

THE LONGITUDINAL PRECEPTOR PROGRAM

**Student Course Book
Academic Year 2021-2022
Year 1**



University of Massachusetts Medical School

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LONGITUDINAL PRECEPTOR PROGRAM CONTACTS

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Welcome to the LPP!

The Longitudinal Preceptor Program (LPP) is designed to give you an opportunity to interview and examine patients as well as to experience the practice of medicine firsthand. You will participate in actual clinical sessions with a physician, assisting them in the care of their patients. We hope that you will find this to be a valuable and rewarding part of your medical education, as well as being “one of the best things about medical school” according to your fellow students!

You are required to participate in 11 precepting sessions for the academic year (AY) in order to receive course credit. You and a partner will be assigned to 2 different preceptors: 1) a primary care preceptor (internal medicine, family medicine, hospitalist) and 2) a specialist physician. Pediatrics and emergency medicine are thought of as being able to serve as both primary care and subspecialty care. The goal of doing this is to broaden your experience. You will spend 5 sessions with 1 physician and 6 with the other for a total of 11 sessions between the 2 preceptors. You and your partner should work out how to contact your preceptors together and coordinate when each of you will be going to your sessions.

Therefore, it is important to maintain good communication with your preceptors. No matter how busy your preceptors may be, they will always appreciate you keeping them informed if you will be late or unable to attend a session. Email or cell phone are the preferred methods of communication. It makes for a smoother experience for both of you. Make the most of it! While there are clear course objectives that you must meet, we encourage you to think about any personal goals that you would like to achieve during this year-long experience and to discuss those with your preceptor as well.

The LPP is an opportunity to practice interviewing, develop a rapport with patients, and observe how a physician practices. One of the first lessons is to understand why people go to visit a doctor in the first place! While this may seem intuitive there are common presentations that are helpful to keep in mind. A useful outline in the appendix can help you to organize your thoughts around a particular patient interaction.

The learning objectives of the LPP are met by placing students in a variety of clinical settings and specialties. Therefore, you can expect differences between your experience and those of your classmates. As long as you are meeting your basic educational goals then you are on the right track. If this is not happening, or you are having other difficulties with your LPP assignment, let us know.

Sincerely,

Peggy, Wu, M.D.
Course Coordinator

Carly Eressy
Educational Specialist II

Link to the LPP website for preceptors and students:

<http://www.umassmed.edu/oume/curriculum/longitudinal-preceptor-program/>

General Instructions/Requirements

1. A total of 11 precepting sessions are required for LPP year 1. Ideally one session every other week. Plan the entire year in the beginning; planning ahead will make it easier for you and in most cases for your preceptor as well.
2. As mentioned above, you will split your 11 sessions between 2 preceptors. There will be another student also assigned to the same 2 preceptors so it's easiest to work with that student and decide on the timing/attendance of your sessions together (each student should attend individual sessions with their assigned preceptors).
3. Record each visit on an online checklist via the OASIS application. One checklist should be filled out and submitted online **after each visit via OASIS. (Instructions are on Blackboard in FM 104)**
4. You are **required** to call your preceptor to schedule an initial meeting (approximately 15- 20 minutes) to arrange your schedule before you formally start seeing patients. **Contact your preceptors (after discussion with your partner) to schedule this first meeting ASAP.** Ideally, this should occur before you start your first precepting session, but it may be that your preceptor prefers to meet by having you arrive early on your first day. Email or cell phone (or both) are typically the preferred method of communication with your preceptor. Discuss this at your first meeting.
5. The initial meeting is to schedule your precepting times, to **review the course book and your educational goals with your preceptor.**
6. In November, **you will receive a self-evaluation** through OASIS. You will need to review and discuss with your preceptor. **These evaluations are due back no later than the end of December.**
7. Finally, it is important to recognize that although you are a student – you are becoming a medical professional. You will be expected to dress and act accordingly. **Please review the medical school's guidelines for professional behavior on the page 7 of this syllabus prior to your first clinical encounter.**
8. The medical school is allowing students (ideally those who have been vaccinated) to opt in to seeing patients with COVID or patients under investigation (PUI). This would be done at your preceptor's discretion. If you do not feel comfortable seeing COVID + or PUI patients, please let your preceptor know. Given you are beginning students, comfort levels for you as well as your preceptor will likely change as the year goes on and you gain more clinical experience. If you do see a COVID + patient or PUI, you should be provided a N95 and appropriate PPE from your preceptor's clinical setting (they have been informed). The medical school will provide you eye protection in the form of goggles or a face shield. You will be required to complete COVID online training and FIT testing prior to starting LPP and the OUME will be providing further information on this.

Helpful Hints for Students

The following are some helpful hints for you as you begin your LPP experience:

1. It is your responsibility to contact the preceptor and arrange on-site visits. Discuss with your preceptor the best way to communicate with him/her – phone, email, etc.
2. In regard to attire, this is best discussed with your preceptor. Some preceptors may wear white coats and prefer that you wear them as well. Some may prefer ties, some suggest scrubs, and sweats and jeans are not appropriate.
3. Punctuality - remember, many of your preceptors have very busy practices. Please be on time for scheduled visits or notify your preceptor if you will be late.
4. Get to know the staff at your preceptor's office. Physicians, even in a solo practice, do not work alone. The office staff may include nurses, receptionists, lab personnel, and office workers. Let them know who you are as soon as possible. In many instances, these people can be very helpful, supportive and instructive.
5. How should you introduce yourself? Most preceptors will introduce you to patients and staff as a student/doctor or medical student. You can clarify this with your preceptor.
6. School ID badge - Always wear an identifying name badge, especially when dealing with patients in a clinic or hospital setting.
7. Some preceptors are busier than others and may not have the time to discuss individual patients with you during patient hours. Ask your preceptor when is the best time to ask questions or discuss things. Also - ask your preceptor for feedback on your progress if he/she does not voluntarily give this to you!
8. It may help to jot things down on a small note pad during your visit (or use the note sheet in this coursebook). In this way, you can keep a record of your questions, what things to “look up” later, or to discuss in your small group session, or to ask your preceptor at the end of the session. Please use the checklists to help you to evaluate what you've done at each session and what goals you have for the next session.
9. Active observation is important in LPP. You have been taught interviewing frameworks in DCS 1 small groups---observe how your preceptor collects information and what information they collect. Do they adhere to the frameworks you have been taught? If not, why not? Consider discussing their approach with them and how they were taught these skills.
10. **Confidentiality** - In order to ensure the confidentiality of the doctor-patient experience, any discussion of patient-related issues must be conducted in an appropriate private setting and only with those individuals directly concerned with patient care.
11. **Please** review the complete medical history framework – this is the format you will use for the rest of your career! Please note: this format is the same for obtaining the history, orally presenting the history, and writing up the history. Learn it now and learn it well!

Most importantly, **Enjoy this opportunity!**

If you have any questions or problems, please contact Carly Eressy at LPP@umassmed.edu.

GUIDELINES FOR PROFESSIONAL BEHAVIOR

The Faculty and Student Body of the University of Massachusetts Medical School regard the following as guidelines for professional behavior. These areas are derived from the school's Technical Standards (see Student Handbook). Students are expected to show professional behavior with or in front of patients, members of the health care team, and others in the professional environment (school, hospital, clinic, office) including members of the faculty and administration, other students, standardized patients, and staff. Faculty members and administrators are expected to abide by similar standards.

PROFESSIONAL ATTRIBUTES

Displaying honesty and integrity

- Never misrepresents or falsifies information and/or actions (i.e. cheating)
- Does not engage in other unethical behavior

Showing respect for patient's dignity and rights

- Makes appropriate attempts to establish rapport with patients or families.
- Shows sensitivity to the patient's or families' feelings, needs, or wishes.
- Demonstrates appropriate empathy.
- Shows respect for patient autonomy.
- Maintains confidentiality of patient information.

Maintaining a professional demeanor

- Maintains professional demeanor even when stressed; not verbally hostile, abusive, dismissive or inappropriately angry.
- Never expresses anger physically.
- Accepts professionally accepted boundaries for patient relationships.
- Never uses his or her professional position to engage in romantic or sexual relationships with patients or members of their families; never misuses professional position for personal gain.
- Conforms to policies governing behavior such as sexual harassment, consensual amorous relationships, hazing, use of alcohol, and any other existing policy of the medical school.
- Is not arrogant or insolent.
- Appearance, dress, professional behavior follow generally accepted professional norms.

Recognizing limits & when to seek help

- Appears aware of own inadequacies; correctly estimates own abilities or knowledge with supervision.
- Recognizes own limits, and when to seek help.

