility for evaluating at least two patients with cardiovascular disease (CHF, Ischemic heart disease, Arrhythmia, Hypertension, Peripheral Vascular Disease, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of cardiovascular disease, the student will be able to:

- a) recognize symptoms that may signify cardiovascular disease including chest pain, shortness of breath, orthopnea and edema
- b) distinguish normal from abnormal findings on cardiovascular exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing cardiovascular disease
- e) develop a systematic approach to the management of common cardiovascular diseases (including the recognition and management of situations that are potential emergencies)

# Endocrinologic Disease

## Endocrinologic Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with endocrinologic disease (Hyper/Hypothyroidism, Diabetes Mellitus, Adrenal Disease, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of endocrinologic disease.

## Learning Objectives

### Endocrinologic Disease

After having primary responsibility for evaluating at least two patients with endocrinologic disease (Hyper/Hypothyroidism, Diabetes Mellitus, Adrenal Disease, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of endocrinologic disease, the student will be able to:

- a) recognize symptoms that may signify endocrinologic disease including weakness, polyuria/polydipsia and hypo/hypertension
- b) distinguish normal from abnormal findings on endocrinologic exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing endocrinologic disease
- e) develop a systematic approach to the management of common endocrinologic diseases (including the recognition and management of situations that are potential emergencies)

# Pulmonary Disease

## Pulmonary Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with pulmonary disease (COPD, Asthma, Interstitial Lung Disease, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of pulmonary disease.

## Learning Objectives

### Pulmonary Disease

After having primary responsibility for evaluating at least two patients with pulmonary disease (COPD, Asthma, Interstitial Lung Disease, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of pulmonary disease, the student will be able to:

- a) recognize symptoms that may signify pulmonary disease including shortness of breath, cough, hemoptysis and chest pain
- b) distinguish normal from abnormal findings on pulmonary exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing pulmonary disease
- e) develop a systematic approach to the management of common pulmonary diseases (including the recognition and management of situations that are potential emergencies)



# Hematologic/Oncologic Disease

## Hematologic/Oncologic Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with hematologic/oncologic disease (Anemia, Hematologic Malignancy, Solid Organ Malignancy, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of hematologic/oncologic disease.

## Learning Objectives

### Hematologic/Oncologic Disease

After having primary responsibility for evaluating at least two patients with hematologic/oncologic disease (Anemia, Hematologic Malignancy, Solid Organ Malignancy, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of hematologic/oncologic disease, the student will be able to:

- a) recognize symptoms that may signify hematologic/oncologic disease including weight loss, lymph node enlargement, easy bruising, hematochezia, hemoptysis and hematuria
- b) distinguish normal from abnormal findings on hematologic/oncologic exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing hematologic/oncologic disease
- e) develop a systematic approach to the management of common hematologic/oncologic diseases (including the recognition and management of situations that are potential emergencies)

# Infectious Disease

## Infectious Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with infectious disease (Sepsis, Endocarditis, Pneumonia, Meningitis, Urinary Infection, HIV, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of infectious disease.

## Learning Objectives

### Infectious Disease

After having primary responsibility for evaluating at least two patients with infectious disease (Sepsis, Endocarditis, Pneumonia, Meningitis, Urinary Infection, HIV, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of infectious disease, the student will be able to:

- a) recognize symptoms that may signify infectious disease including fever/chills, altered mental status, dysuria, diarrhea and cough
- b) distinguish normal from abnormal findings on exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing infectious disease
- e) develop a systematic approach to the management of common infectious diseases (including the recognition and management of situations that are potential emergencies)

# Rheumatologic Disease

## Rheumatologic Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with rheumatologic disease (Rheumatoid Arthritis, Degenerative Arthritis, SLE, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of rheumatologic disease.

## Learning Objectives

### Rheumatologic Disease

After having primary responsibility for evaluating at least two patients with rheumatologic disease (Rheumatoid Arthritis, Degenerative Arthritis, SLE, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of rheumatologic disease, the student will be able to:

- a) recognize symptoms that may signify rheumatologic disease including joint pain/swelling, fatigue, low grade fever and skin lesions
- b) distinguish normal from abnormal findings on exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing rheumatologic disease
- e) develop a systematic approach to the management of common rheumatologic diseases (including the recognition and management of situations that are potential emergencies)

# Gastroenterologic Disease

## Gastroenterologic Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with gastroenterologic disease (Peptic Ulcer Disease, Esophagitis, Cirrhosis, Inflammatory Bowel Disease, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of gastroenterologic disease.

## Learning Objectives

### Gastroenterologic Disease

After having primary responsibility for evaluating at least two patients with gastroenterologic disease (Peptic Ulcer Disease, Esophagitis, Cirrhosis, Inflammatory Bowel Disease, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of gastroenterologic disease, the student will be able to:

- a) recognize symptoms that may signify gastroenterologic disease including diarrhea, constipation, hematemesis, hematochezia and jaundice
- b) distinguish normal from abnormal findings on exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing gastroenterologic disease
- e) develop a systematic approach to the management of common gastroenterologic diseases (including the recognition and management of situations that are potential emergencies)

# Nephrologic Disease

## Nephrologic Disease

- 1- Evaluate at least two patients on the inpatient or outpatient service, as a primary student, with nephrologic disease (Renal Failure, Electrolyte Disturbance, Acid-Based Disturbance, Nephrotic Syndrome, Renal Calculi, etc.)
- 2- To have exposure to assigned reading materials and didactics related to diagnosis and management of nephrologic disease.

## Learning Objectives

### Nephrologic Disease

After having primary responsibility for evaluating at least two patients with nephrologic disease (Renal Failure, Electrolyte Disturbance, Acid-Based Disturbance, Nephrotic Syndrome, Renal Calculi, etc.) and being exposed to assigned reading materials and didactics related to diagnosis and management of nephrologic disease, the student will be able to:

- a) recognize symptoms that may signify nephrologic disease including hematuria, fatigue, nausea/vomiting and muscle cramps
- b) distinguish normal from abnormal findings on exam
- c) formulate a differential diagnosis based on signs and symptoms
- d) use and interpret common tests used in diagnosing nephrologic disease
- e) develop a systematic approach to the management of common nephrologic diseases (including the recognition and management of situations that are potential emergencies)

#### **IV. Required Internal Medicine**

The required Medicine rotation is 10 weeks in length. You will spend a total of 6 weeks at a Toledo area hospital (UTMC, St. Vincent Mercy Medical Center) or at Riverside Hospital, Columbus, Akron General, or St. Joseph, Ypsilanti, MI. You will spend 3 weeks either at a UTMC AHEC site or on the Ambulatory Medicine block.

