CLASS OF 2017

INTRODUCTION TO AMBULATORY MEDICINE
A Physician’s Office-Based Experience

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Welcome to Introduction to Ambulatory Medicine. Now that you’ve had an opportunity to interact with the elderly, it is time to allow you to practice some clinical skills in a real clinical rotation.

Clinical skills are defined as those thought processes and physical skills a physician requires in order to perform his or her duties properly. It is, therefore, important that the medical student learn these skills early on in his/her career since familiarity with them will lead to recognition of the importance of much of the material that is presented during the four years of medical education. The overall goal of this course is to establish a meaningful model for the medical student in order to become a successful clinician.

Primary care as broadly defined means the care administered by the physician for the patient first entering the health care delivery system and for follow up care and guidance a patient might require throughout his or her lifetime. Primary care physicians focus their attention on many aspects of their patients’ lives from prevention to health maintenance and so forth up to the care required for the terminally ill. The impact of health and disease involves not only each individual but also the social environment in which the patient lives. Primary care practice means familial and even societal impacts must be taken into consideration.

Medical care, in the past, has been described as episodic, rather than continuous. Briefly, one went to the doctor when one became ill. When health was restored, one returned to one’s environment. If the illness was found to be more complex and ongoing, the patient might have been referred to a specialist. It was in this situation that patients often found themselves without an anchor to coordinate their care. These events lead to the recognition of the need for such an anchor, the primary care physician. It is within this context that the ambulatory medicine course will expose the first year students to how primary care is practiced. It is hoped that many of you will chose primary care as your field, and, thus, help satisfy the present and future needs of our country for more primary care practitioners. We also hope that whether you chose primary care or not that you will still embrace many of the principles of primary care and apply them to your own field and style of practice.

What then is primary care? It is composed of three different fields – family practice, general internal medicine, and pediatrics. The terms that constantly appear in any definition of primary care include coordinated, comprehensive, continuous, and personal care. The primary care practitioner is usually the first contact the patient has when there is a health problem. The physician then is responsible for reaching a diagnosis and initiating treatment. If there is a need for further treatment, the primary care practitioner will coordinate and arrange it, keeping in continuous contact with the patient even though other physicians may be participating in the care. The primary care
The physician will try to attend to all the patient’s comprehensive needs, but will seek help from consultants, if such is indicated.

The most important aspect of patient care is caring for the patient. The personal attention given the patient and the emphasis on a strong and productive doctor-patient relationship is the underlying feature of good medical care. The practice of primary care recognizes the total patient, which includes not only the patient’s disease but also the patient’s reaction to that disease and the resultant needs and requests. The patient does not exist apart from an emotional and social background. The primary care physician must also understand this background. It is well known that emotional and psychological issues may influence the patient’s response to treatment as well as the patient’s interaction with the physician. Therefore, primary care also focuses on psychological diagnosis and treatment so that the physician can give appropriate support to the patient. This type of personal care and support can create a powerful therapeutic relationship between the doctor and the patient. Of course, a strong doctor-patient relationship underlies all patient contact, be it by a primary care physician, or by a highly skilled subspecialist.

Physicians, primary care and specialists, also have the responsibility of educating their patients about the diseases they have. This requires good communication skills and the willingness to listen to questions and to advise appropriately. Communication is an ongoing process that is part of the continuous care that a primary care physician provides. It is a dynamic process wherein the patient’s expectations, needs and understanding may change during the course of a disease. Good primary care includes an awareness of those changes and the ability to talk about them with the patient.

Finally, primary care involves risk assessment, health maintenance and disease prevention. The specifics of risk assessment are related to the age of the patient. Advice for health maintenance and disease prevention is part of the continuous care of the primary care patient. Advice and education are given not only to the healthy patient but also to the acute or chronic care patient as well. This counseling is part of the long-term doctor-patient relationship.