RELATIONSHIP TO OTHERS

Responding to supervision

- Accepts and incorporates feedback in a non-resistant and non-defensive manner.
- Accepts responsibility for failure or errors.

Demonstrating dependability and appropriate initiative

- Completes tasks in a timely fashion (papers, reports, examinations, appointments, patient notes, patient care tasks).
- Does not need reminders about academic responsibilities, responsibilities to patients or to other health care professionals in order to complete them.
- Appropriately available for professional responsibilities (i.e. required activities, available on clinical service, responds to pager).
- Takes on appropriate responsibilities willingly (not resistant or defensive).
- Takes on appropriate patient care activities (does not "turf" patients or responsibilities).

Interacting with other members of the team

- Communicates with other members of the health care team in a timely manner.
- Shows sensitivity to the needs, feelings, and wishes of health care team members.
- Relates and cooperates well with members of the health care team.

Approved by the Education Policy Committee 11/01



SAMPLE - LPP 1 Interview Checklist on OASIS

Session Date:

You must submit a separate form for each session!

Accomplishments for this LPP session

Please indicate the number of times each of the following occurred.

I observed my preceptor...				I performed...		
0 times	1-2 times	≥3 times		0 times	1-2 times	≥3 times
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7 Cardinal Features of the HPI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Past Medical History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Social History (including habits)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Family History/Genetic History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Meds/Allergies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Counsel a Patient (e.g., smoking, diet, exercise)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Some Portion of Physical Exam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Obtain Vital Signs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Develop a Patient Problem List	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other - <i>please specify:</i> <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	0 times	1-2 times	≥3 times
Number of times I was observed by my preceptor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of times I was given feedback by my preceptor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

LPP Year 1 Objective Guidelines

This grid is to guide you in the specific learning objectives to be completed in LPP year 1. The learning objectives of the LPP are met by placing students in a variety of clinical settings and specialties. Therefore, you can expect differences between your experience and those of your classmates. Some of these guidelines may be difficult to complete depending on your assigned clinical setting. As long as you are meeting your basic educational goals then you are on the right track. If this is not happening, or you are having other difficulties with your LPP assignment, let us know as soon as possible.

1. Demonstrate knowledge of work flow of your practice site.
2. Describe Communication Skills used by your Preceptor in 1 patient encounter per session.
3. Demonstrate the ability to gather the 7 cardinal features.
4. Gather a History of Present Illness (HPI).
5. Gather components of the complete history: HPI, PMH, Meds, Allergies, FH, SH.
6. Demonstrate oral presentation from your LPP's history (see appendix and review Pass One in resources).
7. Observe the difference between a chronic/follow-up visit and acute illness visit.
8. Participate in a Continuity Patient Encounter if your practice setting is amenable. Options can include: see same patient again, consultant visit, accompany preceptor to home visit, attend procedure.
9. Describe the role of another member of the patient care team through working with them during one of your sessions.
10. Utilize the patient's Electronic Health Record (EHR) to find vitals, medication list, diagnostic tests, medication allergies.
11. Complete preceptor and self-evaluation (due early December for discussion with preceptor at final fall semester visit) to demonstrate self-assessment skills
12. Complete and Submit the End of Semester Reflective Write-up via email to LPP@umassmed.edu (your name & class year in the subject line)
13. Perform LPP Presentation in DCS small groups - spring semester
14. Gather the Complete History over the course of the semester: HPI, PMH, Meds, Allergies, FH, SH.
15. Discuss the components of Health Maintenance/Disease Screening for patients. system and notes - resources In FM 104 to present in DCS; give age appropriate milestones, immunizations and screening.
16. Demonstrate counseling skills with a patient (e.g. smoking, exercise, diet).
17. Demonstrate components of the physical exam -vitals, HEENT, heart, lung abdomen, musculoskeletal, Neurological.
18. Develop and Discuss Problem Lists (listing findings, group findings, problem list), Assessment & Plans for one patient at each session. Review with your preceptor.

DETAILS OF LPP year 1 OBJECTIVES

- 1. Communication Skills/Interviewing:** Observe your preceptor interviewing patients: how s/he introduces him/herself and opens the interview; how the four functions of the medical interview are addressed; how the chief complaint is characterized utilizing the seven cardinal features of the problem; how the preceptor addresses cultural issues and how they affect the patient/physician relationship. Observe how the patient perceives his/her illness and how the various cultural, emotional, and social perspectives through which the patient sees his/her illness influences the office encounter. Practice your interviewing skills (reflection, legitimization, partnership, respect and support) to develop a relationship with the patient and attend to their comfort during the interview.
- 2. History of Present Illness/Complete History:** Practice obtaining the components of the medical history, becoming comfortable with the questions and format that is traditionally used. We realize that performing a complete history, using all of the components at one time is a skill that develops over time. Therefore, early in the year we would like you to do as many of the components as you are able to with each patient that you interview. Refer to the components of the medical history in the appendix, for a more detailed review of the specific questions/information in each component. There are several components that comprise the medical history:
 - a. Chief complaint
 - b. History of Present Illness (HPI) – utilizing the 7 cardinal features
 - c. Past Medical History, Medications, Allergies
 - d. Family History
 - e. Social History
 - f. Review of Systems
- 3. Demonstrate oral presentation skills:** This is one of the ways that you will be communicating with others regarding patients. The oral presentation is a basic skill that you will utilize throughout your career. This skill takes practice and the LPP setting is a great place to begin learning this skill. Discuss with your preceptor ways you can start practicing the oral presentation with the patients you are seeing. Have them demonstrate how they do an oral presentation. Refer to the appendix for the format of an oral presentation and view the Pass One video that is in the resource section for DCS1 (FM104) on BBL
- 4. Observe the difference between a chronic/follow-up visit and acute illness visit:** Identify a patient with an acute illness and discuss with your preceptor how they approach this type of visit. Examples you may encounter include: Upper Respiratory infection, Earache, Sports injury. Identify a patient with a chronic illness and discuss with your preceptor. Examples you may encounter include: Asthma, Neurodevelopment problems, and Cystic fibrosis in children; Hypertension, Diabetes, Psychiatric Conditions and COPD (Chronic obstructive pulmonary disease) in adults. Observe the different approaches they may use during the encounter. Also look for differences in how a preceptor approaches a well-established patient compared to a patient they have never met before.

5. **Participate in a Continuity Patient Encounter:** Discuss with your preceptor to see if the office could arrange a follow up appointment with a patient you have seen at a time when you will be back in the office. Observe the differences in the encounter when you see the same patient a second or third time. You may also want to see if that patient has other medical appointments within the healthcare system and ask to attend those as well. This could be visits with other specialists or other scheduled tests such as radiology procedures, cardiac testing, home visits, or pre-op testing. Not all practice settings (emergency department) are amenable to have continuity with the patients you are seeing so options would be to accompany a patient to the medical floor if admitted or visit them the following day. Patients always seem to remember students they have seen so look for the initial reaction they have when they see you again and get a feel for how you have already established some level of rapport with that patient.
6. **Describe the role of another member of the patient care team (IPE or Interprofessional Medical Education):** Working with members of the patient's health care team is a valuable experience. This will help you to understand the team members in your preceptor's office and the role they play in the patient's care. Examples could include spending some time with the triage nurse on the phones, working with the health assistants rooming the patients, spending time in the lab or radiology, or working with the front desk staff at registration.
7. **Electronic Health Record (EHR):** Most medical offices and hospitals now utilize some form of a medical record on EHR. Ask your preceptor to guide you through ways he/she uses the EHR in the care of their patients. This will be very helpful as you move into the in-patient setting during your hospital sessions. Try to find vital signs, medication lists, medication allergies, problem lists, health maintenance screening tests.
8. **Preceptor and Self Evaluation:** In November, you will receive a self-evaluation via OASIS. These evaluations should be filled out and you should schedule a time to review and discuss with your preceptor at your last LPP session of the fall semester. Please be sure to schedule time for this with your preceptor. Preceptors will complete an evaluation on their students in March of 2022.
9. **End of Fall Semester Reflective Write-Up; *DUE 1/31/22 – students must submit this reflection to LPP@umassmed.edu with their name and class year in the subject line. This assignment will be forwarded to DCS1 small group leaders for evaluation. This is a grade bearing assignment.***

This is an opportunity for you to take some personal time to sit back and reflect on becoming a doctor and doctoring. Please complete a written narrative, reflecting on a specific experience or on your total experience to date with patients. Include any or all of the following reflections: How has working with patients affected you? How, if at all, has your perception of what a doctor is changed? How, if at all, has the way in which you would practice as a physician changed? Have you observed examples of patient advocacy where the doctor has gone out of their way to help a patient? Feel free to comment on any other impact this experience has had for you, either good or bad.