Clinical Competency Evaluations are required from each set of physicians with whom you work (Attending, Resident, and Intern). Students on the AHEC block will be evaluated by their Attending. Students on the Ambulatory Medicine block will be evaluated by the attending(s) with whom they work. A sample Clinical Competency Evaluation is included in Appendix B.

#### **Goals:**

The Department of Internal Medicine will provide all third-year medical students with a broad-based educational experience in ambulatory and inpatient medicine so that they will:

- Develop skills in the evaluation and basic management of patients.
- Acquire the knowledge necessary for the competent practice of medicine in a supervised setting as measured by acquiring a minimum score on the Internal Medicine subject exam.
- Acquire excellent interpersonal and professional communication skills.

The Department of Medicine has established a set of Educational Course Objectives which can be found in Appendix F. These are in alignment with the University of Toledo College of Medicine Educational Program Objectives found in Appendix E. We would encourage you to review these frequently over the next three months.

Students will receive written Mid-Clerkship feedback at the end of the fifth week of the rotation. This will not be used to determine your final grade for the clerkship

#### **V. Reading**

The recommended text for Internal Medicine will be Cecil's Essentials of Medicine. This is an excellent, easily readable text, which covers the major topics in Internal Medicine. You will need to be acquainted with the material in this text in order to pass the Subject Exam at the end of this rotation and the Internal Medicine portion of the National Boards. You will not see enough disease variety in your patient population during this rotation to adequately cover all of the important topics in Internal Medicine. You must keep up with your reading during the rotation or you will not pass the Subject Exam. The students will be expected to read in depth on their own patients from one of the major medical textbooks.

#### **VI. Departmental Educational Program**

A seminar series will be presented to all students during the the first week of the required Internal Medicine Clerkship. Students on AHEC rotations will be expected to return to UTMC for Friday afternoon sessions, when offered. Students on rotation at Riverside, Akron General, or St. Joseph do not return for the Friday lectures, but are expected to complete the Ethics portion of the Friday sessions.

During the orientation week, all students will have the opportunity to be observed by a faculty member performing a complete History & Physical on a standardized patient. Formative feedback will be provided after completion of the exercise.

Attendance at all seminars and conferences will be confirmed by sign in sheets and completion of any exercises presented during the sessions.

Students are also expected to complete all of the SIMPLE cases prior to the end of the Clerkship.

Friday afternoon sessions will include Ethics and other topics in Medicine. Attendance is required. A schedule will be given to you at the start of your rotation.

Students will be released from their clinical duties at noon on the day before the Subject Exam.

An OSCE (Objective Structured Clinical Examination) will be given by the Department of Internal Medicine. This exam will assess your skills in taking history, performing a physical exam and interpreting clinical studies.

## **VII. Case Log Website**

The medicine clerkship will be using a web-based system for monitoring students' clinical activity during their medicine clerkship. You are responsible for logging all patient interaction and procedures you performed during your medicine clerkship.

After your clinical activity starts you will need to start logging cases and procedures into the website. The website for this is: <http://MedEd.utoledo.edu> Once inside the website, enter your user name and password as described on that web page and then click the link: [Log Clinical Cases and Procedures](#).

Your UTMC provided email address will be used to communicate with you throughout your medicine clerkship. Therefore, you will need to check it frequently. Also, you are expected to log cases and procedures in a timely fashion.

It is imperative that you honestly log cases and procedures. Students from each rotation will randomly be selected for a review of their entered data. All of their data will be double checked with proctors and/or medical records for accuracy.

**NOTE: In order for the patient information to be permanently recorded, it is necessary to enter the six digit Medical Record Number. AHEC sites may not use patient Medical Record Numbers. In that situation, the patient's birth date should be entered into the Case Log. If neither the Medical Record Number or birth date is available, enter numbers such as 000001 for the first patient, 000002 for the second patient, 000003 for the third patient, etc.**

**If a six digit entry is not made, cases entered will not appear the next time your Case Log is opened.**

You must enter a minimum of 24 patients. At least six of these should be from your Ambulatory Medicine/AHEC experience. Failure to enter 24 patients will result in an incomplete grade. No final grade will be submitted until you have entered at least 24 patients.

Students are responsible for recording their Educational Assigned Hours into the Case Log System. Clinical Cases and Educational Assigned Hours need to be updated weekly throughout the 10 week clerkship.

### **VIII. Standard Grading System for Internal Medicine Clerkship**

Students are asked to refer to the “Grading Policy for Required Clinical Clerkships” (PolicyA-10-04-1301B-0706) for details of the evaluation system. This system was presented during your Orientation to Clinical Clerkship in July.

For the Internal Medicine Rotation, the three major Components include the following:

A) Clinical Competency Grade (40% of final grade) 40 points:

The final grade for Clinical Competence will be determined by compiling all of the evaluations for your ten week rotation. The evaluations for each three week block will constitute one-third (1/3) of the total grade. Within each three week block, each evaluation will contribute an equal weight, adjusted only for the amount of contact with the evaluator.

B) Departmental Educational Program (20% of final grade) 20 points:

1. Ten of the 20 points will come from a variety of projects and quizzes tied to the Ethics lecture series. Students who are rotating at Riverside, St. Joseph or AHEC sites will be able to complete these projects and quizzes by mail or over the internet. Students must keep up with their Case Log entries to qualify for these points.
2. Ten of the 20 points will come from the OSCE (Objective Structured Clinical Exam) mentioned in Section III.
3. Students must obtain at least ten (10) points for the Departmental Educational Program. Failure to do so will result in a grade of Defer until the deficiency is remediated.

