Societies Program: Doctor and Patient Course

Writing a History and Physical

Introduction
The written History and Physical is the cornerstone of medical documentation. An H&P is usually done to document an initial encounter with a patient in a hospital or clinic and is more comprehensive than subsequent notes. There is a large degree of variability in how physicians document their clinical encounters. The H&P format given below is comprehensive. Various elements of the H&P are given more or less emphasis in a variety of settings to better meet the needs of different types of clinical encounters. Whatever the setting or format, the goal of an H&P or clinical note is to communicate key clinical information clearly, concisely, and accurately. Since the advent of the electronic health record (EHR), physician documentation has changed significantly. Templates and scribes are being increasingly used. Nonetheless, it is important for you to be able to construct an H&P yourself before these tools are utilized.

Patient Identification
During the pre-clerkship phase of medical school you will not be using the hospital electronic health record to document your history and physical exams, and will instead type your H&P as a Word document. Given that these H&Ps are being written for educational purposes alone, will not be a part of the medical record, and ArizonaMed is not HIPAA compliant, an abbreviation of the patient’s name must be used (e.g., John G.). Please do not use the patient’s full name.

Source of Information
It is important to note how the information for the medical history was obtained: patient, patient’s family, family or friend interpreter, hospital interpreter, interpreter phone, etc. You may also include whether the patient’s chart/electronic medical record was reviewed to obtain information.

If the quality of the information gathered for the medical history is poor (for example, if the patient has altered mental status or no interpreter is available), this should be noted.

Chief Complaint (CC)
This is an area of substantial variation between physicians. The CC should succinctly convey to the reader the main reason the patient came in for evaluation. This can be either your interpretation of why the patient is seeking medical care (see CC #1) or the patient’s own words in quotes (CC #2).

CC #1: Shortness of breath
CC #2: “I can’t breathe.”
The History of the Present Illness (HPI)
The first sentence is one which “frames” the patient -- that is, gives the pertinent Past Medical History (PMHx) in relation to the chief complaint. This provides a cognitive framework for the information to follow and allows the listener to start thinking about the differential diagnosis in a logical fashion. Not all the PMHx should be mentioned in the first sentence, only those items that are pertinent to the patient’s presenting complaint or are major diagnoses that may affect their overall level of health (e.g., diabetes mellitus, cirrhosis, HIV, etc.). The framing sentence is written after you have collected the H&P information and thought about it, and thus should give some evidence of your thinking about the case.

Consider the different clinical information provided by these opening/framing sentences:

Ms. X is a 60 year-old female who presents with chest pain.
Or
Ms. X is a 60 year-old female with a PMHx significant for Type 2 Diabetes Mellitus, Hypertension, tobacco use and dyslipidemia who presents with chest pain.

In this example, if using the first framing statement, the reader will not learn about the patient’s significant risk factors for coronary heart disease (CHD) until the PMHx is read. Thus, the reader will have to go back to the HPI and re-interpret the information in light of a significantly increased risk of CHD. If the second framing sentence is used, the reader will be able to correctly interpret the information in the HPI as it is read the first time.

Mr. X is a 40-year-old male who presents with a 2-week history of diarrhea.
Or
Mr. X is a 40-year-old male with a PMHx significant for AIDS (last CD4 count was 50) and Cytomegalovirus retinitis who presents with a 2-week history of diarrhea.

Likewise, if using the first framing sentence above, the reader will not learn about this patient’s HIV and immunodeficiency until the PMHx is read. Again, the reader will need to re-interpret the HPI in the context of this new information. The second framing sentence above will allow the reader to correctly interpret the information in the HPI as it is read the first time.