Illness may be broadly defined by the clinical terms acute (meaning sudden) vs. chronic. In the distant past, acute illness (often in the form of infection) killed many patients. Now, gains made against infection have changed the problems physicians have to face. Chronic illness (chronos = time) is now the by-word of medical practice. Unfortunately, issues of importance in chronic illness are often given short shrift in medical school. One of the purposes of this course will be to get you, the medical student, to recognize the important issues in dealing with chronic illness.

Once again this year there will be a written assignment. The focus of the paper will be on the management of a patient with a chronic illness and what the physician must advise so that the patient may adjust his or her life to this illness or disability. Doctors should be more than medicine givers. A chronic illness means that other prescriptions have to be given. The patient’s family has to adjust and often the physician needs to advise them. Other life-style issues have to be addressed. We also want to introduce you
to the process of clinical reasoning (see further on this in the handout). We know that you have had only minimal clinical experiences. The purpose of this exercise is not so much to learn the details of how to manage one illness (see special circumstance associated with assignment to pediatric practice); rather, it is to focus your attention on what are the overall methods of patient/disease management. You are going to have to learn how to do this in great detail during the spring of this year. This exercise will be the beginning of that learning process. We know your preceptor will help you to define these issues because, come to think of it, that’s what good care is all about.

We hope that the student experience in ambulatory primary care will illustrate many of the aspects mentioned above. Even though you as students are new to medicine and don’t have an extensive background, we still feel you are able to communicate with patients on a very basic level. In most cases, the patients will appreciate your interest. What you get out of the office-based experience will depend on your efforts to learn and the office environment in which you will be working. The rotation is an opportunity to experience different aspects of the doctor-patient relationship first-hand. In an era of large group practices and health maintenance organizations, the patient and his/her relationship with the doctor are frequently ignored in the name of efficiency. We hope that you, as future physicians, will help restore the emphasis where it should be – on the patient. We realize that physician contact time with patients is becoming more and more limited as demands grow for more productivity. We hope, however, that you will learn to make that time quality time which is valuable and meaningful for both your patients and you. Now is a good time to start.

S. Benham Kahn, M.D.
Course Director

NOTE: PLEASE READ SYLLABUS CAREFULLY AS THERE HAVE BEEN CHANGES MADE SINCE LAST YEAR.

INTRODUCTION TO AMBULATORY MEDICINE

GOALS:

1) To gain understanding of how ambulatory medicine is practiced.

2) To apply newly developed clinical skills to actual patient encounters, including a history and physical exam.

3) To begin to understand the process of clinical reasoning.

4) To learn the impact of a chronic illness or disability on the patient, on the patient’s lifestyle and on the patient’s family.

5) To describe the principles and best practices of chronic care for an interviewed patient.
OBJECTIVES: By the end of the ambulatory experience, students will be able to –

1) Perform a risk factor assessment on one patient.

2) Be able to discuss the process of clinical reasoning; specifically, relating the findings of the history and physical exam directly to the patient’s clinical findings and to begin to understand how to make a diagnosis and to decide on therapy.

3) Describe ways the patient’s family are affected by the patient’s condition and how one would use the family in the evaluation and management of a patient.

4) Recognize how the physician can positively influence patient adherence.

5) Perform a history and segments of a physical exam on a patient with some degree to comfort, correlating the patient’s complaints with the physical findings.

6) Discuss/describe the management of the disease/condition/disability of a patient (with a chronic illness/disability).

WHAT IS CLINICAL REASONING?

Clinical reasoning is the thought process by which a physician most efficiently obtains information. He/she then uses that information, establishes the diagnosis, and assesses the specific problems the patient has. He/she then determines all the steps necessary to manage the patient so that a cure is affected, or, if no cure is possible, the patients’ problems are alleviated. To be successful, the physician must have a strong knowledge of basic science, clinical epidemiology and clinical and laboratory medicine.

One of the most important aspects of clinical reasoning (especially for the second year student) is knowing how to take a history, focusing on those features that direct the physician towards establishing a correct diagnosis. Establishing a diagnosis requires that specific criteria be met. Most historical facts, physical findings and even some laboratory and imaging studies are non-specific. For example, the same complaint or test may be positive in several conditions. This forces the clinician to act upon facts and tests sometimes without being 100% confident that the diagnosis is correct.