C) National Board of Medical Examiners (NBME) Subject Examination (40% of the final grade) 40 points:

The NBME Subject Examination is offered at the end of the Internal Medicine Clerkship. Students who fail to attain a score equal to the 10th percentile (or the next closest score above the 10<sup>th</sup> percentile) on the first attempt will receive a grade of Defer for the Clerkship and be required to retake the examination within one year of the first attempt. If the student attains a score greater than the 10th percentile in the second attempt, he/she will receive Pass for the Clerkship. The student who fails to attain a score equal to or above the 10th percentile on this second attempt will receive a grade of Fail for the clerkship. The student will be required to perform a four-week supplemental clerkship experience followed by a third administration of the subject examination.

The final grade awarded will be Honors, High Pass, Pass or Fail. See the “Grading Policy for Required Clinical Clerkships” for details.

### **IX. Required Attendance at Conferences**

All students assigned to inpatient services are required to attend Medical Grand Rounds at their respective hospital sites. Students on the AHEC rotation will be expected to return for Friday afternoon sessions only.

Each of the hospitals will have daily noon or morning conferences which you are required to attend. You are also required to attend morning report if offered at your institution. These schedules may be obtained at the respective hospitals.



**X. The Hospital Rotation** (University Medical Center, St. Vincent Mercy Medical Center, Akron General, Riverside Hospital, Columbus, OH, St. Joseph Mercy Hospital, Ypsilanti, MI)

Students' Responsibilities and Criteria for Evaluation

1. Perform complete history and physical exam on new patients admitted to service. H&P should be on the chart within 24 hours of admission.
2. Be prepared to present complete H&P on any admitted patient for attending rounds the next day.
3. See all patients for whom you have primary responsibility **prior to rounds** and be prepared to present a sketch of the chief problems and plans for treatment.
4. Keep up to date on your patients' problems and notify your intern if changes in condition or abnormal tests are seen.
5. Attend student morning report each day, as well as all noon conferences, Grand Rounds and required seminars.
6. When on call, you need to be available to your intern so that you can see new admissions or observe procedures on your patients. See On Call schedule information.
7. Take advantage of any and all opportunities to perform procedures even if they seem fairly minor or routine (starting IV's, placing NG tube, urinary bladder cath., etc.).
8. History and physicals for staff admissions will be reviewed by the attending. They must be neat, complete and most importantly **must** have a differential diagnosis for each major presenting problem. There must also be evidence that you have read from one of the major Internal Medicine textbooks (Cecil's, Harrison's) on each of your patients' problems.
9. You will not be expected to follow more than five patients at a time on average. If you are carrying greater than that number, some will be "pulled" from your service so that you can continue to see and evaluate new patients. You must write progress notes on each of your assigned patients every day.
10. The attending and residents may have additional expectations. If you have questions regarding stated or implied expectations, you must ask the attending or resident early during your rotation. A general job description for members of the medical team can be found in Appendix A. Students will be given ongoing verbal feedback during the rotation. If a student feels that they are not getting adequate feedback during their rotation, they should directly ask the attending physician for an evaluation of their performance.

### On Call Schedule

All schedules will vary by clinical site. You will be “on call” no more often than every fourth night. Your specific call responsibilities will be discussed during orientation at your assigned hospital.

### Weekends

Students will have one weekend day off per week (Saturday or Sunday) which will be determined by the senior resident.

### Vacation

Students will not be expected to come into the hospital on days designated as UT/COM holidays. This includes those students at Riverside, Akron General, and St. Joseph.

### Change of Rotation

Students will be expected to be at their assigned hospitals throughout the duration of the rotation at that hospital. Changing hospitals within the Toledo area does not warrant an entire weekend off.

Students going to an AHEC site, Riverside Methodist Hospital, Columbus, Akron General, or St. Joseph Mercy, Ypsilanti may leave on Friday before starting the next Block after they have completed their assigned patient care duties and attending the seminar session. If they are on call Friday, they will be expected to complete this responsibility before going to the AHEC site or Riverside, St. Joseph, or Akron Hospitals.

## **XI. The Ambulatory Medicine Rotation**

### Students' Responsibilities and Criteria for Evaluators

1. Each student not assigned to an AHEC will spend 3 weeks of their 10 week clerkship in an Ambulatory block. Each student during this period will be assigned to work in an out patient clinic or clinics.
2. Your weekly schedule should be about the same from week to week. If specific clinics are canceled, you will generally be assigned to another clinic scheduled that same day.
3. Students will perform different functions in different clinics at the discretion of the faculty preceptor. Some students will act primarily as observers and some will actually see and examine patients under supervision. This will depend on the clinic experience available.
4. During each clinic session, students will identify one patient presenting with an interesting problem about which they would like to spend time reading and researching. They will prepare a brief case presentation based on their evaluation of the patient and a review of the chart. Four of these Case Reports will be prepared each week. Please see "Directions for Case Report Preparation" and a "Sample Case Report" which follows.
5. Each Friday the students on the Ambulatory block will meet for rounds as a group with a faculty member. Each student will present at least one patient for review and discussion. Discussions may include a review of pathophysiology, discussion and/or plans for treatment.
6. Each student on this rotation will have one faculty member assigned to them as a faculty coordinator. This person will meet with the student individually on a weekly basis to review the students' Case Reports and provide feedback on their performance.
7. Students on the Ambulatory block are encouraged to attend all noon conferences when possible. They will also attend the seminar series.
8. Evaluations will be based on the following:
  - a) Case Reports will be evaluated by the clinic preceptor on the basis of their clarity and comprehensiveness. Evidence of research into a specific topic will be given prime consideration in the evaluation.
  - b) Presentation and discussion during the Friday rounds will be evaluated on the basis of your preparation for this exercise and your ability to present pertinent information in a clear and concise manner.
  - c) Patient evaluation and management skills will be assessed by the faculty working with you in the outpatient clinics.
9. Students will be given ongoing verbal feedback during the rotation. If a student feels that they are not getting adequate feedback about their rotation, they are encouraged to ask the attending physician for an evaluation of their performance.

