Learning in the Ambulatory Setting:

*A Guide for Internal Medicine Students*

The ever increasing proportion of care being delivered in the ambulatory setting and the nation’s growing need for physicians with well developed generalist competencies necessitate that the traditional core clerkship be revised to better prepare students to function effectively in a rapidly emerging new health care environment. (Clerkship Directors in Internal Medicine, 1998)

The emergence of managed care and the role of the primary care physician led to a reduction in hospital care, which has [resulted in] an increase in ambulatory care. Office-based primary care became the focus of most general internists. Patients are seldom admitted to the hospital to establish a diagnosis. Better imaging technology and procedure units for ambulatory patients have shifted the focus of most diagnostic workups to the ambulatory setting. Most internists have a large panel of patients whose medical problems they can usually manage in the ambulatory setting. (Federated Council of Internal Medicine Report, 2002)

**Welcome to Ambulatory Medicine!**

According to the Clerkship Directors in Internal Medicine and Federated Council for Internal Medicine, patient care is largely moving into the ambulatory setting. To reflect this reality, the Medicine clerkship established a separate two-week outpatient rotation during the Medicine I Clerkship.

This booklet is intended to provide the clerkship student and ambulatory faculty with basic information about the ambulatory portion of the medicine clerkship including learning objectives for the rotation, evaluation during the rotation, and how this part of the clerkship contributes to the overall clerkship grade.

If you have questions or concerns during the ambulatory portion of the clerkship, feel free to speak with your preceptor, the clerkship director or the Head of Internal Medicine.

**Learning Goals for the Ambulatory Rotation**

1. To increase understanding of the different outpatient encounters in the ambulatory setting
2. To have opportunities to practice medicine in different patient settings
3. To learn about the management of a patient in an ambulatory setting including when the ambulatory patient needs hospital care
Student Learning Objectives in the Ambulatory Rotation

Following is a list of expectations of the proficient student for the internal medicine clerkship, both for the inpatient and ambulatory rotation, based on the competencies. Preceptors will help students improve their skills in these areas and students will be assessed in their ability to demonstrate these skills and attributes, as appropriate for the outpatient setting, using the evaluation form (appendix 1; also, see the evaluation form for expectations for the outstanding student).

Medical Knowledge
- Acquire a basic knowledge of internal medicine, and a greater knowledge of those areas relevant to patients assigned to the individual student
- Demonstrate knowledge of the basic sciences and patho-physiologic principles behind the manifestations of the disease conditions
- Integrate the knowledge of bio-medical, ethical, and epi-social-behavioral sciences with the clinical presentation of the disease in his/her patient
- Demonstrate knowledge of the indications, contraindications and benefits of the common procedures such as: arterial blood gas, thoracentesis, paracentesis, lumbar puncture, and joint aspiration.

Patient Care
- Obtain an accurate, pertinent history from all appropriate available sources and record it in a complete and concise manner.
- Perform and record a thorough physical examination, and review the physical findings with the faculty.
- Develop an appropriate differential diagnosis based on history and physical examination findings, laboratory and diagnostic tests results.
- Develop a prioritized and detailed problem list for each patient
- Utilize clinical reasoning and form hypotheses to assess the patient’s presenting problems based on gathered information.
- Formulate a diagnostic and therapeutic plan for his/her patient based on gathered clinical information and laboratory data

Interpersonal & Communication Skills
- Develop skills in oral case presentation.
- Demonstrate good communication skills when dealing with patients and their families
- Demonstrate respect when communicating with all members of the health care team
- Participate in obtaining informed consent prior to performing an invasive procedure in his/her patient
- Demonstrate ability to educate patients, families and other members of the health care team

Professionalism
- Develop an understanding of the psychosocial, educational, economic and religious backgrounds of patients that underlie their diverse belief systems, and demonstrate this understanding in the approach to the management of individual patients.
- Demonstrate sensitivity to, and an understanding of, the ethical dimensions of patient care, and demonstrate this in the approach to the management of individual patients.
- Develop a professional relationship with patients, peers and other health care professionals while conducting themselves professionally at all times.
- Demonstrate ability to work hard, accept patient responsibility and respond appropriately to feedback provided.
• Demonstrate respect, compassion, integrity, and honesty at all times.