The HPI is much more than just what the patient tells you. If you only document what the patient says, you are writing a passive HPI. A good HPI is an active process. After listening to the patient (the patient-centered part of the medical interview) you will ask the patient specific questions about the nature of their illness (the doctor-centered part of the medical interview). This may include some or all of the following (using the OPQRST-ADA mnemonic):

- O = Onset; chronology of illness, relative to time of presentation
- P = Position or pattern

Kevin F. Moynahan, MD
University of Arizona College of Medicine
Societies Program
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• Q = Quality of symptom
• R = Radiation
• S = Severity
• T = Timing; intermittent or constant
• A = Aggravating or alleviating factors
• D = Duration
• A = Associated symptoms
• Pertinent positives and negatives, including epidemiologic risk factors and exposures
• Previous evaluation/treatment for the presenting problem
• What the patient thinks is the problem based on his or her previous experience with similar symptoms

Pertinent positives and negatives refer to items that have relevance in the differential diagnoses being considered; those that are present are “positive” and those that are absent are “negative.”

*Example*: A patient presents with shortness of breath and a cough. You are considering pneumonia, so you ask if she has been having subjective or measured (objective) fevers. If her answer is yes, this is a pertinent positive; if her answer is no, this is a pertinent negative.

In the beginning, you will have a limited ability to generate pertinent positives and negatives. Learning the pertinent positives and negatives for a specific problem is a matter of practice and learning which differential diagnoses are associated with different syndromes.

Continuing with another example, if the chief complaint is shortness of breath, your differential diagnosis before asking any questions or examining the patient may include pneumonia, pulmonary embolism, heart failure, chronic obstructive lung disease or asthma, myocardial ischemia, and pneumothorax. Thus, you would ask and document whether the patient has the following pertinent positives or negatives: fevers/chills, a productive cough, chest pain, hemoptysis (coughing up blood) or risk factors for venous thromboembolism, paroxysmal nocturnal dyspnea (waking up at night short of breath), edema, whether the symptoms came on gradually or abruptly, etc. With this approach, the reader of your HPI will be able to start narrowing his/her differential diagnosis based on this pertinent review of systems (ROS). A good HPI will have helped the reader to construct a more defined differential diagnosis before reading the physical examination and noting the laboratory data and the results of other objective tests.

*Note*: You will be performing histories and physicals on patients who have been in the hospital for varying amounts of time. For the purposes of your write-ups (and presentations), take the history from the *time of admission, when they presented for care*. The chronology of the
history is then organized in relation to time *prior to admission*. If the patient has been in the hospital for a significant amount of time, you can add a separate paragraph at the end of your HPI briefly summarizing how the patient has been doing since admission, particularly in relation to his or her presenting symptoms.

**Allergies and Adverse Drug Reactions**

Make sure you note the reasons for the allergy or the adverse drug reaction. Anaphylaxis is much different than stomach upset (which is an adverse drug reaction rather than true allergy). For example, if penicillin is the best treatment for a certain infection, knowing if the patient’s previous symptom was minor or life-threatening can help guide the choice of whether to use a second-line antibiotic or not.

**Past Medical (PMHx) and Past Surgical History (PSHx)**

Be as detailed as possible. Consider the information provided by the following examples:

1. Coronary heart disease

   *Or*

   1. Coronary heart disease; diagnosed in 2009 after an anterior wall MI.

      - Cardiac catheterization at that time showed a 90% mid LAD lesion and a 40% proximal RCA lesion; left ventricular ejection fraction was normal at 65%. A drug-eluting stent (DES) was successfully placed in the LAD lesion.

      - An exercise treadmill test in May 2013 showed no evidence of active ischemia.

There are differing personal styles regarding the separation of the medical and surgical history. A medical condition is at times linked to a surgical repair; the separation of them seems unnatural to many physicians. If a patient has coronary heart disease (CHD) and subsequently undergoes a three vessel coronary artery bypass graft surgery (CABG), one can link them together as in this example:

1. CHD, status-post (s/p) three vessel CABG 3/2005

   This is a matter of personal style; there is no correct way. We suggest that you link all surgeries to the medical conditions for which they were performed when you are able, and list other surgeries together at the end of the PMHx/PSHx section. Another approach is to document the PMHx and PSHx in two separate sections.