## Case Report Preparation

(A sample Case Report follows this description)

1. Case Reports should include a brief description of the reason for the clinic visit, pertinent past medical history and a summary of treatment plans. Pertinent findings on physical exam should also be mentioned whether or not you actually performed this exam yourself.

This is to be a directed history and physical summary only. It should not be a comprehensive history and physical as you would perform on a hospitalized patient.

2. The Case Report should include an assessment of the presenting problem. This should include a differential diagnosis for the presenting problem.
3. The Case Report should include a discussion of some aspect of the presenting problem. This might be a summary of the pathophysiology or etiology of a specific disease. It might be a discussion of therapeutic options or prognosis. It is important that you read in detail on the disease process reviewed because you may be asked about it on Friday morning.

The Case Report should generally be used to answer some specific question related to a patient's presenting complaint or illness. Your faculty preceptor should act as a guide in the selection of an appropriate topic. The Case Report should not be a simple reiteration of textbook material. It should demonstrate understanding of a specific area of Internal Medicine.

4. The Case Report should be submitted to the attending physician supervising your patient encounter. These will be reviewed and a "grade" will be assigned (Outstanding, Above Average, Average, Below Average, Poor) based on the clarity and comprehensiveness of your Case Report. Excessive length is **not** required. Case Reports longer than 3-4 handwritten pages are inappropriate.

Each submitted Case Report should have a card attached to it giving the student's name, patient initials, faculty preceptor and faculty coordinator. These cards will be available in the Clerkship Office.

**CASE REPORT EVALUATION**

**Student Name:**

---

**Patient initials/date:**

---

**Faculty Preceptor:**

---

**Evaluation (by preceptor):**

---

**Outstanding** \_\_\_\_\_

**Above Average** \_\_\_\_\_

**Average** \_\_\_\_\_

**Below Average** \_\_\_\_\_

**Poor** \_\_\_\_\_

**Please return case to Faculty  
Coordinator listed below:**

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This sample card is available in the Clerkship Office Ruppert Health Center,  
Room 0007, Office AA.

One card should be attached to each Case Report.

Case Report

July 20, 1989

AA is a 52 year old white female seen in South Toledo Internists clinic for evaluation of chronic obstructive pulmonary disease. She is a referred patient because her previous internist left the area. AA has 11 years history of lung disease. She was diagnosed of having bronchiolitis obliterans by a pulmonary specialist at Ohio State University in Columbus. For this problem, she was treated with steroid for 6 months. The outcome of the treatment was not successful. AA was a cigarette smoker in the past. She has a history of arthritis, back pain, elbow and hip joint problem. Her past medical record will be obtained from her previous physician.

AA's blood pressure was 120/76, weight 168 lbs. At present, she requires continuous oxygen (1.5 l/min) treatment. Current medication includes Proventil, Atrovent, and Vancertil inhalers, Theodur 300 mg bid, and Premarin 0.625 mg qd. The patient appears calm, and cheerful. She seems to well adjusted with her illness.

Assessment: Bronchiolitis obliterans  
Chronic emphysema

Discussion:

Bronchiolitis obliterans is a pathologic disorder which characterized by partial or complete obstruction of the small airways (bronchioles and alveolar ducts) by granulation tissue or peri-bronchiolar fibrosis. Histologically, there are two distinct patterns: (1) Intraluminal granulation tissue extends from small airways into alveoli and is often referred to as organizing pneumonia. A study by Epler, G. R. et al indicates that majority of patients (57 out of 67 patients) have this histologic pattern. (2) For the other patients, the lesions was limited to small airways without parenchymal involvement. (Epler, G.R. et al, Bronchiolitis Obliterans Organizing Pneumonia, N. Engl. J. Med. 1985; 312:152-8.)

It is believed that bronchiolitis obliterans results when injury to small airways is repaired by proliferation of granulation tissue. The degree of functional impairment is directly related to the number of bronchioles involved. Patients generally presented with cough and dyspnea due to obstruction. Many causes and disease conditions have been fume inhalation, patients develop irreversible airflow obstruction one to three weeks after toxic fume exposure; 2) postinfectious, usually seen in children, after viral or mycoplasma infection; 3) associated with connective tissue disorders, development of bronchiolitis obliterans in patients with rheumatoid arthritis has been associated with penicillamine therapy; however, it is also seen in patients who have never received penicillamine; 4) localized lesions, incidental radiographic findings in asymptomatic patients where biopsy was performed to rule out neoplasia; and 5) idiopathic with patchy or diffuse organizing pneumonia, most frequent pattern. Patient with idiopathic bronchiolitis obliterans organizing pneumonia usually presented with cough and flu-like symptoms which last weeks to months. Crackles were heard in 68% of patients. Radiographically, 81% of patients showed an unusual pattern of patchy density with Aground glass appearance. Physiologically, 72% of patients have reduced lung volume, and 86% have gas exchange impairment.

Treatment for the localized lesion is by resection. As for the other four groups of patients, if they are in the acute stage of disease, they can be successfully treated with high dose of prednisone, 1 mg/kg for one to three months, then followed by lower maintenance dose for six to 12 months. As shown by Epler et al, 65% of patients was completely recovered after such treatment. On the other hand, patients with late stage of bronchiolitis obliterans have not been shown to respond to steroid therapy. For these chronic stage patients, they are usually treated symptomatically with bronchodilator agents. AA appears to belong to this group of patients. These results suggest that early diagnosis and treatment are important in determining the clinical course of the disease. (Epler, G.R. et al, The Spectrum on Bronchiolitis Obliterans, Chest, Feb. 1983, 83(2):161-2.)

Stanley Chung

JR is a 26 year old white female seen in South Toledo Internists clinic for routine pelvic examination and evaluation of Lyme disease. Patient indicated that about a month ago, she had noticed a small erythematous rash on her right leg which was followed by flu-like symptoms two days later. She was distressed that she might have contracted the disease. At present, she does not have any sign of this disorder. Despite reassurance, she insisted to have a blood test for Lyme disease. Consequently, a test was ordered.

During the pelvic examination, purulent discharge was found at the cervical os; this was cultured. Otherwise, the pelvic examination was unremarkable. Pap smear and quaiac test were also obtained. The quaiac test was negative. In general, patient appears to be in good health. Her blood pressure was 122/70, weight 126 lbs. Her latest lab results did not indicate any abnormality.