There is no required length to the write-up but we encourage you to be thoughtful and complete. You may want to reflect on your experience over the winter break – so this component is not due until the end of January, but you are encouraged to complete it sooner.

This writing assignment will not be shared with your preceptor (although you are certainly welcome to do so), but your DCS 1 small group facilitators will have the opportunity to review and provide comments.

10. First years doing LPP have a presentation in DCS 1 small group in the Spring: This will take place in the spring semester in the DCS 1 small groups. You will be given 5 minutes to present a patient from your LPP Office to your DCS small group. Please use the following to prepare your presentation.

A. Case Selection: The goal is for you to reflect upon an experience you had in LPP that was important to you in some way. Some ideas for selecting cases include a case that:

- Taught you something about patient care
- Represents the kind of cases you saw most
- Represents an unusual case
- Illustrates a problem-solving approach
- Let's you use your basic science knowledge when interacting with the patient
- Let's you use your education or counseling skills
- Illustrates the importance of using a population approach to medicine

B. Presentation format: Limited to 5 minutes!

See appendix for an oral case presentation guide. At the conclusion of the presentation, give a 1 minute summary of why you chose this case and allow time for group discussion.

11. Gather the Complete History over the course of the semester: HPI, PMH, Meds, Allergies, FH, SH: We realize that performing a complete history for one patient, using all of the components at one time, is a skill that develops over time. It can also be time consuming. You will have a chance to do this in the hospital sessions next year. However, the LPP setting can be an excellent opportunity to start practicing this task. Observe your preceptor and how they manage to do a complete medical history on either patient they already know or new patients they are seeing for the first time. Observe the different approaches for these patients. Discuss with your preceptor setting up a patient for you to practice the complete history.

12. Perform a Health Maintenance/Disease Screening visit: Identify a patient who presents for a check-up (yearly health maintenance visit) and record on the *'Health Maintenance/Disease Screening Note'* that follows in the appendix. Prevention and screening examples you may encounter include a well child visit, cancer screening, immunizations, high risk population screening (e.g. HIV testing for those with high risk behavior) or a variety of other issues (cholesterol, vision, hearing, dental, sun exposure). These visits will provide a basis for your DCS small group discussions. Review the health maintenance section on the patients EHR and observe how these screening indicators are recorded. Does the practice or the EHR have built in reminders to alert the provider or patients when something is due?

13. Demonstrate counseling skills with a patient: You can discuss this with your preceptor to help find a patient that might need counseling to help change a behavior (e.g. smoking, diet, or exercise). You can utilize the skills you will learn in the spring semester in your DCS1

small groups on the 5 A's of counseling and motivational interviewing. You may want to role play this with your preceptor first before trying with a real patient.

- 14. Demonstrate components of the physical exam:** You will be introduced to physical exam skills in the Physical Diagnosis course which runs from November through February (vitals, HEENT, heart, lung abdomen, musculoskeletal, Neurological). However, be prepared with your stethoscope at your first visit. Your preceptor will likely introduce the physical exam early in your sessions so be prepared and take advantage of this clinical setting to practice your exam skills. Your preceptor may use different techniques from what you are learning in the physical diagnosis course. Also, discuss with your preceptor how they decide what exam to do? Is it a focused exam based on the HPI or the patients' medical history? Is it a yearly physical exam so all exam components are performed?
- 15. Develop and Discuss Problem List (list findings or group findings), Assessment and Plans:** As you progress through the year start working on this with your preceptor and complete these details on at least one patient per session. This is your opportunity to use critical thinking skills, i.e. putting it all together in terms of what the patient's problems are, how to evaluate them and how to treat them. Ask your preceptor to review with you. Ask how your they use the problem list. To help you problem solve a case, you may want to first list your findings and then group common elements so you can better understand what is going on and how best to develop an assessment and plan. These concepts will also be reviewed in your DCS 1 small groups.

2021-2022 EVALUATION/GRADING

The following components are used to determine the LPP grade and are **required to pass**. You must receive a passing LPP grade in order to receive credit for the DCS course (The LPP accounts for 20% of your Doctoring and Clinical Skills (DCS) course grade).

LPP REQUIREMENTS DUE MAY 2022

1. Attend 11 Preceptor Sessions; submit via OASIS 11 Checklists – *one for each session, completed at the end of each session*
2. Review LPP1 Objectives Guideline
3. Preceptor Evaluation (due in March)
4. Self-Evaluation (due in December)
5. **Complete a Reflective Write-up (due 1/31/22** via email submission to the LPP@umassmed.edu mailbox, but feel free to turn in early. These will also be distributed to DCS-1 small group leaders. Be sure to list your name and class year in the subject line.)

You must receive a passing LPP grade in order to receive credit for the DCS course. Failure to have assignments completed will result in a **No Credit** grade. All coursework for DCS and its components (LPP checklists, evaluations, reflection) must be completed by **May 20, 2022** in order for you to move to Year 2. If you have not completed the assignments, you will receive a No Credit for the course.

If you have requested an extension in writing, you will receive a temporary grade of Incomplete until your outstanding assignments are turned in. Request for extensions may be made to LPP@umassmed.edu in writing or by email by **May 1, 2022**.

APPENDICES

**Notes about the medical history that you will
find helpful and should refer to frequently!**

WHY DO PEOPLE GO TO THE DOCTOR?

There are many reasons why people go to the doctor. In addition to the traditional “sick” visit, people also seek their physician for follow-up of chronic problems, and health maintenance. These visit types differ based upon patient age and sex. It is important to understand the physician’s responsibility for their patients’ health besides providing care when they are sick.

The following charts are a guide to understand why people go to the doctor, while not meant to be comprehensive – they provide an outline for what you will see in your preceptor’s office.

CHILDREN	ADULTS
1) Sick Visits	1) Chronic Problem
2) Health Maintenance/Screening (check-ups)	2) Sick Visits
3) Chronic Problems	3) Health Maintenance/Screen (check-ups)

Adults are seen more commonly for chronic problems - children more for sick visits and ‘check-ups’.

‘SICK’ VISIT examples

CHILDREN	ADULTS
1) Fever	1) Upper Respiratory infection
2) Otitis media/upper respiratory infection	2) Musculoskeletal injuries
3) Gastrointestinal distress	3) Gastrointestinal distress
4) Injuries	

CHRONIC DISEASE FOLLOW-UP VISITS

CHILDREN	ADULTS
1) Asthma	1) Hypertension
2) Neurodevelopment problems	2) Diabetes
	3) Psychiatric Conditions
	4) Asthma/COPD(Chronic obstructive pulmonary disease)

HEALTH MAINTENANCE / DISEASE SCREENING VISITS

INFANTS/CHILDREN	ADULTS
1) Immunization	1) Cancer Screening
2) Growth and Development	2) Chronic Disease Screening, (Hypertension, Diabetes, Hypercholesterolemia)
3) Safety Issues	3) Substance Abuse
4) Substance Abuse (Adolescents/Teens)	

Outline of the Complete Medical History and Write-up

I. Chief Complaint (CC)

II. History of Present Illness (HPI)

- A. 7 Cardinal Features of the presenting symptom (CC)
 - 1. Quality
 - 2. Location
 - 3. Chronology
 - 4. Setting and Onset
 - 5. Severity
 - 6. Modifying Factors
 - 7. Associated Symptoms

Include Pertinent Positives - a symptom, risk factor or risk behavior associated with pathological conditions presenting with such a chief complaint **which is present** in the patient.

Include Pertinent Negatives - a symptom, risk factor or risk behavior associated with pathological conditions presenting with such a chief complaint **which is absent** in the patient.

III. Past Medical and Past Surgical History (PMSH)

- A. Medical Illnesses/ Hospitalizations
- B. Surgical History
- C. Psychiatric History
- D. Childhood Illnesses
- D1. (Add Birth and Developmental History to a Pediatric History)
- E. Injuries
- F. Medications
- G. Allergies
- H. Transfusions
- I. Pregnancies

IV. Social History/Habits and Risk Behavior

- A. Birthplace
- B. Education
- C. Work and Work History including exposure to hazardous materials
- D. Marital/Relationship Status
- E. Quality/Quantity of Social Relationships
- F. Diet
- G. Exercise
- H. Tobacco Use
- I. Alcohol Use
- J. Drug Use
- K. Sexual Behaviors History
- L. Domestic Violence
- M. Injury Prevention (seat belts, bicycle helmets, etc.)