Practice-based Learning & Improvement
• Utilize the library and its resources to research clinical questions that arise during patient care and management
• Demonstrate critical reading skills in selected journal articles, and identify characteristics of effective medical articles.
• Demonstrate independent learning as evidenced by researching issues related to patient care.

Systems-based Practice
• Recognize the importance of and demonstrate commitment to the utilization of other health care professionals in diagnostic decision making
• Participate, whenever possible, in coordination of care and in the provision of continuity of care.
CHAPTER 6: SUGGESTIONS FOR SUCCESS IN THE AMBULATORY SETTING
[adapted from the Primer to the Internal Medicine Clerkship, 2nd ed., CDIM]

Although the acuity gained is usually slightly less than in the inpatient setting, the outpatient arena is a place of significant and rapid diagnostic and therapeutic decision-making. It can be an equally exciting environment in which to learn. The role of the student in the ambulatory setting is usually more hands-on than in the inpatient setting. In contrast to your inpatient experience, you will often be the initial person to acquire the history from a patient. The most important skills for success in the ambulatory internal medicine setting are efficiency, organization, and the abilities to think on your feet and tap into a solid knowledge base. A successful ambulatory experience will help you acquire skills you will use throughout your career, no matter which specialty you choose.

Patients see physicians in general medicine or primary care clinics to get a “general check up” or for specific concerns. You may see new patients who present to establish themselves with a primary care physician (i.e. no chief complaint), patients with an acute complaint, or patients with chronic medical problems requiring close and frequent follow-up. You will be working with a single general internist in one-on-one sessions.

*It is strongly recommended that the ambulatory experience not be completely shadowing.* Whenever possible, students should independently interview, examine, and assess patients, prior to seeing the patient with the preceptor.

SUGGESTIONS FOR WORKING WITH YOUR PRECEPTOR

When you first meet with your preceptor (the physician you will be working under), it is important to establish several things.

**Logistics**
- General information about how the clinic is set up.
- What time clinic starts and when you should arrive.
- How will you know when a patient is ready to be seen?
- Will the attending pick specific patients for you?
- Where should you document your note? How detailed should it be?

**Degree of Independence**
- Will you be shadowing the preceptor? If so, does the attending want you to ask any questions or just observe?
- Will you be seeing and examining the patient entirely on your own and then presenting to the preceptor?
- Sometimes the attending will ask you to collect the history and then conduct the examination together.
Organization of a Patient’s Visit

- How detailed should the physical examination be?
- How much of the exam do they want to do together?
- How much time is allotted for you to take the history, conduct the exam, and present the case?
- How are test results communicated to the patient? How should you follow-up on test results?

In the outpatient setting, timing and efficiency are especially important. Because patients are scheduled for specific times, there is less flexibility than in the inpatient setting. When a patient requires, for example, 20 minutes more than allotted, that means the preceptor is 20 minutes behind for all patients that follow, unless time is made up with other patients. Some preceptors have a greater propensity and a greater tolerance for running behind, and this issue may vary with the day (e.g., if your preceptor needs to attend a meeting or pick up a child at daycare). Office-based preceptors generally recognize that having a student in the office usually adds some time to their day. Nevertheless, students should be sensitive to their preceptors’ efficiency and time demands, so that you will be able to help your preceptor meet personal and professional obligations as you meet yours. Further, if time permits, a way to “give back” may be to assist in coordinating services or counseling patients in preventive health matters such as diet, exercise, and smoking cessation.

SUGGESTIONS FOR THE OUTPATIENT VISIT

New Patients/Annual “Check-Ups”
The structure of the new patient visit will vary in general and subspecialty clinics. Overall, you should collect a history of present illness if the patient has a chief complaint. If not, collect a past medical, surgical, gynecological, and psychiatric history as appropriate; inquire about medications, drug allergies, family history, and preventive health. The latter is of particular importance in the primary care clinic. You should ask about vaccination status, screening, vitamins, and alternative therapies.

Follow-Up Clinic Visits
Outpatients frequently do not have a chief complaint; they frequently have multiple complaints and conditions. This is especially true of follow-up visits after a hospitalization. As follow-up clinic visits are generally brief, you may not be able to cover all of the patient’s concerns in one visit. A physician must set an agenda with the patient that covers his or her most significant concerns as well as the physician’s.