(Think about a 50 year old man with chest pain. Sometimes tests done are normal, yet the history is suggestive. The physician then acts as if the patient has a serious cardiac problem, which after a time may be shown to be present. Yet, not knowing that in advance, the physician acted because he/she didn’t know if the patient was ill or not!).

The second year student must begin to establish the mindset of clinical reasoning. Your visit to a doctor’s office and your assignment to an individual patient ought to help you to learn how a physician establishes a diagnosis and how the patients’ problems are set for management. The faculty wants you to take the time and to ask your mentor how these processes are learned.
Here’s an example of what we mean:

**Preface:** A 60-year-old otherwise healthy man complains that he has a bulge in his left inguinal area for the past 6 months.

**Physician** (thinking): What’s in that area? Answer: skin, muscle, vessels and nodes.

**Physician** (asks): When did you first notice this bulge? Does it hurt? Is there anything that changes it?

**Patient** (says): About 6 months ago. It seems to be getting bigger. It doesn’t hurt, but if I lie down it disappears!

**Physician** (thinking): Ah, Ha! Sounds like a hernia.

**Physician** (thinking): Wait a minute! Why did it appear at this age? Maybe he has increased intra-abdominal pressure.

**Physician** (asks): Are you having trouble moving your bowels or passing urine? Do you have a cough?

**Question for student:** Why the question about bowels, urine and cough?

**Answer:** Think about this. If constipated or if prostate enlargement inhibits urine flow or if patient has a cough, intra-abdominal pressure increases because each of these problems causes a human being to do the Valsalva maneuver.

**Physician** (orders): Rectal exam, prostate exam and chest x-ray.

End of Scene

**Comment:** This scene is an example to illustrate a thought process. (It’s not a complete work-up!) The process of clinical reasoning must include not only the diagnosis (the hernia is obvious) but also why the hernia appeared. Clearly if this patient has a cancer in the sigmoid colon that is obstructing his colon causing constipation, repair of the hernia without treating the colon cancer would be tragic.

One final note about basic science: It’s clear that a strong knowledge about basic science is a requirement. Even in the above example, the Valsalva maneuver is a fact of basic science (even if you may have learned about it in high school).

**PATIENT EDUCATION**

Patients frequently fail to adhere to prescribed therapies. Patients fail to follow short-term curative regimens up to 30% of the time and up to 40% of the time when the
therapy is preventive. With lifetime or behavioral change regimens such as dietary changes for diabetes or hypertension, initial non-adherence is 50% and rises over time. Physicians typically overestimate their patients’ rate of adherence and fail to identify non-compliant patients. Patients often signal their low level of adherence by failing to keep follow-up appointments, costing the physician time and money.

A multitude of factors can contribute to patient non-compliance. Behavioral explanations, such as patients’ rejection of authority, denial of illness, and avoidance of dependency probably account for many adherence problems. Many of the behaviors that physicians ask their patients to change, such as smoking, overeating, and alcohol consumption, are not easily changed. Environmental factors, such as poverty, social isolation and lack of family and social support, may adversely affect adherence. Sometimes physician behaviors inadvertently lead to non-compliance. Physicians may unintentionally embarrass patients (e.g. “You didn’t take your pills?”) or inhibit patient questions or admissions of difficulty with a regimen by failing to elicit patient concerns.

Decreased cooperation with prescribed therapy is often due to ineffective patient education. There are two sides to the problem of ineffective patient education: Physicians do not always effectively communicate information, and patients are fallible, with failures of memory and judgment. Shortly after their consultations with physicians, patients forget up to one-third of what is told to them, and half or more of the instructions and statements about treatment. Patients often make interpretive errors when reading the labels of their pill bottles. When successfully implemented, however, patient education can be a powerful force. Documented benefits include decreased medications needs, duration of therapy, hospital stays, risk behaviors, morbidity and mortality, and an overall positive effect on patients’ coping.