V. **Family History**

- A. Significant **Illnesses** in 2-3 generations of family – Document -
Ages and health status of **siblings**
Ages and health status of **parents**
Ages and health status of **grandparents**
Ages and health status of **children**
- B. Ask about Common **Diseases** with known genetic links
 - 1) familial incidence of arthritis, cancer, diabetes, hypertension, myocardial infarction, stroke, mental illness, alcoholism
 - 2) any other illness that **runs in the family**

VI. **Health Care Maintenance (Prevention and Screening)**

- A. Cancer Screening
- B. Immunizations
- C. High Risk Population Screening (e.g. HIV testing for those with high risk behavior)
- D. Other (cholesterol, vision, hearing, dental, sun exposure)
- E. Health Care Proxy

VII. **Review of Systems (ROS)**

- | | |
|---------------------------|---------------------|
| A. Constitutional | B. Skin |
| C. Head | D. Eyes |
| E. Ears | F. Nose |
| G. Mouth | H. Throat |
| I. Breasts | J. Respiratory |
| K. Cardiovascular | L. Gastrointestinal |
| M. Urinary | N. Genital |
| O. Menstrual-Reproductive | P. Endocrine |
| Q. Musculoskeletal | R. Hematological |
| S. Nervous System | T. Psychiatric |

COMPONENTS OF THE MEDICAL HISTORY DESCRIBED

I. Chief Complaint (CC): The patient's stated reason for the medical encounter

II. History Present Illness (HPI): Characterize the chief complaint according to the principles of interviewing that you learned in the Physician Patient and Society course. This includes the 7 cardinal features of the symptom (quality, location, chronology, associated symptoms, modifying factors, setting and onset, and severity) as well as asking all questions in the past medical history (PMH), family history (FH), social history (SH) and review of systems (ROS) that directly relate to the chief complaint. Therefore, if a patient is experiencing shortness of breath, you should characterize the complaint and then include any pertinent PMH, FH, SH, and cardiorespiratory review of systems in your HPI since most causes of SOB can be traced to these two systems. Therefore, at the end of the HPI, it is worthwhile to ask yourself: *"have I characterized the chief complaint and asked the relevant questions from the appropriate past medical history, family history, social history and review of systems"?*

The HPI is the most demanding part of the history. It details completely and concisely all of the features of the illness or symptom complex that brought the patient to the hospital or the physician's office. It should be detailed in chronological order and in literate fashion so that details and time sequence are understandable to the reader. This is a task of potentially extraordinary complexity. It requires that you get the full details as outlined above, as well as the care that the patient has sought for the symptoms, diagnostic tests performed, physician's and patient's impressions of the symptoms and the plan that has been outlined thus far.

While not expected for this course work, keep in mind during the time that you are doing clinical rotations, you will also be asked to review previous medical records to supplement the information that the patient has given you and confirm the details of the tests that the patient has had leading up to the hospitalization. While this list of questions and issues that need to be addressed seem to be daunting, they can all be seen as a part of the time course of the illness for which the patient presents.

Events should be related temporally but attention should be paid to the avoidance of skipping back and forth between the details of symptoms in different organ systems. If a patient has an illness that has multiple symptoms from different organ systems, it is often helpful to detail the symptoms separately followed by their time course, features, pertinent positives and negatives. In addition, if the patient has had multiple episodes of a symptom complex or multiple exacerbation's of one disease, it is often helpful to get the full details of a typical episode, record the frequency of episodes and record how the current episode may differ from a typical episode if it does.

There clearly is judgment involved in deciding whether an item belongs in the HPI. A rule of thumb is to include all the symptoms from the Review of Systems in which the patient's chief complaint falls as well as any diseases that relate to that system. As you take the history and form ideas or hypotheses about what disease entities that the symptoms might represent, be careful to then include questions from the systems that these diseases involve. This requires that you begin to integrate the knowledge that you have gained in the Pathophysiology course with the symptoms that the patient reports to you. You should not include the details of illnesses that are not related to the HPI here as this information belongs in the PMH.

III. Past Medical History (PMH): In this section, you should detail the patient's previous medical and surgical problems. To be included in this section, it should be a clear diagnosis, not only a symptom or symptom complex. In addition, if a patient tells you that they have had a certain disease; you should typically ask about the presenting symptoms, diagnostic tests used to arrive at the diagnosis, and subsequent course of the disease. This information allows you to include only clearly established diagnoses. The more varied that the disease presentation can be, the more critical it is that you record the details completely. You can use a short hand method of recording the PMH/PSH by listing the diagnosis followed by the date that the diagnosis was made and the details that you have collected. An example is given below.

- a. Essential Hypertension - 1986, diagnosed on routine PE, without complications, treated with ACE Inhibitor, Vasotec
- b. Systemic Lupus Erythematosus - 1989, presenting with diffuse arthralgia and arthritis as well as skin rash, diagnosed clinically and treated with Naprosyn for his/her joint pain

Also included in this section are numerous subheadings that pertain to previous problems or health history. These include:

- a. Past Illness (examples above)
- b. Past Surgeries
- c. Childhood Illnesses
- d. Injuries
- e. Immunizations
- f. Allergies (include a description of the reaction)
- g. Transfusions
- h. Pregnancies
- i. Medications - include doses and frequency

IV. Family History (FH): Diseases that can be inherited are a critical part of the history. You should record the health status and health problems, concentrating on those that are known to have genetic links, of the patient's grandparents, parents, siblings and children. If any of these persons are deceased, record the cause of death and the age at which that occurred. While history of the grandparents may be hard to obtain, it is important to attempt to get information for at least two generations of the family that have lived long enough to get heritable diseases. This can be recorded in long hand or in family tree format being sure to identify which one is the patient if a family tree is used. In addition to whatever format is being utilized, you should also ask about the major disease categories that are known to have genetic links such as Diabetes Mellitus, Hypertension, Myocardial Infarction, Stroke, Arthritis, Asthma and Cancer.

V. Social History (SH): This section should attempt to detail prominent features in the life of the person that you are examining. It should include a comment on where the person was born, when and how they came to be in their current community, their marital status, current work, some comment on the quality and quantity of their social relationships and their means of emotional support. By convention, this is the section of the write-up where the smoking history, alcohol history, sexual history, and drug use history are recorded.

VI. Review of Systems (ROS): This is a systematic, comprehensive review of multiple symptoms that the patient may have experienced. The areas that you have to question can be conveniently grouped according to the pathophysiological system in which they fall. A list of systems follows this section. There are several critical items that need to be mentioned with regard to the recording of the ROS in the write-up. If a patient tells you that they have experienced a certain symptom, pursue that positive answer to determine whether it is a current problem, an acute problem that will need attention during this visit, or a fleeting or past problem that does not require attention at all. Do not simply record that symptom as "positive." Conversely, it does not suffice to describe a whole system as negative while not recording the items that you asked the patient. This is the case because recording the system as negative does not adequately characterize what items you asked the patient about. This is generally referred to as "pertinent positive" and "pertinent negative" review of system as applied to the chief complaint.

A NOTE ABOUT TIMING - ROS questions are asked in many situations. It is important to be clear why you are asking them, and what time period you want the patient to consider in answering the question. If the patient is an outpatient who you will follow over time, you are really asking whether a patient has had significant symptoms recently (and in some circumstances like hemoptysis or sudden

asymmetric weakness or loss of consciousness, ever), and then pursuing enough detail to determine whether you might be able to make a diagnosis or need to do some tests, or be aware of these symptoms for a later visit. If the patient is an inpatient who you will follow during the hospitalization, your question really has to do with whether the patient has experienced symptoms in ROS recently, and significantly enough that you need to focus on it (either testing or treatment) during this hospitalization. You are not asking whether a patient has ever had a rash, or ever had epistaxis (bloody nose) or heartburn

What follows is a list of questions from various organ systems that should be addressed in the ROS.