Assessment: Pelvic examination (purulent discharge?)  
Lyme disease?

Discussion:

Lyme disease is a multi-system disease caused by a tick-transmitted spirochete, *Borrelia burgdorferi*. It was named for Lyme, Connecticut, where was first recognized. The disease was thought to be originated in Europe and is now found world-wide. In U.S., three endemic areas have been identified: the northeastern states from Massachusetts to Maryland, the upper Midwestern states of Minnesota and Wisconsin, and portion of four western states, California, Oregon, Nevada, and Utah. However, cases have been reported from other part of country, suggest that the disease is spreading. Study by Piesman et al indicates that May and June are the main months of transmission risk of Lyme disease. (Piesman J. et al, Seasonal variation of transmission risk of Lyme disease and human babesiosis. Am J. Epidemiol 1987; 126:1187-9.)

Lyme disease occurs in three stages (see Table 1) which roughly parallel their chronologic appearance. Overlap of stages is common; however, not all patients will have these signs and symptoms and the problem seems to come and go. In stage I, approximately 86% of patients developed erythema migrans. In stage II, about 15% of patients developed problems in the central and peripheral nervous systems four weeks to several months after the onset of erythema migrans. Arthritis is the dominant manifestation in stage III, about 60% of patients developed recurrent dominant manifestations in stage III, about 60% of patients developed recurrent monoarticular or symmetric pauciarticular arthritis of large joints.

Table 1. Characteristic findings in various clinical stages of Lyme disease

<u>Stage</u>	<u>Findings</u>
I	Lasts a median of 4 weeks: Erythema migrans, Influenza-like illness, Severe fatigue, musculoskeletal pains, headache, stiff neck
II	Lasts days to months: Central nervous system disease with meningitis, encephalitis, Bell=s palsy, peripheral nervous system involvement with radiculopathy or neuropathy (or both); Cardiac involvement with variable heart block, myopericarditis, congestive heart failure; Ophthalmitis
III	Lasts months to years: Asymmetric, pauciarticular arthritis (often intermittent but chronic in 10% of cases; severe, chronic, late central nervous system disease with encephalitis, demyelinating syndromes, and psychiatric disorders.

Recovery of a microorganism from a patient is the most reliable method of establishing proof of infection. However, it is not practical for Lyme disease today. Currently, serologic test to detect a specific antibody to B. burgdorferi is the best alternative to confirm B. burgdorferi infection. The serologic test most commonly used is the enzyme-linked immunosorbent assay (ELISA) to detect both IgM and IgG antibodies. Because of low levels of specific anti-B.burgdorferi antibody during the first two weeks of infection, the ELISA is not very sensitive. On the other hand, for stages II and III diseases, the test is very sensitive. False-positive test results are not common. They occur primarily in patients with other spirochetal infections (such as syphilis), infectious mononucleosis and in those with autoimmune disease. Although the specificity of the ELISA is quite high (97.6%), the low prevalence of confirmed Lyme disease (2.2%) making it less useful for routine screening of Lyme disease. In other word, false-positive will occur in approximately 50% of patients with positive test result. (Duffy, J. et al, Diagnosing Lyme Disease: The Contribution of Serologic Testing, Mayo Clin. Proc., Nov. 1988; 63:1116-21.) Consequently, the test should only be used for confirmation of a clinical diagnosis. It should not be sued as a basis for the institution of therapy to prevent possible illness in persons who are otherwise healthy such as in the case of JR. The diagnostic criteria for definite Lyme disease according to the Center for Disease Control (CDC) are listed in Table 2. (Duffy, J., Lyme Disease, Infectious Disease Clinics Clinics of North America, Sept. 1987; 1(3):511-527.)

Table 2. CDC Diagnostic Criteria for Lyme Disease

Endemic Area:

1. Erythema migrans (EM) with exposure no more than 30 days prior to onset.
2. Involvement of >one organ system (musculoskeletal, neurologic, or cardiac) and positive antibody test.

Nonendemic Area:

1. EM with positive antibody test.
2. EM with involvement of > two organ systems.

Stanley Chung



## **XII. The AHEC Rotation**

Student's Responsibilities and Criteria for Evaluations.

1. Each student assigned to an AHEC site will work with a physician or group of physicians for the entire three week period.
2. Students will perform different functions in different inpatient and outpatient sites at the discretion of the faculty preceptor. Students will act both as observers and participants in the care of selected inpatients and outpatients.
3. Depending on the teaching site, student responsibilities may include evaluating and documenting patient care in the physicians office or in the hospital. AHEC preceptors are encouraged to ask students to read about various topics and prepare short presentation based on their research.
4. Other activities that may occur at AHEC sites include a Hospice experience, attendance at medical staff functions or participating in CME activities at local hospitals. If students are unsure about whether to attend a specific activity, they should ask their physician preceptor or the staff at the local AHEC Office.
5. Students will be given ongoing verbal feedback during the rotation. If a student feels that they are not getting adequate feedback about their rotation, they are encouraged to ask the attending physician for an evaluation of their performance.

## **XIII. The Hospice Rotation**

Student's Responsibilities and Criteria for Evaluations.

1. Each student assigned to the Hospice site will see both inpatients and patients receiving hospice care at home.
2. Students will attend a variety of didactic sessions relating to the care and management of patients receiving Hospice care.
3. Students will observe Interdisciplinary Team Conferences with physicians and staff providing care to patients receiving Hospice care.

#### **XIV. Procedural Competence**

All students on the Internal Medicine Clerkship will be encouraged to demonstrate competence for a number of simple procedures.

Procedures that may performed include:

- Phlebotomy/IV Line Placement
- Arterial Blood Gas
- NG Tube Placement
- Urinary Bladder Catheterization
- Pelvic Examination

Students are encouraged to avail themselves of opportunities to perform these procedures. Residents and nursing personnel can assist you with these procedures. A number of manuals describing the indications, complications and details of performing procedures may be found in the bookstore. You are encouraged to obtain one of these manuals.