Patient education is actually a complex process and entails more than communication of information. There are a number of specific skills and interventions useful in educating patients. Physicians must elicit the patient’s understanding of the problem since the patient’s concept about his/her susceptibility to complications and consequences to health, the effectiveness of treatment and the cost/benefit ratio of treatment, (costs in terms of money and emotional cost) will effect the patient’s intention to comply. Physicians must clear up any patient misconceptions about causes, treatment and prognoses of illness. Physicians should give explanations in clear language, avoiding all jargon, remembering that patients often misunderstand even simple medical terms. It is often helpful to use metaphors that the patient understands in explaining disease mechanisms (e.g., a plumbing metaphor to explain the consequences of hypertension: what too much pressure in the pipes would do to the pump, etc.). It is helpful to organize the message, presenting simpler concepts first, and to give information in readily digestible “chunks” saving further information for later visits. (Telling a patient all at once that he must reduce his salt intake, diet, stop drinking, stop smoking and take medications can be overwhelming.) It is often helpful to personalize information, making the information more relevant to a patient by relating to the patient’s family history or social situation. The use of educational aides, such as pictures, written instructions and videos can be quite helpful. Some physicians find it useful to tape record their presentation of complicated explanations and instructions, giving the patient the tape to
review at home. It is important to check frequently for patient’s understanding by asking patients to repeat back what has just been told. It is also important to invite questions in the middle of an explanation so that patients can follow the explanation, and to provide sufficient time also to ask questions at the end.

The effective use of interpersonal skills during explanations can often enhance understanding and improve motivation. Other useful interventions include expressions of optimism and reassurance. Physicians may need to negotiate with patients to determine mutually agreeable treatment plans. When asked, patients may have disagreements with physicians about what they are willing or are able to do. It is important to explore obstacles to adherence and work with patients to overcome those obstacles. Finally, it is useful to rehearse with patients the intended changes and reaffirm patients’ commitment.

With careful attention to the skills of giving information and patient education, physicians can improve patient adherence, improving their patients’ health and well-being.

OUTLINE OF YOUR RESPONSIBILITIES

1. You will be given an assignment to a physician’s office.
2. You are required to attend that office each week for a total of 3 visits
3. We are asking your physician to assign a patient to you whom you will interview and perhaps also do a physical exam. **IF YOUR PRECEPTOR DOES NOT VOLUNTARILY ASSIGN YOU A PATIENT ON YOUR 1ST VISIT, ASK HIM/HER TO DO SO!** If you do not have enough time in the office visit to fully learn about the patient’s chronic illness, ask the patient and physician’s permission to make a follow-up phone call to the patient.
4. Write a paper (requirements below) that describes the patient, the patient’s chronic disease, and how you would manage this patient’s chronic illness over time if you were his or her physician.
5. Make a 15 minute presentation in a small group summarizing your patient and your chronic illness care plans during the fourth week of this rotation.

Requirements for the paper.

You are required to write a detailed description of the patient’s chronic disease, the patient’s main symptoms, how the patient manages their conditions, the psychological and social consequences of the disease for the patient, how you would care for the patient over time (frequency of visits, follow-up phone calls, use of community and family resources to maximize care, etc.) We expect you to pick a learning issue of one component of caring for a patient with the chronic illness, and read about this issue until you more fully understand how to care for this patient over time. You can use a textbook to start, but we expect you to summarize findings from the primary literature from high impact journals (NEJM, JAMA, JGIM, Medical Care, etc.). You must cite 3 – 5 references. We expect the paper to be 1000 – 1500 words. To help you understand the core concepts underlying chronic care management, please read:

Topics you might want to cover:

- Food/diet, restrictions or improvements
- activities
- medications
- methods of assessing response to management (in other words how do you know your advice is working?)
- restrictions you would recommend, if any
- health care preventive measures
- what services or facilities that might improve quality of life
- unmet needs

6. You are required to attend an assigned conference on the date and time assigned to you. This session will be mentored by either Dr. Evans or Dr. DeJoseph of the Department of Family Medicine. PREPARE A SYNOPSIS OF 1 OR 2 PARAGRAPHS DESCRIBING YOUR PATIENT AND INCLUDE THOSE PROBLEMS THAT YOU DETERMINED TO BE RELATED TO YOUR PATIENT. THIS SYNOPSIS SHOULD BE WRITTEN AND BROUGHT TO THE 4TH SESSION. BE PREPARED TO PRESENT THIS INFORMATION TO THE GROUP DURING THE 4TH SESSIONS. Be prepared to discuss issues you discovered. After the 4th session has been completed prepare your final paper that must include all of the historical and other data that are required (see above). In addition, describe the discussion related to your patient that occurred during the 4th session. Formulate a management plan for your patient. THIS PAPER MUST BE COMPLETED WITHIN 10 DAYS AFTER THE 4TH SESSION. SUBMIT THESE PAPERS TO DONNA MILLS AND SHE WILL DISTRIBUTE TO YOUR FACULTY MENTOR FOR FINAL GRADING. (SEE FOLLOWING FOR GRADING DETAILS)

EVALUATION

Intro to Ambulatory Care is a separate course, and grading is Unsatisfactory, Satisfactory, Highly Satisfactory and Honors. The student’s final grade for the Introduction to Ambulatory Medicine is based on the following items:

1) Preceptor evaluation  =  75%

2) Written assignment paper  =  25%

Grading of the paper: Your paper will be read by your conference leader. The grading will be 80 (all requirements met); 90 all requirements met plus a more thorough analysis of a problem. The faculty expects you to follow directions and include all required information. We expect all papers to be clearly written. NOTE:
It is not difficult for the faculty to sense from your writing how much effort you put into this learning experience.

A. **PRACTICAL LOGISTICS:**

1) Students should always remember they are guests in the preceptor’s offices and should therefore act appropriately.

2) Students are expected to arrive at the preceptor’s office on time and to remain there during the hours noted on the confirmation letter.

3) Each student will bring a stethoscope, white jacket, and I.D. card that can be attached to their jacket. If you have a neuro rubber hammer and ophthalmoscope kit bring that too.

4) In the case of an absence, the student must call DONNA MILLS, Academic Program Coordinator at (215) 991-8527 or email at donna.mills@drexelmed.edu. The preceptor’s office should also be notified. Preceptors will call our office if the student is not present for the session. Make-up sessions must be arranged if the student is to get credit for the course.

5) If there is an emergency, call or e-mail Donna Mills. If there is a problem with a preceptor, call S. Benham Kahn, M.D. at (215) 991-8527.

6) **Students are responsible for the own transportation to the preceptor offices.**

We have asked preceptors –

- To make their medical reference library available to the students during the office session.

- To give feedback to the students as the four-week block goes on.

- To be as encouraging and supportive as possible of the students’ interviewing efforts.

- As much as time allows, to be willing to discuss the patient with the student after the visit is over.

- To assign you a patient with a chronic illness and to discuss with you case management.

- To discuss the thought process that underlies making a diagnosis and deciding on therapy.
STUDENTS ASSIGNED TO PEDIATRIC OFFICES

It may not be possible for your pediatric mentor to assign you a patient with a chronic illness/disability. However, pediatricians see children and children do have a marked impact on family life. Therefore, your paper should describe the impact that having and raising children has had on parents, siblings and other family members. This year the focus is on disease management.

If you are assigned a patient with a chronic illness, please follow the general outline for the paper listed in your manual above. Don’t forget to describe (briefly) the family of the patient. Concentrate on overall disease management.

If you are assigned to a patient with an acute illness (i.e., otitis media, influenza, diarrhea, etc.) follow the same outline. Don’t forget to discuss how the condition might be prevented from recurring as well as overall management and how the acute illness might disrupt normal family activities. (Describe the overall development of the child in your paper).

If you are assigned a healthy baby, please discuss overall management of well children, stressing overall management of changing needs of patients (children) as they grow and mature. Again, describe how these changes have had an impact on the family. Describe preventive measures needed including vaccinations, diet, conditions at home, and who gives care (day care, nanny etc). Make sure your history includes prenatal care and any problems at birth. Also include time and difficulties with labor and delivery. Finally, ask about unmet needs and barriers to adherence. Be sure you include a reference.

SUPPLEMENTAL NOTES

The following are topics we hope you will cover in your three sessions in physicians’ offices.

TOPIC #1 - DOING A HISTORY AND A PHYSICAL EXAM and DISCUSSING DISEASE MANAGEMENT.

Goals:

a) Students will increase their comfort and confidence in performing a HISTORY AND PHYSICAL EXAM on one of the preceptor’s patients using the techniques from the Clinical Skills course. (See following for remarks about how to do a history and physical exam)

b) After discussing the findings with the preceptor, the student and preceptor will discuss the diagnosis and overall management of the patient’s chronic illness.
Objectives: After being assigned a patient with a chronic illness, the student should perform a focused physical exam guided by the patient’s history, looking for physical signs that might confirm a diagnosis. Remembering that the physical exam starts from the moment the examiner first sees the patient, the student should have four observations about the patient (gait, mood, appearance, degree of wellness, tone of voice, etc.) before starting the formal physical exam.

The student will write a brief history and concise physical exam on the patient.

Suggested Methods: The preceptor identifies a patient on whom the student will perform a physical exam.

The preceptor will observe the examination, if possible, and make comments for the student later.

The preceptor should review and explain physical findings, and should then discuss patient’s illness and disease management.

**TOPIC #2 - IMPACT OF ILLNESS ON THE FAMILY AND ON PATIENT’S SOCIAL/OCCUPATIONAL ENVIRONMENT**

Goals: To understand why the family should be considered in the evaluation of a patient and how the family may play a role in patient management. To learn all of the other elements are required for proper patient management

To learn what are the burdens placed on the family care givers and how the patient and the family view these burdens.

To define the impact of illness and therapy on the patient’s work and social life.

To learn about preventive care

Objectives: Student should be able to discuss ways the family can impact in either a positive or negative way on a patient’s medical course.

Students should be able to discuss the ways the family can impact on a preceptor’s management plan.

Students should learn what has been the impact of disease management on patient’s work and social life.
Students should learn about preventive care by discussing needs of assigned patient.

**Suggested Methods:**

Student will talk with assigned patients (or others seen) about their families and how the families react to the patient’s illness.

If approved by the preceptor and allowed by the patient, the student will talk separately with the family members in the office or by phone, if possible, to learn how they perceive the patient’s illness, how they respond to it, and how they feel about it.

Student will discuss with the preceptor how to interact with the patient’s family.

Student will discuss with the preceptor to what extent the family should be involved in patient care and how family issues can be incorporated into the therapy plan.

The student, with permission, might wish to call the patient to discuss issues dealing with work or social life if there has not been sufficient time to do this during the office visit. (If all agree, repeated calls to discuss matters which have to be discussed in your assigned paper are encouraged).

**Suggested Readings:**


**TOPIC #3 - WHAT IS DISEASE MANAGEMENT**

1) Giving drugs and nothing else is not disease management.

2) Disease management means what a physician must do to help the patient accommodate to the illness.

3) Example: A person with hypertension needs medicine, advice about diet, exercise counseling, risks that might be encountered, i.e., driving a car or using dangerous machinery, etc. In other words, all of the procedures needed to control the illness.

4) Make sure you discuss unmet needs and barriers to adherence and include these data in your paper.
5) LOOK UP YOUR PATIENT’S CONDITION IN THE TEXTBOOK AND DISCUSS HOW THE DISEASE SHOULD BE MANAGED WITH YOUR MENTOR. DON’T HESITATE TO ASK!!!

6) See above remarks about elements of proper patient management.

**TOPIC #4 – CONTINUING A RELATIONSHIP**

1) By now you should have gotten to know your patient.

2) Please continue to contact your patient by phone or otherwise (personal visit or even e-mail) to “see how he/she is doing”.

3) Try to practice some patient education.

4) **Always close your relationship by thanking the patient.**

**Suggested readings:**