**Medications**

Use the generic names of the patient’s medications and document the dose when possible. Include over-the-counter medicines, and specifically ask about herbal or other supplements. If you come across a medicine that is not linked to a medical problem already known to you, inquire about why the medicine is taken. If you uncover more PMHx in this fashion, add it to
the PMHx section. For example, if the patient does not give a history of dyslipidemia but is taking atorvastatin (a lipid-lowering drug), you should inquire about this disorder and add it to the PMHx section if applicable. At first, you will be unfamiliar with most of the drugs your patients are taking. We suggest you look them up (using Up To Date or other source) and start familiarizing yourself with major classes of medications, including indications, major adverse reactions, and mechanism of action.

**Social History**
This section will vary depending on the context of the H&P. A full data base will include marital status (past and present) or current relationship, information on children, how long the patient has lived in the current area and where they moved from, occupation and occupational exposures, highest level of education, financial status/ability to afford health care, violence, as well as other information (refer to the document “Approach to the Medical Interview”). A more focused H&P may include only some of this information.

**Lifestyle Behaviors**
This section will include information on tobacco and alcohol use, diet and exercise, the use of recreational drugs, risk of violence, and screening for high-risk sexual behaviors. Please refer to the document “Approach to the Medical Interview.” At a minimum, this section should include information about tobacco use (all forms, past and present use), alcohol use, and recreational drug use.

**Family History**
Family history varies based on whether the H&P is a focused document for a specific problem (e.g., a hospital admission for pneumonia) or a full data base (e.g., a clinic H&P for a new patient). When focused, it is appropriate to include only pertinent family history (e.g., a history of premature coronary heart disease [CHD] in a first degree relative for a patient presenting with chest pain). For a full family history, it is useful to document information about all of the patient’s first-degree relatives (current age or age of death, chronic diseases and at what age diagnosed, cause of death, etc.). After this, you can ask specifically about other diseases that may be hereditary, and document any positive responses (e.g. coronary heart disease, diabetes mellitus, colon cancer, breast cancer, etc.)

**Review of Systems (ROS)**
This is another area where there is much variation between physicians. ROS pertinent to the chief complaint should be in the HPI and not buried in the ROS section, as described above; you can then write “as per HPI” as needed. ROS that seem important need to be clarified as a chronic or benign problem or upgraded to the HPI as another complaint. For example, if you put shortness of breath in the ROS, the reader has no way of knowing how important this is: is it chronic, perhaps from underlying chronic obstructive pulmonary disease, or acute? How
severe is it? Make it clear that this problem does not need to be addressed now or address it. PMHx should not be repeated in the ROS. If you uncover additional PMHx or PSHx while performing a review of systems, put them in the PMHx/PSHx section. For example, “asthma” is PMHx and should be put in that section; current symptoms of asthma, such as wheezing or shortness of breath, are part of the ROS. Remember as well that ROS is subjective (what the patient is telling you) not objective (what you see and hear – that is part of the physical exam).

About using the term “denies”, as in “The patient denies shortness of breath”: Some (but not all) physicians find the use of “denies” objectionable. This is because excessive use of “denies” can make the H&P seem more like an interrogation session rather than a patient-centered experience. We suggest that you limit the use of this modifier and instead write “The patient has not experienced shortness of breath”, or something similar.

Physical Exam
The physical exam should be documented in an orderly fashion, starting with vital signs, general appearance, and then in a generally head-to-toe sequence. Pay particular attention to the portions of PE that pertain to the chief complaint. As with the HPI, pertinent negative findings can be as important as pertinent positive findings, and should be documented as well. For example, the lack of lower extremity edema and the lack of an elevated jugular venous pressure (both features of heart failure) are important to document in a patient with dyspnea. The reader should be able to narrow the differential diagnosis further after reviewing the physical exam. As with the history, knowledge of pertinent positive and negative physical exam findings will come with experience.

Objective Data
In this section you will list the result of pertinent objective information: laboratory results, medical imaging studies, electrocardiograms, etc.