All procedures should be logged as part of the Case Log Website. This information will be tracked throughout your medical school career

## **APPENDIX A**

THOSE NEW TO A TEACHING HOSPITAL SERVICE OFTEN HAVE DIFFICULTY SORTING OUT THE ROLES OF THE NUMEROUS PHYSICIANS AND STUDENTS INVOLVED IN PATIENT CARE. THE FOLLOWING GUIDELINES ROUGHLY DESCRIBE THE RESPONSIBILITIES OF EACH MEMBER OF THE TEAM.

1. THE ATTENDING ON GENERAL MEDICINE SERVICE
2. THE NON-SERVICE ATTENDING
3. THE SUPERVISING RESIDENT
4. THE RESIDENT ON ELECTIVE
5. THE INTERN  
THE ACTING INTERN
6. THE STUDENT ON MEDICINE ELECTIVE
7. THE STUDENT ON REQUIRED MEDICINE

## **1. THE ATTENDING GENERAL MEDICINE SERVICE**

The attending on service has a dual role (i.e., teaching and patient care). Teaching responsibility includes making rounds with the entire team 3 or 4 times per week at a prearranged time and place, for approximately 2 hours. These rounds consist of:

Presentation by the students or interns of cases recently admitted to the team. This should include both staff and non-staff patients. Patient presentations should be followed by bedside evaluation of the patient and bedside teaching.

Other patients, both staff and non-staff, should also be discussed and evaluated as time permits. Any extra time could be spent with x-ray review, smear evaluation, didactic teaching or topic presentations by the students or housestaff. One of the goals of service rounds is for the attending to assess the competence and attitude of each member of his team, both students and housestaff.

The service attending also is the attending of record for staff patients on his service. He is responsible for overseeing the care of these patients by the housestaff. The supervising resident should contact the attending for any admissions or changes in patient status. If the attending feels a change in plans or therapy is needed, he/she should contact the supervising resident or, if the problem is not urgent, place a note in the chart. If possible, the attending should leave the specifics of patient care to the housestaff and concentrate advice on general goals and strategies.

If there is a particular problem with a student or house officer, the attending should meet with him/her part way through the rotation to discuss the deficiency and plan how to correct it.

## 2. THE NON-SERVICE ATTENDING

The attendings not on the General Medical Service have mostly patient care responsibilities.

When the attending is aware of an admission, he should communicate with the supervising resident on the appropriate admitting team. This could be done in writing, in person or by phone. Again, general principles and plans as opposed to details should be discussed. It is the responsibility of the resident to contact the attending after admission and initial evaluation to discuss impressions and plans.

If there is a significant change in patient status or the resident feels a major change in diagnostic or therapeutic plans is necessary he/she should personally contact the attending to discuss it. When the attending has urgent suggestions to make to the primary care team, (i.e., verbal communication is required) it is recommended that the attending personally contact the supervising resident involved. When feasible he/she should supply literature to the primary care resident and student.

Consulting attending also have teaching responsibilities. Rounds with the attending should be made on a prearranged schedule with students and housestaff on that particular elective. New consults and patients should be presented and discussed with attention to both teaching and patient care. The same is true of follow-up on old patients. It is recommended that subspecialty students not write notes on patients who are on the medical service.

Generally, communication pertaining to patient care should be between the attending and the supervising resident.

### 3. THE SUPERVISING RESIDENT

The job of the supervising resident is to “run the service”. This would include the following:

- a. Doing a thorough, directed History and Physical on all patients admitted, writing a summary of that in the form of a resident admit note, and formulating and recording a diagnostic and therapeutic plan for the patient.
- b. Evaluating emergency room consultations. It is the responsibility of the resident to determine if the Emergency Room patient requires admission to the hospital. If the resident and the emergency room attending physician agree that the patient can be treated and followed up as an outpatient, then the resident should arrange for this. However, if there is disagreement (i.e., the emergency room attending feels admission is necessary but the resident thinks outpatient treatment is adequate), then the internal medicine attending should be contacted for the final decision.
- c. Communicating with the attending regarding plans for the patient. The resident should have a plan formulated at the time of calling the attending. This plan may, of course, be subject to alteration dependent upon further information which the attending is able to provide. In cases of conflict with the attending, while it is advisable to proceed with the plans of the attending, the resident should consider it part of his/her function to review the appropriate data and literature so as to resolve the conflict. If review of data does not provide resolution, then with the agreement of the resident and the attending, other specialty consultation, or consultation with the Resident/Faculty Grievance Committee may prove helpful.
- d. Delegating responsibility for carrying out the plans for the patient. The supervising resident will be held responsible for the care of patients on his service. This is obtained via daily work rounds early in the morning, and daily “check out” rounds in the afternoon, as well as communication throughout the day with the other members of his/her team. The supervising resident is not expected to perform the “nuts and bolts” of patient care, but should see to it that plans are executed efficiently by his/her interns and medical students.
- e. Medical student teaching. This involves critical review of the medical students’ H&P’s and presentations, as well as providing teaching regarding pathophysiology, therapy, etc. on patients on the service. This may be done on a formal or informal basis, but it should be done.
- f. It is the responsibility of the supervising resident to coordinate the care of the patient, especially when there are multiple consultants offering opinions. This may involve a good deal of communication with consultants. If a consultant’s advice is not taken, it should be stated in the chart why this is the case, and the reasons should be defensible.
- g. The supervising resident must be available to provide backup for the intern in managing complicated and critically ill patients, and to help out if the number of patients on the service become unmanageable.

- h. It is the function of the supervising resident on call at night and on weekends to provide emergency medical or medical subspecialty consultation for patients on non-medical services. After seeing the patient, he/she should communicate with the appropriate attending or GIM resident. It is not his function to see non-urgent consults or to provide non-urgent opinions on patients followed by medical or medical specialty consultants.
- i. Responding to CODE Blue. It is the responsibility of the supervising residents on their call days to head the CODE Blue. The resident will respond immediately when the CODE is announced, and upon arrival is expected to take over the management of the CODE. If the attending physician is present, the resident has the option of asking whether the attending wishes to run the CODE.
- j. Outpatient clinic responsibilities. The supervising resident is expected to attend his/her outpatient clinics as scheduled. The clinic hours take precedence over ward service responsibilities; if the resident is admitting that day, the admissions for that day and responding to CODE Blue are to be handled by one of the other ward supervisors for that hospital. Any other duties of the supervising resident that conflict with clinic are to be addressed outside of the clinic hours. Similarly, it is the responsibility of the ward supervising residents to help cover for each other when one or more of them have clinic obligations conflicting with their admitting/CODE Blue duties.