Suggested Structure for the Outpatient Interview
- Prepare. Find out what the patient’s medical problems are by briefly reviewing the chart or discussing the history with your preceptor. Focus on highlights such as the problem list, flow sheets, and the most recent progress notes since you cannot read the entire chart in the time available.
Negotiate an agenda:
- Ask the patient what his or her concerns are.
- Prioritize concerns by the problems that are most concerning to you and to the patient.
- Tell the patient your agenda; most frequently, this prioritization will involve establishing the status of chronic medical problems. “Dr. Smith tells me you have high blood pressure and diabetes. How are doing with your blood pressure and blood sugar?”
- When the patient has more concerns than can be covered, let the patient know that you would like to hear more about those concerns later. “Let’s talk some more about your chest pain and hypertension. I’d like to hear more about your concerns about menopause but since we have a brief visit scheduled today, can we cover that in more detail at another time?”

Gather the data:
- Conduct a focused history with targeted review of systems. For example, in a patient with diabetes, you may want to ask about polyuria and polydipsia.
- Perform a targeted yet appropriately thorough physical exam.

Collect your thoughts:
- What are the major issues?
- What are the most likely differential diagnoses?
- Do you have time to quickly read up on your patient’s complaint?
- What is your assessment and plan?

Present the case:
- Identify the patient: “Mr. Smith is a 50-year-old man with hypertension and diabetes who presents for a routine three-month follow-up.”
- Review the agenda: “In addition to reviewing his chronic medical problems, the patient also wanted to discuss left knee pain.”
- Present the problem list:
  - Knee pain: “The patient has had knee pain for six months. It is worsened by…”
  - Diabetes: home blood sugars (average, lowest reading, highest reading), last eye exam, foot care, etc.
  - Hypertension
  - Health maintenance
- Present the physical examination.
- Present your assessment: “Overall, Mr. Smith is doing well. His diabetes and hypertension are adequately controlled. The differential diagnosis for his knee pain is osteoarthritis, gout, and pseudogout. I think it is most likely…”
- Present your plan:
  - “For his knee pain, x-rays will help to confirm the diagnosis of OA. He can try Tylenol for the pain. We should avoid NSAIDS in diabetic patients, if possible.”
  - “For his diabetes, check hemoglobin A1C, etc.”
- “For his hypertension…”
- “For his health maintenance…”
  o Discuss follow-up appointments and referrals.

- Follow through: check test results and communicate them to the patient as arranged with your preceptor.

A “learner-centered approach” to the presentation that can be useful is the SNAPPS model:
- Summarize briefly the history and findings.
- Narrow the differential to two or three relevant possibilities.
- Analyze the differential by comparing and contrasting the possibilities.
- Probe the preceptor with questions about uncertainties, difficulties, or alternative approaches.
- Plan management for the patient’s medical issues.
- Select a case-related issue for self-directed learning.

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Additional Information

Proper Examination Procedures:

1. Handwashing
2. Positioning the patient
3. Draping the patient
4. Describing process to the patient
5. Answering patient questions
6. Maintaining appropriate eye contact with patient, at eye level

Other Considerations During the Examination:

- Laboratory Evaluation Review all recent and/or significant laboratory data (pertaining to the patient) that were available at the time of patient evaluation.
- Radiographic Evaluation This section should include all recent and/or relevant patient radiographic data.
- Special Procedures Review the results of any special procedures performed on patient during the most recent hospitalization (i.e., biopsies, surgery, etc.).
Basic Procedures In The Outpatient Setting:

As appropriate, students will be able to articulate the key indications, contraindications, risks, and benefits of each of the following basic procedures:

1. Venipuncture
2. Injections - subcutaneous, intramuscular, joint
3. Skin Biopsy, Incision & Drainage of Wounds
4. Electrocardiogram
5. Microscopic analysis of urine & body fluids
6. Throat Culture
7. PAP Smear
8. Digital Rectal Examination
9. Place And Interpret A Tuberculin Skin Test (PPD).

Resources:

The following resources are recommended for ambulatory medicine and are available online through the College of Medicine’s Library of the Health Sciences website: http://www.uic.edu/depts/lib/lhsu/

- ACPMedicine http://www.acpmedicine.com/cgi-bin/publiccgi.pl?loginOP

This resource was recommended reading for the Introduction to the Clinical Clerkship.

Fine, Paul. The Wards.