Summary
Prior to writing the assessment and plan, it is useful to briefly summarize the highlights of preceding information, as in the following example:

In summary, this is a 55 year old African American female with known cholelithiasis who presents with a one-day history of right upper quadrant pain, fevers, and a positive Murphy’s Sign*. Additionally she has a marked leukocytosis and abnormal liver enzymes.

A summary statement includes only the most pertinent parts of the history, physical exam and objective information and should in general be only two to three sentences. The purpose of the summary statement is to re-focus your reader on the most important aspects of the patient’s presentation in anticipation of the assessment and plan that immediately follows. Additionally, creating a summary statement allows you to assess your knowledge of the case; if
you cannot construct an appropriate summary statement, you probably do not have an adequate understanding of the case.

(*Note: Murphy’s Sign is increased pain and/or inspiratory arrest during inspiration when the right upper quadrant is palpated, and is often present in acute cholecystitis.)

**Assessment and Plan (A/P)**

This is yet another area of variability among physicians. One approach is to write a complete assessment and plan for each problem, rather than listing all the assessments first and then all the plans. With this approach, one always knows which assessment each plan is linked to.

**There are three distinct parts to an assessment and plan:**

1. **Assessment**
   Be as specific as possible, based on the information you have gathered. For example, your assessment might be “abdominal pain” if you are unsure what the specific etiology of the pain is and you are considering a large differential diagnosis. If, after reviewing labs and imaging studies, you are fairly certain the diagnosis is cholecystitis, then your assessment would be “Cholecystitis”, not abdominal pain.

2. **Discussion**
   This is where you defend your assessment and explain your reasoning. A discussion of the differential diagnosis or the actual diagnosis (if known) is included here. You should explain why you think one or two possible diagnoses are more likely than others, and make note of why you think certain diagnoses can be excluded from consideration. The exact structure of the discussion will vary depending on the assessment and the complexity of the problem. If your assessment is as general as “Abdominal pain” the discussion will center on the differential diagnosis and which possibilities you feel are most likely. If your assessment is “Cholecystitis,” (because, as the above, this diagnosis has already been established by the physical exam and objective tests) the discussion will center on how you made this diagnosis and why you feel comfortable excluding other possibilities.

3. **Plan**
   This is action – what you are going to DO to treat the illness or to further diagnose the disorder. Your plan should be defensible from the preceding discussion, and it should be clear why each element of the plan is being carried out. If you find yourself defending your plan while writing it, you have not written an adequate discussion. You may wish to use a bullet-type format in this section for clarity.

One useful strategy is to divide the Plan into three separate categories:

- Dx: diagnostic studies (laboratory tests, diagnostic imaging or procedures, etc.)
• Tx: therapeutic interventions (medications, therapeutic procedures, etc.)
• Pt. Ed: patient education (including follow-up plans, etc.)

Not all plans will have each of the above elements; it depends in part on whether the assessment is undifferentiated. For example if your assessment is undifferentiated (e.g., abdominal pain) you will have more under diagnostic studies (Dx) than under therapeutic interventions (Tx) or Pt. Ed because you have not established a diagnosis. If you assessment is differentiated (e.g., cholecystitis) you will have more under Tx and Pt. Ed because the diagnosis has already been established and no further diagnostic tests are needed.

Each section of an A/P (Assessment, Discussion, and Plan) is distinct from each other and there should be no confusion as to where one section starts or ends. Avoid a block paragraph style in which it is unclear when the discussion ends and where the plan begins.

Conclusions
A good H&P reflects your thought process and lends credibility to your conclusions. We recommend that you read your finished H&P from the imaginary perspective of someone who is not familiar with the case. Will your H&P allow the reader to quickly ascertain an accurate picture of the clinical situation? Is it clear how and why you came to the conclusions in your Assessment and Plan? The answers to these questions may aid in identifying needed revisions of your H&P.

It will take much practice and experience before you feel comfortable writing H&Ps and it will be longer still until you develop your own personal style. Your Society Mentor and eventually your attending physicians during clinical rotations will be instrumental in advancing your development. Be sure to obtain feedback, ask questions, and have fun!