#### 4. THE RESIDENT ON ELECTIVE

The job of the resident on the subspecialty service is to learn. This is usually accomplished by seeing ambulatory and hospitalized patients with problems related to that subspecialty and reading and discussing with the attending about those problems. The consulting resident should also complete the consults and discuss the findings and plans with the attending in a timely manner, and then review any pertinent literature pertaining to that particular problem. It is recommended that the resident supplement this experience with reading as recommended by the attending and the core curriculum.

In interaction with the medical services, it should be remembered that the function of a consultant is to offer an opinion and/or suggestion, unless further action is requested by the primary service. The consulting resident should avoid daily progress notes unless the course of the patient is such that daily new suggestions are required. It is also recommended that medical students on the consult services not write progress notes on medical patients. On non-medical patients, the consulting resident may take a more direct role in patient care as needed.

It should be noted that it is not the function of the consulting resident to be the intermediary between the consulting attending and the primary medical service.

The other major function of the consulting resident is to act as the supervising admitting resident as indicated on the call schedule.

Residents on “primary care” elective at St. Vincent Mercy Medical Center (SVMMC) take a more “hands on” role in patient care. In addition to consults, the primary care resident should complete a history and physical on patients admitted to their attending physician with problems pertinent to the subspecialty being studied. The resident should also follow these patients daily and perform any procedures, write progress notes and orders, and obtain consultations as needed under the supervision of the attending physician. The resident should follow the consults closely as well.

Despite all these duties, the primary care consulting resident’s main job, as with other consulting resident’s is to learn. He should not be expected to be a “mini-attending” and duties such as taking calls from outpatients, functioning as a general medical physician on consults, or spending large portions of time on private patients of the attending who do not have problems pertinent to his subspecialty, should be avoided.



## 5. THE INTERN

The intern's major obligation is the providing of patient care. This involves, among other things, the performance and recording of a complete history and physical, writing or supervising daily progress notes, writing or supervising all orders on the patient, and procuring and/or noting results of laboratory test and diagnostic procedures in a timely fashion.

It should go without saying that the intern should see all patients at least daily and perform directed physical examination to assess the patients' progress. Also, it is the responsibility of the intern to notify the supervising resident of significant or unexpected changes in the patient's status or when major therapeutic or diagnostic changes are contemplated. It is also his/her responsibility to seek help from the supervising resident when in doubt as to appropriate actions in patient care. When time permits, the intern should help in the teaching of medical students.

A number of the intern's duties parallel those of the supervising resident, beyond what is described above:

- a. CODE Blue. On admitting days, the intern is a member of the CODE Blue team, and is expected to respond immediately when a CODE is announced. The intern is to administer therapies during a CODE effort as directed by the physician in charge of the CODE (usually the supervising resident); if there is no senior person (attending or resident) present, the intern should run the CODE until relieved by a senior physician.
- b. Hours. As per supervising resident description.
- c. Overnight call duties. As per supervising resident description.
- d. Outpatient clinic responsibilities. The intern is expected to attend his/her outpatient clinics as scheduled. The clinic hours take precedence over ward service responsibilities; if the intern is admitting on a clinic day, the admissions are to be worked up outside of clinic hours, or be assigned to another intern on the admitting team. The intern is not expected to respond to CODE Blue while in clinic; ideally, the CODE pager should be given to another intern during clinic hours. Any other duties of the intern that conflict with clinic hours should be addressed outside of clinic.

## **6. STUDENT ON ELECTIVE**

The job of the fourth year medical student on an elective medicine rotation is to learn by observing inpatients, outpatients, and consults, and discussing these patients and their problems with the attending and housestaff.

Teaching should be centered on rounds with the team. Rounds may consist of student case presentations, topic discussions and bedside patient evaluation and should take place at a predetermined time. The student should not fill out consults or write progress notes on Internal Medicine in-patients (to avoid "chart clutter"), however, this should not prevent him/her from following these patients closely and learning from them. Consults and progress notes may be completed by the student on non-medicine patients under the direction of the attending or housestaff. The student should also attend one or more out-patient clinics with the attending each week. The student may be asked to do some of the "busy work" involved in patient care such as making flow sheets, obtaining specimens, and searching through old charts, however, he/she should have enough free time to read and study. The student is not expected to act as a "go between" for his attending and other services.

## 7. STUDENT ON REQUIRED MEDICINE

The job of the 3rd year medical student on the required medicine clerkship is to learn by experiencing “hands on” medicine. The clerk’s duties include the following:

- a. Completing an extensive history and physical on assigned patients admitted to their medical service. This is recorded in a history and physical, which should include an impression, differential diagnosis and plan. The student should also complete the problem list and participate in writing orders with the intern. He/she needs to be prepared to present this patient during the next scheduled attending rounds.
- b. Close follow-up of patients. The student is responsible for daily clinical evaluation of the patient, progress notes, and updating of the problem list. The student should be up to date on all lab work, x-ray results, etc. He/she needs to be available during the day and when on call for any change in patient status or procedures for which he should be present. The student should participate in work, attending and checkout rounds with his assigned team.

Periodically, the student will be asked to help with some of the “footwork” involved in patient care (e.g. carrying specimens to the lab) however, this should not constitute a large portion of time.

- c. Formal teaching. Mandatory meetings include morning report after your team is on call, preceptor rounds, grand rounds, and the Friday afternoon seminars. Other conferences (M & M, etc.) should be attended whenever possible. The required conferences may vary somewhat from hospital to hospital.