1. **CONSTITUTIONAL SYMPTOMS:** Fever, night sweats, chills, fatigue, anorexia, insomnia, weight change, weakness, irritability.
2. **SKIN:** Change in moisture, temperature, color or texture, lesions, rashes, itching, bruising, bleeding disorders, changes in hair or nails.
3. **HEAD:** Change in head size, headache, trauma.
4. **EYES:** Vision changes, glasses, blurring, eye pain, diplopia (double vision), scotomata (blind spots), flashes of lights, injury, irritation, discharge, photophobia, excessive tearing.
5. **EARS:** Hearing loss, pain, infections, discharge, tinnitus, vertigo.
6. **NOSE:** Dryness, bleeding, pain, discharge, coryza, epistaxis, obstruction, sinus pain, change in smell.
7. **MOUTH:** Condition of teeth, pain in mouth or tongue, bleeding gums, lesions in mouth, tongue or lips.
8. **THROAT:** Soreness, hoarseness, dysphagia.
9. **BREASTS:** (both sexes) Pain, swelling, discharge, masses.
10. **RESPIRATORY:** Cough (acute or chronic), sputum production, hemoptysis, dyspnea, wheezing, chest pain, pleurisy, orthopnea.
11. **CARDIOVASCULAR SYSTEM:** Chest pain, exertional dyspnea (shortness of breath), paroxysmal nocturnal dyspnea, orthopnea, palpitations, syncope, peripheral edema, cyanosis, murmur, intermittent claudication, Raynaud's phenomenon, varicose veins, phlebitis.
12. **GASTRO-INTESTINAL TRACT:** Dysphagia, odynophagia, appetite, heart burn (acid indigestion), eructation (belching), regurgitation, bloating, abdominal pain or discomfort, fullness, distention, pain, nausea, vomiting, hematemesis, jaundice, bowel habit change, rectal pain, hemorrhoids, hernia, hematochezia, melena, diarrhea, constipation.
13. **URINARY SYSTEMS:** Dysuria, frequency, urgency, polyuria, nocturia, incontinence, flank pain, hematuria, retention, dribbling, hesitancy, poor stream, back or costovertebral angle (CVA) tenderness.

14. GENITAL SYSTEM:

- a. Gynecological: discharge, itching, genital lesions
- b. Male Genitalia: pain, lumps, urethral discharge, testicular pain or swelling
- c. Sexual Problems: dissatisfaction, dyspareunia, potency, recent change in pattern.

15. MENSTRUAL-REPRODUCTIVE HISTORY: Dysmenorrhea, intermenstrual bleeding, changes in cycle, amenorrhea, menorrhagia, metrorrhagia. Peri-menopausal symptoms like hot flashes, sweating, post-menopausal bleeding. Emotional reaction to menarche and menopause.

16. ENDOCRINE SYSTEM: General (weight change, easy fatigue, behavioral changes), thyroid disease (goiter, heat or cold intolerance, sweating, exophthalmos, tremor, skin and hair changes), diabetes (polyuria, polydipsia, vaginal discharge and itching, skin infections), pituitary disease (change of facial features, hands, feet). Secondary sex characteristics, habitus, hair distribution. Impotence, libido, sterility.

17. MUSCULO-SKELETAL SYSTEM: Bone pain, tenderness, swelling, stiffness, limitation of movement of neck, trunk, extremities. Weakness. Trauma, fracture. Swelling backache and leg cramps.

18. HEMATOLOGICAL: Lymph node enlargement, pain, bleeding, bruising.

19. NERVOUS SYSTEM: Syncope (faint), dizziness, convulsions, vertigo, difficulty with speech or swallowing, localized or generalized symptoms, tremor, weakness, pain, numbness, paresthesia, incoordination, difficulty with bladder or bowel control.

- a. Cranial nerve symptoms: change in smell, Diplopia, change in vision, blind spots, difficulty with speech, swallowing, or chewing, facial numbness or drooping, change in hearing, tinnitus
- b. Motor system: paralysis, atrophy, involuntary movements, seizures, gait, incoordination
- c. Sensory system: pain, paresthesia, hyperesthesia, anesthesia
- d. Mentation: orientation, memory. Reading and writing. Loss of consciousness.

20. PSYCHIATRIC: Rapid changes in mood, memory loss, phobias, hallucinations, sleep disturbances, problems with coping, suicide, (attempts or thoughts), anhedonia, frequent crying

Review of Systems - Lay terms

GENERAL: Any problems with your sleep? energy level? appetite? Any recent change in your weight? Any fever, chills? Any problem with excess thirst? Does the heat or cold bother you more than it bothers most people?

SKIN: Any problem with your skin...itching, bruising, growths? changes in moles or a freckle? Any problem with skin moisture...too dry, too oily?

HEAD: Any problem with headaches, dizziness, blackouts?

EYES: Do you have any trouble with your vision? blurred vision? double vision? Do you ever see spots or flashes? Any problem with discharge, redness, itchiness, or tearing?) Do bright lights bother your eyes?

EARS: Do you have any difficulty with your hearing or ringing in your ears? pain in your ears? itching? drainage? Do you have any difficulty with dizziness? a sensation that the room is spinning around you?

NOSE/THROAT/MOUTH: Any mouth or throat problems...hoarseness, difficulty swallowing, pain, or swelling? Any problems with your teeth or gums?

BREASTS: Any problems with pain, swelling in your breast? Any discharge? lumps?

RESPIRATORY: Do you get short of breath or have pain with breathing? Do you get short of breath with activity? Do you ever wheeze? Do you ever wake up at night short of breath? (Can you go up one/two flights of stairs without stopping? Would you have to stop to catch your breath at the top?) Do you cough up phlegm or blood?

CARDIOVASCULAR: Do you ever have chest pain? Do you ever wake up in the middle of the night short of breath? Have you increased the number of pillows that you sleep on to help you breath at night? Do you have skipped or rapid beating of your heart? Have you ever passed out? Do you have a problem with swelling or cramping in your legs? Have you ever noticed a color change in your fingers or toes when exposed to cold temperature? Do you have varicose veins

GI: Do you ever have trouble swallowing or painful swallowing? Any problems with heart burn? Have you been sick to your stomach? Have you vomited? ever vomited blood? Do you have belly pain, cramps or bloating? Any problems with bowel movements? (Diarrhea? Constipation? Noticed any blood in your stools or black or tarry stools.

GU: Do you have any problems with urination? (Any burning when you pass your urine? Are you passing urine more frequently? When you feel the urge to urinate, do you feel like you have to go right away? Is the force of your urine stream as strong as it always was? Do you have incontinence...trouble controlling your urine?) Do you have or have you had blood in your urine?

GENITAL SYSTEM:

- a. Gynecological - Do you have any vaginal discharge, itching, growths or lumps?
- b. Male Genitalia - Do you have any discharge from your penis? pain, lumps, or growths? testicular pain or swelling?
- c. Sexual Problems - Are you satisfied with your sexual function? What difficulties do you have, if any? Has your desire for sexual activity changed recently? Do you have pain with intercourse?

MENSTRUAL-REPRODUCTIVE HISTORY: Do you have any difficulties with your periods? pain? bleeding between periods? irregular cycles? intervals without periods? heavy bleeding? prolonged periods? Have your periods stopped? Are you having any hot flashes or sweating as your periods are changing? bleeding after menopause completed? Do you have any emotional reactions to beginning (menarche) or ending your periods (menopause)?

ENDOCRINE SYSTEM: Do you have any change in weight? energy level? unexplained changes in behavior? Any neck growths? feelings of warmth or cold when others are not? excessive sweating? eye bulging? shaking of your hands that is not voluntary? loss or thinning of hair? Any excessive thirst? frequency of urination? Any change in facial features/appearance? size of hands or feet? Any loss of pubic hair? hair growth in locations you haven't had it before?

MUSCULO-SKELETAL SYSTEM: Do you have any bony pain? tenderness? joint pain? swelling? or stiffness? Do you have limited movement of any joint or in neck/back that seems greater than others? Do you have any weakness? back pain?

HEMATOLOGICAL: Do you have any lumps in your neck? under your arms? or in your groin? History of bleeding or bruising?

NERVOUS SYSTEM: Do you have any fainting, dizziness, convulsions/seizures or "fits"? difficulty with or change in speech? swallowing? hand or head shaking that isn't voluntary? localized weakness, pain, numbness or tingling? difficulty with balance? bladder or bowel control?

- a. Cranial nerve symptoms - Do you have any change in smell? vision (double vision, blurry vision?) speech, swallowing, chewing? Any drooping of the face or eyes? change in hearing? ringing or buzzing in your ears?
- b. Motor system - Any paralyzed part of the body? loss of muscle bulk? involuntary movements? difficulty with walking? coordination?
- c. Sensory system - Any pain, numbness, tingling, or increased sensitivity of a body part?
- d. Mentation - Any change in your thinking? sense of where you are? your memory? reading or writing ability?

PSYCHIATRIC: Any change in mood? new fears/phobias? Do you ever see or hear things that aren't there? Do you have any difficulty sleeping? coping with life stresses? feelings about ending your life? plans to end your life? Do you cry frequently and for no reason? Do you no longer get pleasure from things that used to give you pleasure?

GUIDELINES FOR ORAL PRESENTATIONS (for case-type presentation) for DCS 1

Chief Complaint/Opening Line/Orienting Statement . includes identifying information and the chief complaint

HPI-should reflect the chief complaint, its features (7 cardinal features)

You should at least detail:

1. The seven cardinal features of the presenting symptom.
2. PMH that could be related to diseases that present with the chief complaint
3. FH that could be related to the chief complaint
4. SH that could be related to the chief complaint
5. Summary statement
 - a. Must start with pt demographics (Gender, Age) and end summary sentence with as much of a “commitment” your proposed diagnosis as you are able to give at your level of training.

Chief Complaint/Opening Line/Orienting Statement . includes identifying information and the chief complaint (see opening line notes below, which chiefly pertain to DCS2)

Your opening line will vary depending on the audience, the situation, and the purpose of the presentation. It should orient the listener to key elements of the chief complaint and how it relates to the broader case. Consider the following situations.

1. In a new patient who presents with symptoms of cough, you should make sure that the chief complaint is in the first sentence of your presentation. “This is a 32 year old man who presents to the hospital with shortness of breath and cough.”
2. You do not need to present all the details of the Past Medical History in the first line of the presentation, but you should consider whether some aspects of the medical history would influence the listener’s thinking and is **so** important that you should include it in the first sentence. For example, one would think differently if the opening line of the presentation above were: “This is a 32 year old man with a 12 year history of HIV infection and progression to AIDS who now presents with shortness of breath and cough.”

HPI-should reflect the chief complaint, its features (7 cardinal features)

You should at least detail:

- The seven cardinal features of the presenting symptom.
- Pertinent Review of Systems (ROS questions from the system(s) in which chief complaint may fall)
- PMH that could be related to diseases that present with the chief complaint
- FH that could be related to the chief complaint
- SH that could be related to the chief complaint
- Condition specific data- detailed (disease based) information about specific conditions that don’t fit into above categories (nausea in patient with headache is something that you likely need to think of migraine or elevated intracranial pressure which then makes you ask and then report on nausea.)

NOTE: Risk factors for disorders that could present with the chief complaint is a broad term that includes items from many of the above categories (something from the PMH, FH, SH, or medications that makes a particular diagnosis more likely, i.e. heavy drinking from SH or aspirin from medications are risk factors for a bleeding ulcer. FH of MI or PMH of HTN are risk factors for MI).

NOTE: Collectively, the information beyond the 7 cardinal features represents **pertinent positives** (pertinent positive is a symptom, risk factor or risk behavior associated with pathological conditions

presenting with such a chief complaint that is present in the patient) and **pertinent negatives** (pertinent negative is a symptom, risk factor, or risk behavior associated with pathological conditions presenting with such a chief complaint that is absent in the patient). The pertinent positives and negatives depend on your knowledge of pathophysiology.

Medications*-list the medication and doses that the patient is taking.

Allergies*-list agent and type of reaction.

By the end of the HPI presentation, the listener should have some idea of the diagnostic possibilities that you are considering.

*Some advocate for presenting Meds/allergies in all patients to encourage you to think about whether meds or allergies could be related to HPI

Summary statement

- Must start with pt demographics (Gender, Age)
- Most pertinent PMH, FH, SH, i.e. if is is immediately related to the chief complaint
- End summary sentence with as much of a “commitment” to your proposed diagnosis as you are able to give at your level of training. For instance, in the case above, you may say “32 year old male with a 12 year history of AIDS who now presents with fever and cough (will add physical exam and labs as you perform more complete exams), suspicious for PCP pneumonia”. You may only be able to narrow down your most likely diagnosis after the history and physical (you will likely be doing more, i.e. labs, XRAYs, to further clarify). For instance, “18 month old full term male with 2 days of cough and wheeze, and now 1 day of increased work of breathing, consistent with either asthma or bronchiolitis”
- Do not have your summary statement be a rehashing of the HPI!

Adaptations for the Complete Presentation

If oral presentation is a complete presentation of a full History and Physical (like you will perform in DCS2 Hospital sessions and in the clinical years), you will present full details of PMH, Meds/All, FH, SH, ROS in more complete fashion, but with less detail than information from these categories that are related to the HPI

Review of systems-for the presentation; you should only give those positive symptoms that will need to be addressed during the admission or at the end of the outpatient visit.

Physical Examination-patient’s general appearance (uncomfortable appearing woman in respiratory distress), a complete set of vitals, all parts of the exam that could have abnormalities produced by diseases that are on your differential.

PROBLEM LIST, ASSESSMENT AND PLAN

After you have written up a complete history, ROS, physical exam, and labs, the problem list, assessment and plan is what comes next.

Below is a description and examples for each component.

Problem List

Those issues which the patient and/or you identify as concerns. These may be physical, psychological or social. There may be several at each visit.

Example:

1. Chest pain
2. Weight gain
3. Tobacco Abuse

Assessment

This is what you think is causing the problem (i.e. the diagnosis) or a list of multiple possible causes (i.e. the differential diagnosis).

Example:

1. Chest pain - atypical in nature, heartburn-like, occurring only supine easily relieved with antacids. Differential diagnosis includes: GI - probably GERD, most likely because of previous mentioned characteristics, musculoskeletal - still most likely GI but given chest wall tender to palpation on exam suggests component of costochondritis (inflammation of joint spaces between sternum and ribs) as well, cardiac - but less likely because no significant risk factors and atypical pain, pulmonary - very unlikely, no symptoms referable to this system.
2. Weight gain - patient does not watch diet or exercise regularly. (note - not a diagnosis but a description of the cause)
3. Tobacco abuse - long-time smoker, does not want to quit. (note - not a diagnosis but a description of the pattern)

Plan

This is what you are going to do about each problem. This includes diagnostic test, if indicated, and treatment.

Example:

1. Chest pain
 - start H2 blocker
 - call in 2 weeks to report progress
 - will hold NSAIDS for now for costochondritis till reflux improved
 - followup as indicated, may need UGI if no significant improvement with H2 blocker
2. Weight gain
 - patient interested in starting weight watchers, encouraged to do so
 - patient agrees to daily walking program of twenty minutes
 - return visit 3 months
3. Tobacco abuse
 - long discussion with patient regarding importance of quitting, patient unwilling to quit at this time,
 - will discuss at future appointments

Put it all together and it looks like this:

1. Chest pain - atypical in nature, heartburn-like, occurring only supine, easily relieved with antacids. Differential diagnosis includes: GI - probably GERD, most likely because of previous mentioned characteristics, musculoskeletal - still most likely GI but given chest wall tender to palpation on exam suggests component of costochondritis (inflammation of joint spaces between sternum and ribs) as well, cardiac - but less likely because no significant risk factors and atypical pain, pulmonary - very unlikely, no symptoms referable to this system
 - start H2 blocker
 - call in 2 weeks to report progress
 - will hold NSAIDS for now for costochondritis till reflux improved
 - followup as indicated, may need UGI if no significant improvement with H2 blocker
2. Weight gain - patient does not watch diet or exercise regularly
 - patient interested in started weight watchers, encouraged to do so
 - patient agrees to daily walking program of twenty minutes
 - return visit 3 months
3. Tobacco abuse - long-time smoker, does not want to quit
 - long discussion with patient regarding importance of quitting, patient unwilling to quit at this time, will discuss at future appointments

H2 Blockers – acid blocking medications such as ranitidine (Zantac)

GI - gastrointestinal

UGI – upper gastrointestinal series – x-ray study to rule out ulcers or gastritis

GERD – Gastroesophageal reflux disease

NSAIDs – non-steroidal antiinflammatory drugs – such as ibuprofen (Motrin, Advil).

SOAP NOTES

SOAP notes can be used for problem focused outpatient encounters and for daily progress notes on inpatients. These notes can vary dramatically, depending on the situation. They are the method used to communicate your thoughts on the progress of the patients medical condition to others.

S- Subjective, this is what the patient tells you, the history. When it is a symptom, this portion of the note is the HPI with all the categories of information you need to collect as taught to you in DCS (7 cardinal features, pertinent review of systems, PMH/PSH, FH, SH, and condition specific data). If you are discussing smoking cessation or any other behavior change, the framework you are using for the interview provides you with a structure for what information to collect and then record

O- Objective, this is the physical examination that you performed, lab data and other medical test data for instance chest x-ray results. In most outpatient encounters or in inpatient follow up visits, a complete physical is not performed. You usually perform and record a **Focused Physical Exam** that consists of

1. General Appearance and Vital Signs
2. Examine systems that could be involved in the disease processes you are considering as potential causes for your patient's symptoms (this is your differential diagnosis) or the systems involved by the problem if you have already established a diagnosis. This allows you to use your physical exam as a problem solving exercise, examining focused areas to allow you to distinguish amongst the possibilities (e.g. heart, lungs, abdomen, and muscles of the chest in a person with chest pain) as well as use the exam to determine if a patient is improving through performing serial exams, either on the same day or over consecutive days in the hospital setting.

Assessment and Plan

Begin with the first problem on your problem list and proceed sequentially. The **problem list** is a series of issues that you need to address over time during a hospital admission or during a continuous relationship with a patient. So for each problem listed, you will end up with an assessment and plan for that problem. Your assessment of the problem will differ slightly if the problem is a symptom or if your problem is a diagnosis.

If your problem is a symptom, your assessment should discuss what the possible diagnosis's are that could cause the symptom (referred to as a differential diagnosis). Then you discuss your most likely diagnosis, and the reason(s) why you think this is the most likely diagnosis. Reasons usually include supporting evidence from the history (the shortness of breath was accompanied by cough, fever, yellow sputum), the physical exam (the patient had rales present in the lower left lobe), x-rays and lab data. You should also briefly discuss the reasons that allowed you to conclude that the other diagnoses in the differential were less likely (i.e. "this patient had no paroxysmal nocturnal dyspnea-waking up in the middle of the night short of breath, leg edema, or orthopnea, making the diagnosis of Congestive Heart Failure unlikely). Finally, **your plan** discusses your decisions about testing and treatment that will allow you to distinguish the various diagnostic possibilities from each other.

If your problem is a diagnosis, your assessment should include how you arrived at the diagnosis and the reason(s) why you think this is the diagnosis. Reasons should be similar to the supporting evidence as above. You should also discuss the other diagnoses that you considered, and how you excluded them. **The plan** is then similar to the above

task, but you will concentrate on testing if needed to confirm the diagnosis and treatment of that condition if the diagnosis is certain.

NOTE FOR THE CLINICAL YEARS (and you may see this is LPP). There are other problems (behaviors like smoking or drinking; or FH of certain conditions, like colon cancer) that are neither symptoms nor diagnoses. These “problems” will require an assessment and plan that will be different than listing a differential diagnosis, but will consist of a behavioral assessment about readiness to change habits and subsequent plans or recommendations. Similarly, a FH of colon cancer might be listed as a “problem” whose subsequent plan might entail a screening colonoscopy. As students begin assessments and plans, we typically focus on doing an assessment and plan related to the chief complaint, which often is a symptom or a diagnosis

Here is an example:

S – This patient presents today with a complaint of mid sternal chest pain which started 2 weeks ago after eating pizza and has occurred almost daily since, lasts approx. 1-2 hrs., usually occurs after meals particularly caffeine or fatty foods, is burning in quality and relieved by TUMs. The patient denies radiation of pain, shortness of breath, association with exertion, palpitations, nausea, dizziness or sweating. There are no cardiac risk factors (family history, diabetes, hypertension, smoking or cholesterol or male sex). The patient has never had this before. He has noted occasional bright red blood per rectum, which he thought was hemorrhoids

O - T- 98 BP-110/72 HR- 64 RR- 16

General- Alert, no apparent distress

Cor- regular rate and rhythm, no murmur, rub or gallop

Chest- tender to palpation at costochondral junctions

Lungs- clear to auscultation

Abdomen- normoactive bowel sounds, soft, nontender, no hepatosplenomegaly, no masses

Rectal- nontender, no masses, brown stool, guaiac negative, external hemorrhoids

A - Chest pain - atypical in nature, heartburn-like, occurring only supine, easily relieved with antacids. Differential diagnosis includes: GI - probably GERD, most likely because of previous mentioned characteristics, musculoskeletal - less likely than GI but given chest wall tender to palpation on exam suggests component of costochondritis (inflammation of joint spaces between sternum and ribs) as well, cardiac - but less likely because no significant risk factors and atypical pain, pulmonary - very unlikely, no symptoms referable to this system. One final element to discuss in the GI bleeding, not likely related as he has hemorrhoids, and it is bright red blood, and if significant bleeding associated with GERD/chest pain, would either be occult blood or melena if bleeding significant

P -start H2 blocker

-call in 2 weeks to report progress

-will hold NSAIDS for now for costochondritis until reflux improved

-follow-up as indicated, may need UGI if no significant improvement with H2 blocker

Overview of Clinical Problem Analysis* FOM 1 & FOM2

1. Initial Data Gathering using "scanning history"

Chief Complaint

Seven cardinal features of the chief complaint

2. Identify the key problem/s

3. Generate conditional hypotheses

Strategies to help generate hypotheses:

A. Systems Approach

B. Anatomic Approach

C. Pathophysiologic Approach

D. General Classes of Disease (VINDICATE=Vascular, Infectious, Neoplastic, Drug, Inflammatory, Collagen-vascular, Allergic, Toxic, Environmental)

4. Gather further data to test hypotheses

A. Pertinent Review of Systems (ROS questions from the system(s) in which chief complaint may fall)

B. PMH that could be related to diseases that present with the chief complaint

C. FH that could be related to the chief complaint

D. SH that could be related to the chief complaint

E. Gather condition specific data Ask detailed (disease based) questions about specific conditions to refine knowledge. These are questions that don't fit into above categories (nausea in patient with headache is something that you likely need to think of migraine or elevated intracranial pressure which then makes you ask about nausea.)

F. Physical exam findings

5. Formulate a solution

Synthesize findings and differentiate problems:

A. List Findings (all pertinent data)

→ B. Group Findings into clusters

→ C. Generate Problem List

↓
D. Generate Differential Diagnoses (for each problem)

E. Order Diagnoses in your Differential from most likely to least likely and defend your differential (using probability, epidemiologic clues, pattern recognition, pertinent positives and negatives)

F. Develop Action Plans

F1. Diagnostic plan (when diagnosis isn't certain)

F2. Treatment plan

F3. Monitor patient for

Complications of disease
Complications of treatment and improvement

*Adapted from Custers: Academic Medicine 75(3):291 3/2000 "Clinical Problem Analysis: A Systematic Approach to Teaching Complex Medical Problem Solving."

NOTE –Underlined categories will be a focus in DCS 2, while **bolded** categories will be a focus of DCS1

- The first four steps will allow you to gather **an integrated History of Present Illness**, gathering the seven cardinal features, form hypotheses as to what could be causing the problem and then test the hypotheses by gathering additional focused information to help you determine which diagnosis is more likely than the others
- Those questions that you ask to test the hypotheses make up what we consider pertinent positives (e.g. a symptom, risk factor, risk behavior, PMH, FH, SH associated with disease processes that present with such a chief complaint which is present in the patient—thus making the disease more likely) and pertinent negatives (e.g. a symptom, risk factor, risk behavior, PMH, FH, SH associated with likely disease processes that could present with such a chief complaint which is absent in the patient—thus making the disease less likely)
- As you **Formulate the Solution**, you will make a list of all pertinent data from the history, the physical exam, and any tests that have been completed. You will then sort these into groups or clusters of findings that fit together. Next you will generate a problem list that encompasses each of your clusters. For each problem, you will then generate and defend a differential diagnosis, order the differential by probability and develop an action plan.

Outline of Comprehensive Adult Health Risk Behavior History

Tobacco Use

- ☐ Current use
- ☐ Past Use

Current Smokers:

- ☐ ADVISE TO QUIT
- ☐ Quit history
- ☐ Use of NRT/Meds for Quitting
- ☐ **Readiness to Quit**
- ☐ Counsel as indicated

Alcohol Use

- ☐ Current Use
- ☐ Past Use

Possible Problem Drinkers:

- ☐ CAGE if indicated
- ☐ Readiness to cut down or quit
- ☐ Counsel as indicated

Drug Use

- ☐ Current Use
- ☐ Past Use

Current Users

- ☐ Readiness to quit
- ☐ Advise to cut down or quit
- ☐ Counsel as indicated

Diet

- ☐ 24 hour dietary recall
- ☐ Frequency of high fat foods
- ☐ **Frequency of fruits/vegetables**
- ☐ Frequency of high calcium foods

High fat or low fruit/vegetable eaters:

- ☐ Readiness to change diet
- ☐ Advise to change
- ☐ Counsel as indicated

Exercise

- ☐ Leisure time physical activity
- ☐ Work/housework activity

Sedentary patients:

- ☐ Readiness to exercise
- ☐ Advise to exercise
- ☐ Counsel as indicated

Sun Exposure

- ☐ History of unprotected sun exposure

Sun exposed patients:

- ☐ Advise sunblock
- ☐ Counsel as indicated

Injury Prevention

- ☐ Seatbelt Use
- ☐ Motorcycles/bicycle helmets
- ☐ Smoke detectors
- ☐ Safe storage of firearms
- ☐ Fall prevention (elderly)

Sexual Behavior

- ☐ Current sex partners
- ☐ Current sex practices
- ☐ Current use of contraception
- ☐ Past high risk exposures/practices

Having High Risk Sex:

- ☐ Advise safe sex
- ☐ Advise contraception
- ☐ Counsel as indicated

Guidelines for the Health Risk Behavior

The questions below about common health risk behaviors are designed to help you identify behaviors which should be targeted for more detailed questioning and behavior change counseling.

Risk Factor	Possible Disease
Tobacco Use	Cancer: lung, larynx, oral cavity, esophagus, possibly cervical, and some others including bladder, kidney, pancreas. CHD, COPD
<p>Do you smoke cigarettes, chew tobacco, or smoke a pipe or cigar? Yes → GO TO SMOKERS SECTION NO → GO TO NONSMOKERS SECTION</p> <p>SMOKERS</p> <ol style="list-style-type: none"> How many cigarettes do you smoke each day? (Substitute pipe tobacco, cigars, or amount of chewing tobacco as appropriate. In the questions that follow substitute “use/using chewing tobacco” for “smoking” as appropriate.) How old were you when you first started smoking? Have you ever tried to quit smoking, even for a day? YES → GO TO 4 NO → GO TO 8 About how many times have you tried to quit smoking? Tell me about each of the times you tried to quit: (For each quit attempt, or if many quit attempts for the most recent three attempts) <ol style="list-style-type: none"> How did you go about trying to quit? How long did you quit for? Why did you start smoking again? Have you ever used the nicotine patch, gum, or spray to help you quit? YES → GO TO 7 NO → GO TO 8 Tell me about your experiences with nicotine replacement or medication to help you quit smoking. Are you living with anyone who smokes cigarettes? Are you thinking about trying to quit smoking in the near future? How confident are you that you could quit smoking in the near future? <p>NONSMOKERS</p> <ol style="list-style-type: none"> Have you ever smoked cigarettes, a pipe, or cigars or used chewing tobacco? YES → GO TO 2 NO → FINISHED How old were you when you first started smoking (using chewing tobacco)? How old were you when you quit most recently? 	

Risk Factor	Possible Disease
<p style="text-align: center;">Alcohol</p> <p>High Risk or Hazardous Drinker: Male: >2 drinks/day on average or >4 drinks on any one occasion (binge drinking) Female: >1 drink/day on average or <3 drinks on any one occasion (binge drinking)</p>	<p>Esophageal, oral, pharynx, larynx, liver cancer Cirrhosis Injury</p>
<p>About how many days each week or each month do you usually drink alcoholic beverages like beer, wine or liquor?</p> <p>DRINK SOME → (Record frequency) GO TO DRINKER SECTION DON'T DRINK AT ALL → GO TO NONDRINKER SECTION</p> <p>DRINKER</p> <p>1. About how much do you usually drink each time you drink? What is the largest number of drinks you have had in one day during the last few months?</p> <p>IF MEETS ANY CRITERION FOR HIGH RISK DRINKING OR BINGEING OR IF OTHERWISE CONCERNED ABOUT POSSIBLE ALCOHOL ABUSE → GO TO 2 (CAGE)</p> <p>IF DOES NOT MEET CRITERIA FOR HIGH RISK DRINKING → GO TO 3</p> <p>2. CAGE Screen (One or more “yes” responses is a positive test for alcohol abuse or dependence: Sensitivity is 84%, false negative rate is 16%, specificity is 95%, and false positive rate is 5%)</p> <ul style="list-style-type: none"> a. Have you ever felt you ought to cut down on drinking? b. Have people ever annoyed you by criticizing your drinking? c. Have you felt bad or guilty about how you’re drinking? d. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? <p>3. Are you thinking about cutting down your drinking in the near future?</p> <p>4. Has drinking ever been a problem for you in the past? (For example, did you need to seek help to control drinking or did drinking interfere with your life in any way?) (Seek elaboration as indicated.)</p> <p>NONDRINKER</p> <p>Has drinking ever been a problem for you in the past? (For example did you need to seek help to control drinking or did drinking interfere with your life in any way?) (Seek elaboration as indicated.)</p>	

Risk Factor	Possible Disease
High Fat Diet: (>30% of calories as fat or >10% of calories as saturated fat) Low Calcium Diet: <1000 mg./day (<1500 mg./day for the elderly) Diet Low in Fruits/Vegetables: (<5 servings of either per day on average)	Colon, breast cancers CHD Obesity
1. Tell me what you had to eat yesterday, starting with breakfast and including any snacks. 2. About how many Fast Food meals or snacks do you eat each week? 3. How many times a week do you usually eat any of the following: hot dogs, lunch meats such as ham or other cold cuts, bacon or sausage? 4. How many times a week do you usually eat red meat? 5. How many times a week do you eat cheeses like cheddar, Swiss, American or cream? 6. How many servings of fruit juices do you usually have each day? 7. How many servings of vegetables do you have each day? 8. How many glasses of milk or servings of yogurt do you have each day?	

Risk Factor	Possible Disease
Drug Abuse	Overdose, Hepatitis B and C HIV, Endocarditis, Addiction
1. Have you ever used any street drugs like heroin, cocaine, marijuana, or any others? YES → GO TO 2 NO → END 2. Which drugs have you used? 3. Have you used this/these drugs in the past six months? YES → GO TO ACTIVE USER NO → GO TO PAST USER ACTIVE USER 1. How much do you use (on average or recently)? How frequently do you use the drug/s? 2. Are you thinking about cutting down or quitting use of this/these drug/s? PAST USER (Also ask of active users) 1. How much did you use in the past (for each drug)? How frequently? 2. Have you ever injected (shot up) any drug? (If yes: Did you ever share needles?) 3. Have you ever received any treatment for drug use? What kind? When?	

Risk Factor	Possible Disease/Risk
Unprotected/Unsafe Sex	Sexually Transmitted Infections: Gonorrhea, Chlamydia, HIV, others Unintended Pregnancy
<p>1. I would like to ask you some questions about your sex life that are related to some important health issues I think we should discuss. Is that okay with you?</p> <p>YES → GO TO 3 NO → GO TO 2</p> <p>2. Can you tell me why it might be hard for you to discuss these issues? Is there anything I can do to make it easier for us to talk about this?</p> <p>3. Have you had any kind of sexual relations in the last year?</p> <p>YES → GO TO 4 NO → GO TO 8</p> <p>4. How many sex partners have you had in the past year?</p> <p>5. Are/is this/these partner/s male or female or both?</p> <p>6. When you have sex, do you or your partner use any kind of protection against pregnancy (for male/female relationships) or sexually transmitted infections, like practicing safer sex or using condoms? What kind of protection do you use? How often do you use this? Under what circumstances? How do you practice safe sex?</p> <p>7. Was there ever a time when you did not use protection or practice safe sex the way you do now? IF patient does not use barrier protection when appropriate and/or practice safe sex, advise regular use of appropriate protection, safer sex, and consider further counseling.</p> <p>IF patient does not use appropriate contraception in male/female relationships when pregnancy is not desired, advise to use appropriate contraception and consider further counseling. I would now like to ask you a few questions that will tell me about your risk for HIV infection.</p> <p>8. Have you ever had sex with anyone you thought might have HIV or might use injection drugs like heroin?</p> <p>9. Have you ever had sex with a homosexual or a bisexual man or a man you thought might be gay or bisexual?</p> <p>YES to 8 or 9 → GO TO 10 NO to 8 and 9 → GO TO 11</p> <p>10. (Referring to the sexual experiences in 7 and 8) How often did you practice safer sex or use some kind of protection against sexually transmitted infections? Can you tell me how you practiced safer sex and the kind of protection you used?</p> <p>11. Have you ever had a sexually transmitted infection like gonorrhea (GC), syphilis, pelvic inflammatory Disease (PID), chlamydia or any other?</p> <p>12. Have you ever been tested for HIV? IF yes, what made you decide to get tested?</p>	

Risk Factor	Possible Disease
Sedentary Lifestyle Minimum exercise goals: Light (walking) to moderate physical activity ≥ 30 min./day	CHD, Obesity, Diabetes Colorectal cancer, possibly breast cancer
<ol style="list-style-type: none"> Do you ever participate in any physical activity or exercise outside of work such as walking for exercise, jogging, bicycling, swimming, gardening or yard work, or playing any kind of sport? YES → GO TO 2 NO → GO TO 4 About how many times each week and for how long do you usually participate in the activity/ies you mentioned? Does your participation vary with the season? How? Which of these activities do you plan to continue on a regular basis in the months to come or in the appropriate season? (IF EMPLOYED): What kind of exercise do you get at work? (Record type and duration of common activities) Do you do any heavy housework such as vacuuming, washing floors or washing windows? About how many flights of stairs do you climb on an average day? Are you thinking about getting more exercise in the future? 	