## Appendix B

### Final Clinical Competency Evaluation

## Required Clerkships Clinical Competency Evaluation

Clerkship:

Evaluator:

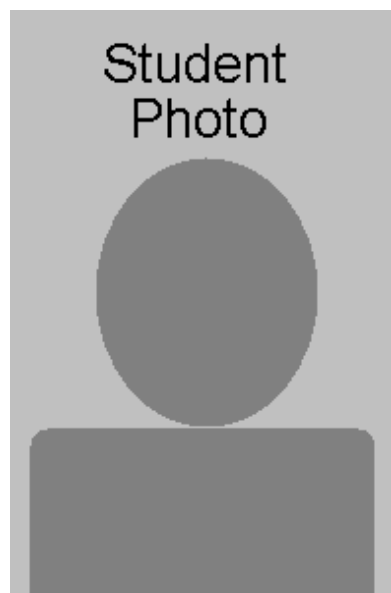
Start Date:

End Date:

Rotation Number:

Site:

Site if "Other":



- Time Spent with Student:
- Extensive (More than 10 Hours)
  - Moderate (4 to 10 Hours)
  - Minimal (1 to 4 Hours)
  - No Contact (Less than 1 Hour)

For each item in each category, please select a value from 1 to 5, or N/A. A selection of N/A will not impact a student's final evaluation score.

- 5 - Exceptional performance for this level of training – far above expected
- 4 - Performance above expected for this level of training
- 3 - Performance appropriate for this level of training
- 2 - Performance less than expected for this level of training – requires occasional intervention
- 1 - Performance not acceptable for student at this level of training – requires frequent intervention
- N/A - Not Applicable/Unable to Evaluate

### History Taking Skills

History is thorough, systematic, logical and accurate.  5  4  3  2  1  N/A

Student controls interview and obtains history in a time efficient manner.  5  4  3  2  1  N/A

Student established rapport and listens to patient perceptions.  5  4  3  2  1  N/A

Student uses vocabulary appropriate to level of patient understanding.  5  4  3  2  1  N/A

### Physical Examination Skills

Student is able to demonstrate appropriate exam techniques.  5  4  3  2  1  N/A

Student is able to describe physical exam findings using appropriate terminology.  5  4  3  2  1  N/A

Student is able to interpret exam findings in light of patient presentation.  5  4  3  2  1  N/A

### Oral Case Presentation

Oral presentation is complete and appropriate.  5  4  3  2  1  N/A

Presentation reveals that student has done preparatory reading.  5  4  3  2  1  N/A

Student identifies patient problems.  5  4  3  2  1  N/A

Student openly reveals an appropriate level of knowledge and understanding regarding an assessment and diagnostic plan.  5  4  3  2  1  N/A

Student verbally communicates in a logical systematic manner.  5  4  3  2  1  N/A

### Written Data Recording Skills

Data documentation is complete and accurate.  5  4  3  2  1  N/A

Handwriting is legible.  5  4  3  2  1  N/A

Patient data is documented in an organized and logical manner.  5  4  3  2  1  N/A

### Clinical Judgment and Diagnostic Skills

Appropriate initial therapeutic plans are formulated for each problem.  5  4  3  2  1  N/A

Student justifies appropriate diagnostic possibilities for each problem with avoidance of diagnostic indecision or premature closure.  5  4  3  2  1  N/A

The issues of cost-effectiveness and risk to patient vs. outcome are considered when ordering diagnostic studies.  5  4  3  2  1  N/A

The student is able to interpret laboratory data using a pathophysiological approach.  5  4  3  2  1  N/A

### Self-Education Skills

Student demonstrates the initiative to enhance his/her knowledge through reading and facilitate accurate patient assessments and plans.  5  4  3  2  1  N/A

Student is motivated and initiates self-education.  5  4  3  2  1  N/A

### Professional attributes and responsibilities

Exceptional, performance above and beyond expectations. Outstanding in attendance, dependability and punctuality in team activities and patient care responsibility. Makes extra effort to be an integral team member by volunteering for higher levels of patient care responsibility.	Conscientious, makes a consistent effort to be responsible and dependable regarding patient care responsibilities. Makes a noticeable effort to be part of the team.	Can regularly be relied upon in fulfilling responsibilities as a member of the ward team and in the delivery of patient care.	Needs reminders in the fulfillment of ward responsibilities including patient care. Allows himself/herself to be too peripheral to active team activities and patient care.	Cannot be relied upon. Attendance and punctuality are erratic. Student's whereabouts are often unknown. Needs prodding frequently. Am concerned over student's commitment.	Not observed
<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> N/A

### Self-Improvement and Adaptability

Outstanding in soliciting and receiving criticism with interest and grace. Able to effect change. Extensive self initiated supplemental reading. Makes an extra effort to learn.	Accepts criticism and is able to effect change. Self motivated to expand knowledge with supplemental reading.	Accepts criticism when offered, Makes an effort to change. Does some supplemental as well as required reading.	Resistant or defensive in accepting criticism. Makes those offering suggestions uncomfortable because of lack of receptiveness.	Completely unaware of own inadequacies. Refuses to consider or make changes.	Not observed
<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> N/A

### Relationships with patients

Makes an extra effort to put patients and family members at ease and appropriately communicating medical information to them. Relates well with difficult patients and/or families. Shows empathy, compassion and respect.	Consistently relates well to patients and family members. Shows empathy, compassion and respect.	Relates well to most patients and family members. Seems comfortable with patients and family members, and his/her role as a developing physician.	Sometimes has difficulty establishing rapport with patients or communicating with them. Not always comfortable interacting with patients.	Often insensitive to patient's feelings, needs and wishes. Lacking capacity for empathy.	Not observed
<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> N/A

## Interpersonal relationships with other members of health care team

Outstanding in respecting the feelings, needs and wishes of all health care team members. Makes an extra effort to be highly integrated into the team structure. Is consistently a positive contributor to the team.	Relates well to all health care team members. Makes an effort to be integrated into the team structure.	Relates well to most of the health care team members. Functions well within the team structure.	Sometimes has difficulty relating well to health care team members.	Insensitive to needs, feeling and wishes of health care team members. Poorly integrated into the team.	Not observed
<input type="radio"/> 5	<input type="radio"/> 4	<input type="radio"/> 3	<input type="radio"/> 2	<input type="radio"/> 1	<input type="radio"/> N/A

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Comments: