USMLE® Step 2 CS Core Cases

Third Edition

Practical Tools to Help You Score Higher

- Reflects the latest Step 2 CS exam changes
- NEW section outlining differential diagnosis and diagnostic reasoning
- 43 frequently tested and challenging cases

Phillip Brottman, MD, MS

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DEDICATION

To PRB, who makes everything worthwhile.
The material in this book is up to date at the time of publication. However, the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME) may have instituted changes in the test after this book was published. Be sure to carefully read the materials you receive when you register for the test. If there are any important late-breaking developments—or any changes or corrections to the Kaplan test preparation materials in this book—we will post that information online at kaptest.com/publishing.
ABOUT THE AUTHOR

AUTHOR'S NOTE

SECTION 1: The Basics

The Purpose of the Exam
Where to Find Information about the Exam
How the Exam Is Scored
The Day of the Exam
Spoken English Proficiency (SEP)
Communication and Interpersonal Skills (CIS)
History Taking
Pediatric and Adolescent Histories
Physical Exam
Complete Physical Exam by Organ System
Guide to a Brief Examination
Patient Note Writing

SECTION 2: 43 Core Cases

Case 1: Ankle Pain
Case 2: Back Pain
Case 3: Sore Throat
Case 4: Car Accident
Case 5: Left-Arm Weakness
Case 6: Positive Pregnancy Test
Case 7: Pre-Employment Physical
Case 8: Nosebleed
Case 9: Sudden Abdominal Pain and Syncope
Case 10: Vaginal Bleeding in a 40-Year-Old
Case 11: Vaginal Bleeding in a 60-Year-Old
Case 12: Personal Problem
Case 13: Elevated Blood Pressure
Case 14: Medication Refill
Case 15: Menopause Drug Refill

Contents
Phillip Brottman, MD, MS, has seen approximately 40,000 patients over his lifetime as a practicing emergency physician, using the same skills that are tested on the USMLE Step 2 CS exam. Having seen so many patients, many of them in about 15 minutes, he has firsthand experience of how to communicate compassionately, effectively, and efficiently with American patients while gaining their trust. Upon leaving the patient's room, he routinely developed a differential diagnosis based on clinical reasoning and ordered an appropriate diagnostic workup.

Dr. Brottman joined the faculty of Kaplan Medical in 2004, molding the Step 2 CS curriculum and lecturing in the Step 2 CS live classes in Chicago, where he is known as "Dr. Phil." He also lectured around the country for Kaplan Medical's USMLE Step 2 CK and Step 3 classes and most recently is a lecturer for the Step 2 CS Live Online class.

Dr. Brottman received his medical degree at the University of Illinois. He has fulfilled many roles, including medical director of an emergency department and member of the teaching faculty of a large community hospital with ties to a major university and a full complement of residency programs.
Author’s Note

The purpose of this book is to help you pass the exam. In order to give you the guidance and techniques you need, I have built on the stated goals and tasks of the USMLE by drawing on my years of seeing patients and teaching medical students and residents. This work is also an outgrowth of my experience teaching Kaplan’s live Step 2 CS class in Chicago, where I refined my teaching to meet the needs of an international community of physicians. As a result, the text emphasizes those parts of the patient encounter that seem most daunting for the international medical graduate.

Now renamed USMLE Step 2 CS: Core Cases (formerly USMLE Step 2 CS: Complex Cases), this edition is thoroughly updated to address the changes to the Step 2 CS exam as of June 17, 2012. Every effort has been made to align this new study guide with the information freely available at www.usmle.org. If there are any discrepancies, follow what is on the USMLE site.

Updates to this edition include:

- Explanation of the new scoring method is given in the Basics section.
- Explanation of the new Diagnostic Reasoning documentation, now required to support your diagnosis in the Patient Note, is given in both the Basics section and new Appendix C.
- Explanation of other changes in the Patient Note is given in the Basics section and in the cases.
- All 35 existing cases have been modified to fit the new 3-diagnosis maximum and to highlight the interpersonal skills needed to collect the information.
- Eight new common cases have been added to expose you to more scenarios that may be similar to what you will encounter.
- Lastly, new material has been added on the Differential Diagnosis, both in the Basics section and throughout the cases.

While revising this book, I was struck how much better the new version of the exam is. It is less artificial, and you can more easily “just pretend” you are seeing patients at your own practice site.

Certainly there is more than one correct way to take a history. The memory devices and phrasing of questions that I present are just one way to successfully perform a patient encounter. The key is having a consistent, organized way to rapidly collect the history and physical exam you need while having an excellent bedside manner and supporting the patient’s needs.

With the aging of America and the predicted doctor shortage, you are needed here. If you internalize the communication and interpersonal skills and adopt a methodical way of collecting and organizing the information into a written plan, you will have a long and successful career and provide comfort and care to thousands.

I’m glad I could play a small part.

Phil Brottman
Section One

The Basics
THE PURPOSE OF THE EXAM

The USMLE states: "Step 2 of the USMLE assesses the ability of examinees to apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision, and includes emphasis on health promotion and disease prevention. Step 2 ensures that due attention is devoted to the principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and effective practice of medicine." (usmle.org)

To accomplish this, the two USMLE Step 2 exams make sure that you have the basic skills needed to function as a first-year resident. Step 2 Clinical Knowledge (CK) exam is a computer-based theoretical exam that measures your medical knowledge base. Step 2 Clinical Skills (CS) is a clinically based exam with standardized patients to test your ability to perform as a first-year resident.

- You need to look professional, act and speak like a doctor, and have a professional bedside manner.
- You must able to collect the pertinent history and perform a focused physical exam while supporting the patient's emotional and physical needs.
- You must be able to convey in writing your history and physical findings, as well as the diagnoses, diagnostic reasoning, and diagnostic tests required, to the grading physician.

WHERE TO FIND INFORMATION ABOUT THE EXAM

There is only one place to obtain acute, definitive, and up-to-date information about all aspects of the Step 2 CS exam, and that is from the USMLE itself. While you are studying for this exam, make a habit of regularly going to www.usmle.org. Do not rely on social networking sites to get your information. It is important to get the “rules of the game” directly from those responsible for developing and grading the exam.

HOW THE EXAM IS SCORED

Step 2 CS is a pass/fail exam made up of three separate subcomponents, each of which is also pass/fail. If you fail one subcomponent, you fail the entire exam and you will then need to retake the entire exam another day. All three subcomponents must be passed on the same day. The three subcomponents are:

1. Spoken English Proficiency (SEP)
2. Communications and Interpersonal Skills (CIS)
3. Integrated Clinical Encounter (ICE)

You are not graded on the basis of your passing or failing on each patient; instead, your pass/fail determination is based on your overall performance in the ICE, CIS, and SEP across all 12 cases. What this means in terms of test-taking strategy is: Never Give Up!
Even if you get off to a bad start on a case, do your best and get as many points for each of the three subcomponents as possible! It is possible that one of your cases will be an unscored pilot test case.

Spoken English Proficiency (SEP)

This section is graded by the Standardized Patient (SP) on a rating scale that is most likely the same for all 12 cases. This score is graded while you are writing your Patient Note. The big question is: Can you understand the SP, and can the SP understand you? Clarity of verbal English communication is the key. Word pronunciation, word choice, and minimizing the need to repeat questions are important. However, no human communication is perfect, and USMLE* does not expect you to be perfect either. You will not be graded down just because of your regional accent.

Communications and Interpersonal Skills (CIS)

This section is also graded by the SP. Again, the checklist has been developed based on national consensus documents as to essential communication skills. It tests your bedside manner and skill in questioning the patient. Specifically, the SP is looking at your questioning skills and information-sharing skills, as well as your professional manner and rapport.

Integrated Clinical Encounter (ICE)

The ICE subcomponent tests your ability to gather and interpret data. The data gathering is the history and physical you collect. The data interpretation is the diagnoses you list, the supporting history and physical you cite as justification for your diagnosis. The tests ordered and the overall impression of the Patient Note is graded by the physician. The SP has a checklist they complete on what physical exam maneuvers you have completed. The physician grades the rest of the ICE component.

THE DAY OF THE EXAM

The following information is detailed in the USMLE Step 2 CS Content Description and General Information Booklet. Information is current as of publication; however, please visit the USMLE website for any notifications or announcements (usmle.org).

Identification

Bring with you your scheduling permit and a current government-issued photo ID that also has your signature. If the names printed on the two documents are different, contact USMLE well ahead of your test day. If you have no valid current photo ID you will not be allowed to take the exam.
What to Bring

Do bring the following:

- Your white lab coat and professional attire. Keep your wallet, car keys, and breath mints in your pants pocket.
- A plain, old-fashioned stethoscope without any electronics.
- A watch that is not digital.
- A bottle of juice or water and nonperishable items to eat on break or at lunch. Food will be provided, but if you are a picky eater it’s nice to have something you know will be nourishing.

If you have any personal medical needs, it is best to contact USMLE well ahead of your test day to arrange for any additional items.

What Not to Bring

Do not bring:

- Digital items
- Cell phone, computer, PDA, or digital watch
- A pen (you will be provided with this)

There will be a locked space to store items not allowed in the testing rooms. Please do not bring luggage.

Timing

You can expect to spend a full 8 hours at the test center. You will have 12 cases. One or more of these cases may be “non-graded” cases. These “non-graded” cases are for the purpose of pilot testing and will not be scored. You will not be told which of your cases is not scored, so you will have to complete them all with the same effort. However, don’t worry too much about this because the case that you feel you did the worst on may in fact be the unscored case. It is more difficult to finish on time and do a good job if the case is still under development and not normed.

You will have one 30-minute lunch break and one 15-minute break to have your snack and visit the bathroom.

Each patient encounter lasts 25 minutes. 15 minutes to enter the room, introduce yourself, take the relevant history, wash your hands, do the focused physical exam, and tell the patient what will happen next (closing or summary). Then 10 minutes for you to complete the Patient Note outside of the exam room. If you finish in the patient’s room early, you may leave early and have additional time to complete the Note. While you are in the patient’s room, you will hear one announcement when 5 minutes are remaining (10 minutes after the beginning of the case). Good test-taking strategy indicates that if you are still taking the history at the 5-minute warning, you should wash your hands and get the most relevant physical exam completed.
Standardized/Simulated Patients (SPs)

This exam is unlike any you have taken before. It involves interpersonal skills and complex psychomotor skills. The “patients” you see are trained to portray certain disease states and are following prepared scripts. They know what to say and do depending on the actions and speech of the doctor. SPs are trained by the National Board of Medical Examiners. They do not have professional degrees in health care; in fact, many of them are actors. However, SPs certainly do know how they want to be treated by their physicians. Because the SPs grade the majority of the exam, it is impossible to pass if you don’t treat them as real patients all the time. For this reason it is important that you do not speak to the SPs outside of the role of a patient.

Irregular Behavior

You do not want to be labeled as having irregular behavior, as this may be recorded in your USMLE records. The following are all considered dangerous or disruptive behavior:

- Carrying unauthorized materials, such as a cell phone
- Conversing in a language other than English at any time
- Talking about the content of the exam (even after the exam is over)
- Preparing any notes to take away from the test center
- Speaking to the SPs outside of their role as patients
- Continuing to type your note after the 10 minutes is finished. When you are told to stop typing, you must stop typing at that precise moment—not 3 or 4 words later. Immediately click “Submit” at the bottom of the electronic form.

SPOKEN ENGLISH PROFICIENCY (SEP)

SEP consists of two basic parts: Can the patient understand the doctor, and can the doctor understand the patient. The grading scale that the SP uses reflects this basic concept of understandability. No human communication is perfect. Nobody expects you to understand every word and be understood on every utterance during the 8-hour Test Day. The important point is to use the communication strategies outlined here so that you communicate most effectively with your patient. Remember, your intent and sincerity to communicate with your patient must be genuine.

Speak in English as much as possible before Exam Day. If English is not your first language, make every effort to speak as much as possible with native English speakers in the weeks and months leading up to Test Day. Just being comfortable speaking, even about nonmedical topics, will spill over as greater self-confidence on Test Day. Even if you are unsure about your spoken English, continue to speak openly and freely. Doctors who are unsure of their English skills frequently limit their use of spoken words on the exam. This is a mistake—it is sure to come across as detached and uncaring, and may affect your communications skills (CIS) score. You may also find that you are not able to collect all of the historical information needed to pass the Integrated Clinical Encounter (ICE).

Do not be concerned about any accent you may have. SPs are used to hearing a variety of accents and do not expect you to speak with the same accent as they do. They are
looking for understandability. If you enunciate your words clearly, your accent will not matter. If you mumble, however, it will be difficult for the SP to understand you—accent or no accent.

Word choice is important. Three words that repeatedly get doctors into trouble are “feel,” “good” and “okay.” If you say “good or okay” after performing a physical exam maneuver, the patient might take it to mean that the exam was normal. During the history, if you say “good or okay” after a patient answers your question, it may come across as judgmental that you agree with her behavior. Use “Thank you” or “thanks” instead of “Okay” or “good.”

The word “feel” is appropriate to use in the History. “How does that make you feel?” is perfectly acceptable. Try not to use the word “feel” during the physical exam, as it often has sexual connotations that are inappropriate. Prior to palpation of the chest wall, say, “Now I am going to push on your chest.” It would be wrong to say, “Now I’m going to feel your chest.”

**Tips for Being Understood by Your SP**

**Tip 1. Speak slowly.**
If you speak really quickly, patients will not understand.

**Tip 2. Speak loudly.**
Some hearing loss is common in the general population. If your patients cannot hear you, you will not be understood. Also, a very low volume of voice comes across as meek, uncertain, and not confident. If you come from a part of the world that considers loud speaking to be rude, consciously practice raising the decibels of your voice.

**Tip 3. Use short sentences.**
Patients are nervous and have limited short-term memory. For example, “Do you have chest pain?” is much better than “Now I’m going to ask you, if that is okay with you, have you ever had, now or in the past, any chest pain, discomfort, or sense of impending doom now or any time in the past?” Besides being better understood, short questions have the additional advantage of not taking up so much time.

**Tip 4. Use simple vocabulary.**
Not including your medical training, you are likely to be much better educated than many of your patients. Minimize the excessive syllables—that is, use shorter words.

**Tip 5. Use body language.**
Use hand gestures to explain ideas whenever possible. If you say to a patient, “Please show me where it hurts,” you will more likely be understood if you hold out your index finger at the same time. The patient will get the idea he should point to where it hurts.

This technique works especially well when having the patient go through the range of motion of any joint. Saying, “Do this,” and demonstrating the movement you want the patient to do, is a lot more efficient and understandable than saying, “Please extend your wrists.”
Memorizing a range of possible questions for the History and commands to give during the physical exam can greatly improve your speed, communication, and confidence. Be careful not to become too robot-like in your delivery. Speak to the SP as if he has never been asked these questions before.

Tips for Understanding Your SP

Tip 1. Pay attention.
Listen! This is the most common problem in communication. Doctors do not listen to their patients. While the patient is speaking, look at him or her as much as possible and concentrate on what he or she is saying. Do not think about what your next question will be. If you have to write yourself a note on the clipboard, look down at it only briefly. Many doctors score low on SEP because they were not listening, not because of any deficiencies in their English language skills.

Tip 2. Look at your SP’s body language and acting.
If the patient is crying, grimacing, or doing any other acting, it is part of the case! Comment on it and the SP will think you an excellent communicator.

Tip 3. Nod occasionally when the patient is speaking.
Head bobbing up and down means YES. Shaking head from side to side signals disapproval or NO.

What if the patient says, “I do not understand”? The key here is to not ignore the patient. Telling a patient who doesn’t understand you that it “doesn’t matter” is not the correct response. It is best to respond by asking the same or a very similar question in another way. For example:

Doctor: “Do you have any ischemic symptoms?”
Patient: “I do not understand?"
Doctor: “Do you have any chest pain?”
Patient: “I still do not understand.”
Doctor: *(Pointing to the patient’s sternum)* “Does it hurt here?”
Patient: “Ohh … no, Doctor …”

Throughout this exchange with the patient, be sure not to get flustered, angry, or defensive. Keep a caring, professional demeanor the entire time.

What if you do not understand the patient? If you have no idea at all what the patient has said, you could ask the question in another way. Without getting a history, it is impossible to select the correct physical exam elements to perform, and impossible to write an accurate note. In other words, you cannot pass the ICE component without understanding the majority of the history.

The most important thing here is to paraphrase and find out what the patient has to say. Paraphrasing means repeating back to the patient what you think he may have said.
It is a technique to check your understanding, and is not a sign of weakness or failure. Paraphrasing will improve your CIS score, SEP score, and ICE score!

If you are unsure of what the patient said, just guess and repeat it back to the patient! The whole idea is to make the patient say it again for you to hear. For example:

**Patient:** "I have had a cough and fever for 3 days."
**Doctor:** "You have chest pain and cough for 3 days. Is that right?"
**Patient:** "No chest pain, just 3 days of cough and fever."
**Doctor:** "Oh, 3 days of cough and fever, no chest pain?"
**Patient:** "Yes."
**Doctor:** "Thank you. Have you had any sputum?"

**COMMUNICATION AND INTERPERSONAL SKILLS (CIS)**

The CIS component relates to treating the patient with respect and showing empathy for the patient’s condition. This section of the exam is just as important as SEP or ICE. Having an excellent bedside manner is necessary for success in the real world as well as on Board exams.

The guiding principle is to treat patients the same way you would want your mother treated by a physician. You would demand that your mother’s physician do everything in his ability to make your mother comfortable physically as well as emotionally and, at the same time, gather all the personal information and perform the physical exam required to make an accurate diagnosis.

Emphasis is placed on the introduction at the beginning of the patient encounter and the closing or summary at the end of the encounter. The introduction allows the doctor to make an excellent first impression on the SP. A good closing allows the doctor to make an excellent last impression on the SP. This is always nice, as the next thing the SP is going to do is grade the doctor!

Fortunately, we have a concrete list of objectives and communication techniques to share that will help you pass the CIS component. While you will memorize and practice these techniques, the most important idea is that each patient should be able to sense your desire to help. If the patient realizes you are there to help and you will not cause any unnecessary pain or embarrassment, you are well on your way to passing Step 2 CS and having a satisfying career.

**The Introduction**

The introduction can be subdivided and thought of as five tasks:

1. Entering the room
2. Greeting the patient
3. Offering a handshake
4. Draping the patient
5. Asking the first question
Task 1: Entering the Room

At the beginning of the case, you will be standing outside the door with your clipboard. You will hear the overhead announcement, “Your patient encounter will now begin.” Do not write on your clipboard until you hear the starting announcement. Slide open the little cabinet that contains the Doorway Information.

Read the Doorway Information carefully and take up to 45 seconds to collect your thoughts about the case. During this time, feel free to write on your blue paper attached to your clipboard. We recommend writing the patient’s name as it appears on the doorway across the top in large letters. If you forget the patient’s name while in the room, you can glance at this as a reminder.

Next, write the vital signs under the name. This way they will be ready to transcribe onto the Physical Exam section of the Patient Note. Some doctors like to write out the main memory device for the history (SIQOR AAA PAMHRFOSS) in large letters in 2 columns across the top of the page. Some doctors like to write out the differential diagnoses along the right-hand side of the page.

It is useful to write out the memory device and Differential Diagnosis of the chief complaint from the Doorway Information when you are beginning to study for Step 2 CS. However, closer to test day, see if you can remember the order of the history and physical as well as the differential diagnoses for common chief complaints without writing it all down. This could save you a few seconds and allow a little more time in the room.

When you are ready to enter the patient’s room, knock twice loudly on the door. Take a deep breath, let it out, smile, and enter. There is no need for you to wait for the patient to respond verbally before you enter. The time it takes for one breath and a smile will be enough for the patient to make any quick adjustments with her gown to protect her modesty.

When you enter the room, walk toward the patient before beginning to speak. If you begin speaking while your hand is still on the doorknob, it gives the patient the impression that you are terribly rushed (this might be true, but don’t let on). Observe the patient as you walk in. If she is smiling and in no obvious distress, keep smiling. If she is any physical or emotional distress, drop the big smile. If you are responding to a patient as you would to a real patient in distress, your face will reflect this. For a patient not in distress, 3 to 5 feet is good conversational distance. For a patient in severe physical distress, standing even closer is comforting. Position yourself so you can make good eye contact.

Task 2: Greeting the Patient

Saying hello and telling the patient your name is always a good start and may begin the process of putting the patient at ease. Below are two correct ways to do a greeting.

Greeting A

Doctor: “Hello, my name is Dr. First-Name Last-Name.”

Don’t worry if you’re still a fourth-year medical student and not officially a doctor yet. Next you’ll need to establish a doctor-patient relationship.

Doctor: “I will be your physician today.”
This is certainly a direct, short, and simple statement that will be understood by all patients.

This is not the only way to begin an interview. Some physicians prefer to check the patient's name right at the beginning of the interview. For example:

**Greeting B**

**Doctor:** “Hello, Mrs. Smith?”

**Patient:** “Yes, Doctor.”

**Doctor:** “My name is Dr. William Osler.”

**Patient:** “Please call me Mary.”

**Doctor:** “All right, Mary, I will be your physician today.”

One advantage of taking a Board exam is that you are always in the correct patient’s room. With this in mind, Greeting A is slightly shorter and still gets the job done. Greeting B allows the patient a chance to introduce herself. Always use the appropriate title (Mr., Mrs., Ms.) unless the patient specifically gives you permission to use the first name.

**Task 3: Offering a Handshake**

The handshake is a traditional greeting. Handshaking is the normal accepted convention regardless of the gender or age of the patient or of the doctor. Deciding on whether to shake hands or not can be simplified into three general rules.

**Rule 1.** Always shake hands if the patient offers. It would be considered rude to refuse.

**Rule 2.** Do not initiate a handshake if the patient has any emotional or physical distress. You would not want to extend your hand to someone with a possible myocardial infarct as he would feel obligated to shake back even though it might make his chest pain worse. If the vital signs are abnormal you can consider the patient to be in distress. It is always embarrassing to make someone shake hands when he has a fractured clavicle. Similarly, a patient in emotional distress will typically not appreciate the contact. Looking at the patient’s face will help you decide if a handshake is helpful or not.

**Rule 3.** When in doubt, leave it out. You may occasionally meet a patient from a cultural background where you may not be sure about the handshake. If you aren’t sure, it’s better to err on the safe side and leave it out.

If you decide to shake hands, offer your hand when you say “Hello.”

**Task 4: Draping the Patient**

There will be a white sheet clearly visible in your test room, most typically folded on the chair or patient table. It is your responsibility to give it to the patient and to all SPs dressed in patient gowns at this point of the introduction so that you do not forget. There is no need to offer—nor should you offer—a drape to the guardian(s) of the patient who are wearing regular street clothes (such as a grandmother of a pediatric patient).

For a patient in no distress, simply pick up the drape, unfold it one or two folds, and say, “Here is a drape for you.” Simply drop the sheet on his lap. There is no need to tuck the drape in or even touch the patient at all. As soon as you let go of the drape, the patient will adjust it the way he wants.
For a patient in distress, perhaps someone lying in pain with a broken hip, adjust the drape for him to be sure he is comfortable. Having him adjust his own drape might make him move his broken femur and induce more pain.

**Doctor:** “I have a drape for you. May I cover your legs?”

**Patient:** “Yes, please.”

**Doctor:** “Here you go. *(Adjusting the drape)* How is that?”

**Patient:** “Fine.”

During the physical exam, the drape might get displaced when the patient rolls over or when you do physical exam maneuvers. You are responsible for seeing that the drape stays in place if it falls to the side.

**What should you do if you realize halfway through the encounter that you forgot to offer the drape?** Offer the drape with great poise when you think of it, and present it to the patient with a smile.

Note: Make sure you provide the drape to the patient before you begin the physical examination.

**Task 5: Asking the First Question**

The first question must always be an open-ended question; in other words, a question that cannot be answered with a simple “Yes” or “No” response.

**Doctor:** “How can I help you today?”

This is an excellent way to begin the interview. It shows that you are caring and want to help. Here are three of many alternative ways to begin:

**Doctor:** “What brings you in today?”

or

**Doctor:** “What can I do for you today?”

or

**Doctor:** “I see you have *(state the symptom listed on the doorway)*. Please tell me all about it.”

The key here is to be sure it is an open-ended question. Do not begin the interview by making small talk, commenting about the weather, or complimenting the patient on her nice clothes.

After you ask your opening question, be quiet, listen, and let the patient tell you her story.
The Closing or Summary

The summary is completed after you finish your physical exam. This is your last chance to make a good impression on the patient. Before beginning the summary, ask the patient to sit up if it isn’t uncomfortable to do so. Stand or sit so you have good eye contact. A complete closing consists of seven tasks:

1. Making the transition
2. Paraphrasing
3. Giving knowledge
4. Telling what you are going to do
5. Counseling as needed
6. Asking for questions
7. Saying goodbye

Task 1. Making the Transition
This is to let the patient know that you have finished your physical exam and now want to tell him what you think.

Doctor: “Let me tell you what I am thinking.”

Task 2. Paraphrasing
The purpose of this is to highlight the key historical points and the key physical findings. It is your last chance to make sure you have the information correct. There is no need and no time to repeat everything the patient told you.

Doctor: “You told me you have had 3 days of cough and 1 day of shortness of breath. Is that correct?”

Patient: “Yes, Doctor.”

Doctor: “On physical exam I found that you have a fever and you are breathing fast.”

Task 3. Giving Knowledge
This is where you explain in lay language one or two possible diagnoses. It is perfectly acceptable to be unsure of the exact diagnosis. After all, you have not even done any tests yet or written your note!

Doctor: “I think you may have (name one possibility), or it could be (name another).”

Task 4. Explain What You Are Going to Do
In this section, be definite. While you’re yet unsure of the final diagnosis, you can be certain about what tests you are going to order. It is also very important to tell the patient that you will meet again to go over the test results.

Doctor: “I am going to take a picture of your chest to find out why you are coughing. I am also going to take a blood test to look for infection. When the test results are back I will call you so we can discuss them and make a treatment plan.”
Enjoy the role-playing aspect of Boards. If the case involves someone who is very ill, you could pretend the tests will be back very soon. For example:

**Doctor:** “I am going to take a sample of your blood to find out why you are so short of breath. I will have the results in a few minutes. Could you wait here? I'll be back as soon as possible.”

**Task 5. Counseling**

If you have found any behaviors that affect a patient’s health, this is the time to advise the patient on the importance of treatment. Smoking, alcohol abuse, drug abuse, addiction of any kind, safe sex practices, depression, domestic violence, weight loss, and management of chronic diseases such as hypertension and diabetes would all be appropriate here.

**How should you counsel?** It is appropriate to counsel the patient on behaviors that are detrimental to his health. The key here is to have the patient see the “counselor.”

**For Smoking**

**Doctor:** “Your health will improve if you stop smoking. I'd like you to attend nonsmoking classes run by our counselor.”

**For Alcohol**

**Doctor:** “For your health, it is important that you stop drinking. I would like you to speak with our alcohol counselor. I will bring you her number.”

**For Recreational Drugs**

**Doctor:** “Please stop using drugs. They are hurting your health. I know it can be difficult, so I would like you to speak to our drug counselor.”

**For Sexually Transmitted Diseases**

**Doctor:** “Do not have sex until all your treatment is finished and your partner(s) are treated as well. Then I want you to use a condom every time to prevent infection in the future.”

**Task 6. Asking for Questions**

**Doctor:** “Do you have any questions?”

**Task 7. Saying Goodbye**

This is the last step in the closing. Too often, the closing seems to be the time when you find out precisely what concerns the patient most. Answer whatever questions the patient asks. If he has none, gather up your stethoscope and clipboard and make a parting comment.

**Doctor:** “Call me if you have any problems or any other questions before our next meeting.”

**Patient:** “Okay, 'bye.”

**Doctor:** “Goodbye, *(patient's name).*”

or
Doctor: “Call me anytime with any concerns, otherwise I’ll call you when the tests are back.”

Patient: “Yes, Doctor.”

Doctor: “Goodbye, (patient’s name).”

Turn around and leave, and close the door behind you.

What Should You Do If You Run Out of Time? At the end of the 15 minutes with the patient, you will hear the announcement, “This encounter is now over.” As soon as this announcement is made, you stop earning points. You will not get credit for any additional history you obtain, physical you do, or counseling you give.

Even worse, the clock is now running on the 10 minutes that remain for you to write your Note. So you need to get out of the room—fast. The SP also wants you to make a rapid exit. The SP has to grade you, set up the exam room, and get ready for the next doctor. If your exit takes too long, a proctor will come into the patient room to ask you to leave.

Picture the following scenario. A doctor has finally gained the trust of a patient who is just beginning to reveal a very personal and sensitive problem:

Patient: “Well, Doctor, I think it’s safe to tell you. My problem is ...”

Overhead Announcement: “This encounter is now over.”

Doctor: (Says nothing, since the case is over, and walks out of the room)

This type of interaction will make the SP feel depersonalized and cheated. All the empathy that you have shown for 15 minutes is now gone. A better approach would be the following:

Patient: “Well, Doctor, I think it’s safe to tell you. My problem is ...”

Overhead Announcement: “This encounter is now over.”

Doctor: “I’m sorry; I have to answer this emergency page. I’ll be back as soon as I can.”

Patients expect busy physicians to get emergency pages that must be answered immediately. They generally don’t take offense and do accept this explanation. As you turn to leave, the SP is thinking, ”What a nice doctor.”

The Communications and Interpersonal Skill (CIS) checklist as well as the Spoken English Proficiency (SEP) checklist will be the same for each of the 12 patients you see on Test Day.

Bedside Manner

In addition to the items mentioned in the introduction and closing, the following will give you an excellent bedside manner.

1. Wear Professional Attire

In addition to your clean white lab coat, your clothing should be clean, relatively wrinkle-free, and neat. Expensive new clothes are not necessary or advantageous. Shoes should
be polished and in good repair. Do not wear high heels or sandals. Instead, wear traditional leather shoes.

*Hygiene:* Take a shower and use deodorant on the morning of Test Day. Patients want their doctors to smell clean or have no odor at all. Cologne or perfume may offend some patients or, even worse, may trigger an attack in an asthmatic patient. Consider bringing some quick-dissolving breath mints and putting a couple in your pocket for after lunch.

*Jewelry:* Wear whatever you normally wear. Piercings are fine except for tongue-piercing, which interferes with pronunciation and could hurt your SEP score.

*Religious/Ethnic Dress:* If you normally wear a head covering, religious symbols on your jewelry, or ethnic clothing, then you may do so on Test Day as well. Be yourself!

*Men:* Wear long pants that are not denim or blue jeans. No shorts. All men need to wear collared shirts with ties.

*Women:* Wear long pants that are not denim or blue jeans. No shorts. A knee-length dress or skirt is perfectly acceptable as well. No t-shirts, tube tops, or spaghetti straps. Any other type of blouse or shirt is fine.

Clothing for men and women should be free of any commercial logo or printing.

2. **Make Eye Contact**

   It is important to make eye contact the majority of the time with your SP. This is especially important during the introduction and closing, as well as when doing any counseling or discussing personal topics. During the physical exam, you should observe the patient's face when palpating and percussing to see if there are any simulated physical findings of abdominal pain.

   You are not expected to have eye contact 100% of the time, though it's best any time you are speaking with the patient. It is normal to look down occasionally at your clipboard when you write notes. If you nod up and down slightly when writing on your clipboard, it gives the impression you are still listening.

3. **Pay Attention to the Patient**

   If you make eye contact most of the time, paying attention and concentrating on the patient is automatic. If you look at your clipboard most of the time, the patient will think you are not interested in him; he will think you care only about the medical record.

   You will lose this point if you appear distracted, looking about the room randomly. Do not look at your watch repeatedly. This gives the message that you would rather be somewhere else. And if you ask the exact same question twice in row, it suggests to the SP that you are not listening.

   **Doctor:** “Do you have vomiting?”
   **Patient:** “Yes.”
   **Doctor:** “Do you have vomiting?”
   **Patient:** “I said YES!”
Asking the same question twice in a row can annoy your SP. What the doctor above meant to ask the second time was to get a description of the emesis. Better communication would be the following:

**Doctor:** “Do you have vomiting?”

**Patient:** “Yes.”

**Doctor:** “How many times have you vomited?”

**Patient:** “Three times.”

The process of making eye contact and looking concerned goes a long way in building empathy and passing your CIS component.

### 4. Do Not Interrupt the Patient

If you ask a question, let the patient answer. Do not speak again until the patient is finished speaking! Yes, this can be hard to do.

The cases are designed and scripted to be doable in the 15 minutes allotted. Interrupting, besides being seen by the patient as rude, often slows you down and makes finishing on time difficult. For example:

**Doctor:** “How can I help you today?”

**Patient:** “I have pain in my chest..”

**Doctor:** *(Interrupting)* “Is it a sharp pain?”

**Patient:** “No.”

**Doctor:** “How long have you had the pain?”

**Patient:** “Three weeks.”

**Doctor:** “How long does it last?”

**Patient:** “A few minutes.”

**Doctor:** “How often does it happen?”

**Patient:** “A few times each week.”

If you hadn’t interrupted, the same case might have gone like this:

**Doctor:** “How can I help you today?”

**Patient:** “I’ve had pain in my chest for the last three weeks about the size of an orange. It’s right under my breastbone. It only happens when I run in the cold weather. It lasts for a few minutes each time and stops a minute after I stop exercising.”

In the first example the patient stopped talking spontaneously as soon as the doctor interrupted. It will take minutes now to collect the information needed—if you can obtain it at all. In the second example the doctor did not interrupt and was rewarded immediately with most of the information needed for the History of Present Illness (HPI).

Patients are often intimidated by their physicians; patients are sitting practically naked in your exam room, and as they undress, they know they must confess the most personal
details of their lives in order to receive help. They are afraid of what you might tell them about their mortality. Painful, expensive, disfiguring treatments might be needed. You are the authority figure. They are vulnerable. If you realize this is what patients are experiencing, it’s easier to let them finish their thoughts. If you allow them to speak, they will feel you are interested in them as individuals and not just organisms from which to collect and tabulate data.

However, there is one exception when it comes to not interrupting your patient: the situation where your patient is rambling and talking about unimportant, perhaps tangential, issues. It is a challenge to you—and part of the case—to see if you can gently redirect the interview. You need to collect a complete history and there’s little time. Let the patient talk long enough that you realize the SP is not portraying a psychotic or manic patient. Then apologize, acknowledge, and redirect.

**Doctor:** “How can I help you today?”

**Patient:** “Oh, Doctor, thank you so much for seeing me today. I called the office and your nurse was so nice.”

**Doctor:** “Thank you. I see my nurse wrote that you have a sore foot. Can you tell me about it, please?”

**Patient:** “I had a dog once with a sore leg. Spot was her name. I’ll get a picture and show you.”

**Doctor:** *(Interrupting)* “I’m sorry, I need to interrupt. I know you want to show me the picture but I would like to focus on you today. Please point and show me exactly where it hurts.”

This is a case that may be easier on the Board exam than in real life. If you say you are sorry and acknowledge that you are interrupting, the SP will give you credit for passing this communication challenge. The rest of the case may be scripted such that the SP will answer questions more directly, allowing you to collect the history you need in a timely manner.

5. **Keep a Professional Demeanor**

SPs are looking to see if you are calm, confident, concerned, and caring. Verbal and non-verbal communication are important.

You will appear nervous if you constantly tap your pen, touch your hair, or twist your ring. Be conscious of how you stand or sit. Tapping your foot like a musician is a dead giveaway that you are nervous. Nervous physicians make for nervous patients. Patients start to wonder if the doctor really knows what he is doing when he acts nervous.

Don’t worry if your hands are a little sweaty or if you have a little twitch on Test Day because of nerves. The SP will not grade you down for this. You can begin to relax because you are prepared for the exam and know generally what to expect.

How you stand or sit also projects calmness or nervousness. Stand with your feet flat on the floor and don’t move a lot, shifting your weight back and forth. Keep your hands at your sides and not in your pockets. Be especially careful not to cross your arms, as this projects disapproval to the patient. Finally, do not hide behind the clipboard. Hold it so it does not cover your face or mouth.
Facial expression is part of nonverbal communication. Generally, if the patient is in no distress or is smiling, you should be smiling as well. You can tell if the patient is in distress certainly by the chief complaint and vital signs, but it’s easier just to look at her and react to her facial expression and behavior as you walk in the door. If she is smiling, you should be smiling.

If the patient is in distress, is in pain, has respiratory distress, or is crying, you should drop the smile and look calm, caring, and confident. You do this by pretending this is a real-life patient whom you want to help. Your facial muscles will then take care of themselves.

Your tone of voice is also important. Never be angry, be condescending, or appear uncomfortable when you ask delicate questions. Practice the parts of the History several times until you can ask the Sexual History with the same ease as the History of Present Illness (HPI).

Finally, what you say in response to the patient is important. Here is an example of what not to do:

Doctor: "Are your partners men, women, or both?"
Patient: "Both."
Doctor: "REALLY!"

You should not appear shocked by anything the patient says. Keep the same even tone of voice when asking personal questions. If you are genuinely surprised at a response, you can always thank the patient for sharing personal information while you regain your composure.

Here is a better interaction:

Doctor: "Are your partners men, women, or both?"
Patient: "Both."
Doctor: "Thank you. Have you ever been tested for sexually transmitted disease?"

You also do not want to appear alarming. Here is another example of what not to do:

Doctor: "Has there been any change in your weight?"
Patient: "Yes, I've lost 20 pounds in the last 4 months."
Doctor: "Wow! That could be cancer! Oh, my!"

Your CIS score will be better if you keep your anxiety about the patient’s diagnosis to yourself.

Doctor: "Has there been any change in your weight?"
Patient: "Yes, I've lost 20 pounds in the last 4 months."
Doctor: "Have you been on a diet?"
Patient: "No, I just can't keep the weight on."
Doctor: “Has there been any change in how much you sleep? (Besides cancer maybe this patient is dealing with hyperthyroidism, diabetes, depression, drug abuse, or homelessness)

6. Express Empathy
As part of your role as doctor to the SP, you will need to be empathetic. Being empathetic means being sensitive and understanding of the patient's emotional and physical state. By your actions and words, you show the patient that you understand how she feels and that you respect her concerns. You demonstrate by your actions and speech that you want to work together and help improve her comfort and health. No patient wants to be dismissed as someone whose problems are not worthy of your attention.

Empathy is built up during the 15 minutes with the patient. The concept of treating a patient the same way you would want your parent treated usually works. Some of the actions you can take to show empathy are:

- Make the patient as comfortable as possible.
- Check that the drape is always protecting the patient’s modesty.
- Pull out the leg rest before a patient lies back.
- Assist the patient when he/she needs to change position during the physical exam.
- When the patient is ready to stand up, pull out the footrest and offer to help him down.
- Offer water when a patient is thirsty or when you do a thyroid exam.
- Offer to dim the room lights if the patient is photophobic.
- Offer a tissue to a patient who is crying.
- Be attentive to making a painful exam as brief as possible while explaining the need for the maneuver.
- If the patient is hard of hearing, always stand in front of him so he can read your lips.
- Stand behind the patient if he seems dizzy and about to fall.
- Sit in silence for a couple of seconds when a patient is emotional.

Verbal Empathy
Sample expressions of verbal empathy are the following:

“Tell me more.”
“The more you tell me, the better I’ll be able to help.”
“Remember, I’m here to help.”
“I want to be sure I understand. You told me (paraphrase here). Is that correct?”
“I imagine that must be (hard/sad/frustrating/painful).”

Example #1:
Patient: “I don’t like to talk about my problem. It’s personal.”
Doctor: “I can see that it’s hard for you to talk about.” (Patient shrugs shoulders and is silent)
Doctor: “Tell me about it, and together we can figure out what to do.”
The patient here communicates in a nonverbal manner, which the doctor needs to recognize. It might also help with a reticent patient to state that everything you are about to discuss is confidential.

**Example #2:**

*(Patient is pacing back and forth in the exam room as you enter. Before you can even say hello, the patient speaks angrily.)*

**Patient:** “What took you so long?”

**Doctor:** *(Showing great empathy)* “I can see that you’re upset. I’m sorry I took so long to see you.”

**Patient:** *(Who was expecting an excuse and is pleasantly surprised by the simple apology)* “Oh, that’s okay.”

**Doctor:** “Let me introduce myself. My name is Dr. . . .”

This scenario illustrates three points: (1) Always answer the patients’ questions immediately. Most questions are verbal. However, if the patient makes a face to indicate pain, confusion, or any other emotion, it is best to comment also that you noticed. (2) Apologizing to the patient is not a sign of weakness. It shows the patient that you respect his time. It makes the doctor more approachable. Apologizing defuses a confrontational situation. (3) After you answer the patient’s question, get back to your agenda. In this case, the doctor started his introduction.

**Empathy through Appropriate Touch**

It is sometimes appropriate to use touch to get the patient’s attention. This is especially useful when a patient is crying. With your fingertips, touch the patient for no more than 3 seconds and make an empathic statement.

Touch only the shoulder or forearm—never the leg. Do not grab, pat, squeeze, or rub the patient. Never sit on the patient’s bed.

*(Patient is crying uncontrollably after being told she has cancer.)*

**Doctor:** *(Begins appropriate touch)* “I know you are upset by the bad news. *(Releases touch now that doctor has patient’s attention)* I was upset also when I read the report. The good news is that we have treatment available for your condition.”

**Ask Only One Question at a Time**

This is a key skill that will also improve your SEP score. It helps by keeping the questions short. Quite simply, patients cannot remember multiple questions. You will find that you can ask questions fairly quickly and wait for a patient response. If you ask several questions at once to save time, you end up wasting time trying to get the patient’s true meaning.

The following are sample patient responses to multiple questions:

**Doctor:** “Do you have now or have you in the past experienced any chest pain, shortness of breath, nausea, or vomiting?”

**Patient:** “What?”
Doctor: “Do you have now or have you in the past experienced any chest pain, shortness of breath, nausea, or vomiting?”

Patient: “Yes.”

The doctor here would be entirely unclear on what the patient means by “Yes.” To which symptom is he responding? Instead, the most efficient way to ask multiple questions is one at a time:

Doctor: “Have you ever had chest pain?”

Patient: “No.”

Doctor: “Any shortness of breath?”

Patient: “No.”

Doctor: “Nausea or vomiting?”

Patient: “No.”

By the end of this encounter you won’t require complete sentences, as the patient will have realized that you just want to check for several different symptoms.

7. Use Open- and Closed-Ended Questions
You will need to use a combination of open- and closed-ended questions. Closed-ended questions are those that can be answered with a simple “Yes” or “No.” One example: “Do you have chest pain?” This type of question is useful when you need to go through a list of possible symptoms quickly.

Open-ended questions are questions that cannot be answered “Yes” or “No.” Rather, an explanation is required. For example, begin your interaction with an open-ended question, i.e., “How can I help you today?” Open-ended questions allow the patient to tell his story in his own words. This is often the quickest way to obtain the history.

In general, ask open-ended questions to start and closed-ended questions to fill in the gaps of information you need to collect.

8. Use Lay Language When Speaking with Patients
Lay language means nonmedical terminology. Speak to patients as much as possible with lay terminology. Patients are often shy or intimidated by a doctor’s technical and highly educated speech. In addition, it is inadvisable to give long technical explanations. Just use the lay terms to describe medical tests and procedures. It is usually not necessary to translate the lay term into medical terminology for the patient, unless, of course, he asks.

Incorrect: “I’m going to take a picture of your brain. It is called computed tomography, or computerized axial tomography. You lie still on the x-ray table and the camera moves about. The pictures are fed into a computer and ...”

Correct: “I’m going to take a picture of your head to find out why you have headaches.”
The SP will pretend not to understand when you use medical jargon. You can use a technical term only if the patient uses it first. Even if the SP is portraying a physician who is a patient, do not use medical jargon.

Almost every physician makes an occasional mistake with medical terminology. If you get caught by your SP, simply explain yourself and move on.

Doctor: "I'm going to get an echo on you."
Patient: "A what?!"
Doctor: "A sound wave picture of your heart."
Patient: "Oh, okay, like when they take pictures of unborn babies?"
Doctor: "Yes."

If you realize you have made a mistake, you can correct yourself.

Doctor: "I'm going to ask for a CBC—that is, a blood test to look for infection and anemia."

More likely, the SP will catch your mistake before you can correct yourself. Remember not to interrupt the patient.

Doctor: "I'm going to ask for a CBC."
Patient: "What's that?"
Doctor: "It's a blood test to look for infection and anemia."

The best way to tell the patient is without using medical terms at all.

Doctor: "I'm going to take a blood test to look for infection and anemia."
Patient: "Okay."

The average patient does know the names of a few organs. Heart, brain, kidney, liver, appendix, lungs, stomach, and bowel are acceptable lay terms. Try to use lay terms to describe different body parts. Head, neck, chest, belly or tummy, arm, leg, hand, foot, finger, and toes are acceptable lay terms.

Finally, it is best to use lay terms when speaking with your patients and medical terms when writing your note.

9. Be Nonjudgmental
One of the ethical tenets of being a physician is to be nonjudgmental. Even if we personally disapprove and find patients' habits undesirable, we are not to reveal our personal feelings. We treat and care for everyone with the same respect. Speech is the easiest thing to control, but it's important to keep your facial expression, body language, and tone of voice from showing any disapproval as well.

If the patient feels he is not being judged, he'll be more receptive to counseling.
Doctor: “How many sexual partners have you had in the last 6 months?”
Patient: “Ummm … eight or nine.”
Doctor: “Do you use a condom every time?”
Patient: “Sometimes I forget.”
Doctor: “I want you to practice safe sex and use a condom every time.”

If you give this advice with same professional demeanor that you’ve shown during the rest of the interview, it will be well received.

In the context of counseling, there is no conflict between counseling and being non-judgmental. We are expected to help patients change behaviors that can be damaging to their health. The key is that we are basing our recommendations on medical science and, hopefully, are offering realistic advice with which our patients can comply.

10. Try Not to Ask Leading Questions
A leading question is one in which the patient guesses what answer will please you. A patient will often say what he thinks the doctor wants to hear, even if it isn’t the truth. Leading questions are often judgmental as well. Doctors often slip into leading questions by mistake when they ask about habits and social conditions at home.

Leading question: “You work, don’t you?”
Nonleading question: “Do you work?”

Leading question: “You don’t use recreational drugs, right?”
Nonleading question: “Do you use recreational drugs?”

Leading question: “Your spouse has never hit you. Is that correct?”
Nonleading question: “Have you ever been hit by your spouse?”

If you do not assume or presuppose the answer to a question, you can avoid this pitfall.

11. Use Transitional Statements
Transitional statements inform the patient of what is coming next in the encounter. You are not asking permission from the patient; you are merely telling her what to expect next. Here are examples of the most common times transitional statements.

Before the Past Medical History (PMH)
Correct: “Now I’m going to ask you about your health in general.”
Correct: “Now I’m going to ask you about your health in the past.”

Incorrect: “Now I’m going to take your Past Medical History.”

Before the Family History (FH)
Inform the patient that you are no longer talking about her but now want to know about her family.

Doctor: “Now I’ll ask you about your family’s health.”
Before Starting the Ob/Gyn, Sexual, and Social Histories
Inform the patient about confidentiality. If you do not do this, the patient may not provide all of the information you need. Typically, confidentiality needs to be stated just once. Occasionally you will meet patients who will not give you the HPI until you assure them your conversation is confidential.

**Doctor:** "I'm going to ask you some personal questions. Everything we talk about is confidential."

Before the Physical Exam
While you are washing your hands, you can tell the patient what is going to happen next.

**Doctor:** "Now I will do your physical exam."

You may have noticed that the first part of the closing or summary is also a transitional statement.

**Doctor:** "Let me tell you what I am thinking."

At a minimum, use the family history, confidentiality, and closing transitions. If you use more than that, however, you'll find that it will help the patient to understand you, resulting in a higher SEP score. Keep the statements short. All you need to say is what is going to happen next; you are not explaining the reason why.

**Incorrect:** "I am going to ask about your family's health because I want to know about any possible genetic disease to predict what you might have."

**Correct:** "I am going to ask about your family's health."

Finally, do not use transitions in the form of a question.

**Incorrect:** "May I ask you about your family's health?"

Asking a question requires you to pause and wait for the patient's response. You can assume that the patient has already given permission for the general history, physical, and tests.

12. Pitfalls of Being Reassuring
All patients like physicians who are reassuring. The problem is, it is tempting to promise that you can cure the patient.

**Patient who has some ominous symptoms:** "Am I going to be okay?"

**Doctor:** "Sure, don't worry about it. We will make you all better. I promise."

This is incorrect for Step 2 CS—and for real life as well. You really don't know what the future will bring. In Step 2 CS, you are the junior member of the health care team. The case has not been presented yet to your senior physician via the Note. No workup or test results are available. The diagnosis is not yet fixed, so no definite prognosis can be made at this time.
Also, many patients are sophisticated enough to realize they have just been made a promise that cannot be kept.

You’re better off reassuring the patient that you:

1. Understand his concerns
2. Will do everything you can to make him feel better
3. Will do everything you can to find out what is wrong
4. Will get him the best treatment available
5. Will remain his doctor and will always be available to help

HISTORY TAKING

General Approach

The history you need to take on your Step 2 CS exam is different from what you did in medical school. In medical school, you were taught to do a complete history. For Step 2 CS, you will take only the relevant history. In other words, you are going to skip sections of the history that are not important in making a diagnosis, ordering tests, and counseling the patient.

Furthermore, no two histories will be the same. Sometimes the family and social histories are not important. There are even situations where there is very little history of present illness to obtain. The doctor is responsible for deciding what to ask. Always consider what parts of the history are most likely on the SP’s history checklist. That is what you should be asking next! Asking nonrelevant history is not penalized, though you could have been spending your time asking relevant questions. As you practice, you see that you need an organized approach and a general idea about what is relevant in different situations.

Without further introduction, here is the main history mnemonic that needs to be memorized.
After the introduction, and after the patient tells her story to you, the doctor, you should complete the parts of SIQORAAA PAMHRFOSS history that are relevant. This can be accomplished with a combination of open- and closed-ended questions. If the chief complaint is “pain” somewhere in the body, you'll usually need some information about each point of SIQORAAA PAM and only parts of HRFOSS. There is no absolute correct order in which to ask the questions. The memory tool is just a way for you to stay organized and collect the information rapidly.

Ask at least one question about medication and allergies for each patient. Be sure to ask this of every patient every time. Another required question is for post-menarche female patients: be sure you ask each one about her last menstrual period (LMP).

You do not have to ask every question directly to get credit. If the patient volunteers that the pain is located exactly on the fifth toe of the right foot, you will get credit for knowing the site even if all you did was say hello.

Specific Phrasing for Each Part of the History: SIQORAAA

**SIQORAAA: Site/Symptom**
You may ask the site of symptoms by simply asking where it hurts. However, you need to know the precise location in order to help narrow your diagnosis.

**Doctor:** “Where does it hurt?”

**Patient:** “My head.”

**Doctor:** “Could you point and show me where?”

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<table>
<thead>
<tr>
<th>HPI Mnemonic</th>
<th>Stands For</th>
<th>PMH Mnemonic</th>
<th>Stands For</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Site/symptom</td>
<td>P</td>
<td>Previous episodes of chief complaint</td>
</tr>
<tr>
<td>I</td>
<td>Intensity/quantity and quality</td>
<td>A</td>
<td>Allergies</td>
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<td>Q</td>
<td>Quality of the symptom</td>
<td>M</td>
<td>Medications (birth control, OTC, herbal, vitamins)</td>
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<td>O</td>
<td>Onset of symptoms</td>
<td>HITS</td>
<td>Hospitalizations, illness, trauma, surgery</td>
</tr>
<tr>
<td>R</td>
<td>Radiation</td>
<td>RUGS</td>
<td>Review of symptoms (urinary, GI, sleep)</td>
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<td>A</td>
<td>Aggravating factors</td>
<td>F</td>
<td>Family history</td>
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<td>A</td>
<td>Alleviating factors</td>
<td>O</td>
<td>Ob/Gyn</td>
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<tr>
<td>A</td>
<td>Associated symptoms</td>
<td>S</td>
<td>Sexual history</td>
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</table>
Ask the patient to point on his own body, not on your body or that of another person in the room.

Have a list of differential diagnoses of common causes of pain for every part of the body. That way you’ll spend a minimum amount of time outside the doorway and be more confident inside the patient’s room.

Have a list of common differentials for commonly presenting symptoms, such as shortness of breath, diarrhea, fatigue, fever, weight loss, vaginal bleeding, and dysuria.

If the patient says it’s the worst headache of his life, think subarachnoid hemorrhage. If he says it’s the worst sore throat of his life, think adult epiglottis, peritonsillar abscess.

Having the patient point is especially useful for headache, since sinusitis pain, temporal arteritis, and temporomandibular joint pain are only centimeters apart. Having the patient point is also important for abdominal pain.

Try to identify the location of the pain as specifically as possible, and use paraphrasing to make sure you have it correct. Sometimes patients say “right” to mean the opposite of left, and sometimes “right” means correct or, as in this example, “centered.”

Doctor: “Where does it hurt?”
Patient: “My back.”
Doctor: “In the lower back?”
Patient: “Yes.”
Doctor: “On one side?”
Patient: “No, right in the middle.”
Doctor: “Thanks, so that’s lower back pain in the middle.”
Patient: “Yes.”

If the case does not have a site of pain (such as chest pain or sore throat) but has a symptom, e.g., fatigue, fever, or shortness of breath, have the patient begin talking about the problem.

Doctor: “Please tell me about your symptoms.”
Patient: “Well, I’ve had vomiting and diarrhea for the last 12 hours.”

SIQORAAA: Intensity/Quantity and Quality

Intensity of Pain
If the patient’s chief complaint is pain, have the patient rate it on the pain scale.

Doctor: “On a scale from 1 to 10, with 10 being the worst pain, how would you rate your pain?”
Patient: “8/10.”

Pain is a subjective finding, and you should put in your note whatever the patient tells you. If the patient says it’s a 10/10 pain but you think he looks comfortable, you can say so in the General Appearance (GA) section of your note. For example:

HPI: 10/10 pain
GA: Pt appears in no distress

The most important thing to remember when asking about the pain scale is don’t rush the patient. You have to pretend this is a real patient who hasn’t been asked this question hundreds of times before.
Intensity of a Symptom
The pain scale is only for pain and is not used for symptoms. There are several ways to determine the intensity of a symptom: You could ask how bad the symptom is, or you could ask how the symptom is affecting the patient’s life, if that is more appropriate.

Doctor: “How is this weakness affecting your life?”
Patient: “Well, I lost my job because I missed so much work.”

Another way to measure the intensity of a symptom is to ask questions about functional impairment. This is especially useful with chronic problems such as dementia, depression, and Parkinson’s. It is also useful in any disease that might cause one to lose the ability to live independently. These questions are known as the DEATH questions: Dressing, Eating, Ambulating, Toilet, Hygiene.

Doctor: “Are you having any problems getting dressed?”
Patient: “No.”
Doctor: “Are you able to prepare your own food and eat it?”
Patient: “Yes.”
Doctor: “Are you having any falls?”
Patient: “No.”
Doctor: “Any problems getting off and on the toilet?”
Patient: “Yes.”
Doctor: “Are you able to bathe or shower by yourself?”

Quantity of a Symptom
If the symptom has a volume, what we really want to know for Intensity is the quantity, or “How much has this been happening?”

Vaginal Bleeding:
Doctor: “How many pads or tampons do you use a day?”
Patient: “Three or four on a heavy day.”

Sputum:
Doctor: “How much sputum do you have?”
Patient: “About 3 teaspoons a day.”
Doctor: “What color is it?”
Patient: “Yellowish.”
Doctor: “Any blood?”
Patient: “No.”

1 teaspoon ~ 5 cc;
1 tablespoon ~ 15 cc.
1 cup = 8 oz = 240 cc.

**Emesis and Diarrhea:**
Find out the number of times, how much each time, the color, the consistency, and if there is any blood:

- **Patient:** "I have diarrhea."
- **Doctor:** "Are your bowel movements watery?"
- **Patient:** "Yes."
- **Doctor:** "How many times a day?"
- **Patient:** "Six times today."
- **Doctor:** "How much?"
- **Patient:** "Don't really know."
- **Doctor:** "What color is it?"
- **Patient:** "Kind of greenish."
- **Doctor:** "Any black or red?"
- **Patient:** "No, there is no blood; I know black or red vomit or bowel movement means bleeding!"

**Quality of a Pain or Symptom**
Ask every patient with pain in the body what the pain or symptom feels like. "What does it feel like?" is on almost all SP checklists.

**SIQORAAA: Onset**
Knowing the onset of any pain or symptom is very important in determining possible causes of the symptom. Sudden chest pain would suggest pneumothorax, pulmonary embolism, or perhaps a rib fracture. Slowly developing, sharp pain would be more characteristic of infection such as pneumonia or pleurisy. Even with just the Doorway Information and site/symptom, you have a differential diagnosis that you start to rank order in your mind as you continue with the rest of the history.

Onset questions that are sometimes very revealing are the following:

- "When did it begin?"
- "What were you doing when it started?"
- "Did it come on slowly? Suddenly?"

For patients who are not sure when a chronic symptom began, try the following:

- "When were you last completely well?"

Onset also includes the duration, course, and frequency. These questions are often essential in figuring out the diagnosis.
Duration
“How long does the pain last?”
“Does the pain ever go away?”
“When was the last time you didn’t have pain?”

Frequency
“How often does it happen?”

Course
“Is it getting better or worse?”
“Does the pain come and go?”

For example, if the patient is getting RLQ pain every month, it is unlikely to be appendicitis.

SIQORAAA: Radiation of Pain
Another question that is appropriate only when the patient has pain that radiates is the following:

“How does the pain move anywhere?”

A common pitfall with this question is using the word radiation. This term is medical jargon that patients may take to mean “radioactivity.”

Doctor: “Does the pain radiate anywhere?”
Patient: “What? I need radiation?!”
Doctor: “Oh no, I just want to know if the pain moves anywhere.”

Patients are often under stress when they see the doctor, and misunderstandings are frequent. It is helpful to remember where a few pains radiate to.

<table>
<thead>
<tr>
<th>Type of Pain</th>
<th>Typically Radiates To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischemic chest pain</td>
<td>Arms, neck, back, jaw</td>
</tr>
<tr>
<td>Kidney stone</td>
<td>Groin and testicle</td>
</tr>
<tr>
<td>Gallbladder</td>
<td>The tip of the right scapula</td>
</tr>
<tr>
<td>Spleen injury</td>
<td>Top of the shoulders (diaphragm irritation)</td>
</tr>
<tr>
<td>Testicular torsion</td>
<td>Lower abdomen</td>
</tr>
<tr>
<td>Abdominal aortic aneurysm</td>
<td>Back</td>
</tr>
<tr>
<td>Pancreatitis</td>
<td>Back</td>
</tr>
<tr>
<td>Posterior penetrating gastric ulcer</td>
<td>Back</td>
</tr>
<tr>
<td>Sciatica</td>
<td>Down leg</td>
</tr>
<tr>
<td>Pharyngitis pain</td>
<td>Can radiate to ear</td>
</tr>
</tbody>
</table>

Sometimes, depending on the case, the SP may ask you for more specific information. For example:
**Doctor:** “Does the pain move anywhere?”

**Patient:** “Like where?”

**Doctor:** “How about your arms?”

**Patient:** “No.”

**Doctor:** “Neck?”

**Patient:** “No.”

**Doctor:** “Back?”

**SIQOR4AA: Aggravating Factors**

“Does anything make it worse?”

Aggravating and alleviating factors are present on most SP History checklists. You will need to ask these two questions of almost all patients in the exam. It is helpful to know common alleviating and aggravating factors.

Common aggravating factors are the following:

- Ischemic heart disease: exertion, walking up stairs, sexual intercourse
- Asthma: physical exertion, exposure to cold air, dust, smoking, animals
- Ulcer: eating food, taking aspirin or ibuprofen (NSAIDs)
- Meningitis: movement, jumping up and down
- Migraine: exposure to sound or light
- Muscle contraction headache: stress
- Gallbladder: eating fatty foods
- Pancreatitis/gastritis: alcohol ingestion
- Polymyalgia rheumatica: gel phenomenon (stiff, sore joints after resting for a few hours)
- Musculoskeletal pain: moving about

**SIQOR4AA: Alleviating Factors**

“Does anything make it better?”

Common alleviating factors are the following:

- Angina pectoris: rest
- Pericarditis: sitting forward
- Renal colic: moving about
- Muscle contraction headache: massage
- Migraine: dark, quiet room; caffeine ingestion
- Ulcer–GERD: antacids or eating food
- Gastric outlet obstruction: vomiting
- Musculoskeletal pain: keeping still and not moving

You may also ask the patient directly about activities that you suspect should make her symptoms better or worse.

**Doctor:** “Does anything make it better when you have the pain?”

**Patient:** “Yes, when I sit and rest for a few minutes.”
Doctor: “What happens when you walk fast or climb stairs?”
Patient: “Oh, I know not to do that to keep the pain from returning.”

**SIQORAAAA: Associated Manifestations**

Associated manifestations are symptoms that commonly occur in the diagnoses you are considering. Negative findings are just as important as positive findings. These are symptoms that a patient might have based on the diagnosis you have made. If you do not have a diagnosis in mind yet, you can ask good associated-symptom questions based on the chief complaint and the preceding history alone.

For example, if you suspect that a patient with chest pain has acute myocardial infarction, you would also ask about palpitations, syncope, shortness of breath, diaphoresis, nausea, and vomiting.

However, if you have no idea what was causing the chest pain, your list of associated symptoms would be similar but a bit longer. To those listed above, you might add cough, sputum, and fever.

**Associated manifestations for cough:** Fever, sputum, shortness of breath, chest pain, hemoptysis.

**Associated manifestations for joint pain:** Redness, swelling, heat, and loss of function are the signs of inflammation.

Don't forget to ask about rash and fever in joint-pain cases. This may be a tipoff that you're dealing with a rheumatology case, specifically systemic lupus erythematosus.

For an abdominal pain case, try asking about fever, anorexia, emesis, diarrhea, dysuria, and jaundice. Add the question, “Are you passing gas?” if you suspect bowel obstruction.

Associated-manifestation questions can help you confirm diagnoses already in mind, or help you think of the diagnosis for the first time.

Be very careful here not to ask multiple questions at once. It is fine to ask a series of brief closed-ended questions.

**Doctor:** “Do you have any loss of appetite?”
**Patient:** “No.”
**Doctor:** “How about any vomiting?”
**Patient:** “No.”
**Doctor:** “Diarrhea?”
**Patient:** “No.”
**Doctor:** “Have you noticed any yellowing of the skin?”
**Patient:** “No.”
**Doctor:** “Are you having any problems urinating?”
**Patient:** “Yes.”
**Doctor:** “Tell me about it.”
Patient: "I have to go urinate every 2 hours, but there are only a few drops. Once I saw blood."

Doctor: "Any burning?"

Patient: "Oh, yes!!!"

You’ll notice that the doctor above used closed-ended questions until she got a positive response. Then she used the open-ended “Tell me about it” question to elicit more information about the symptoms. When the patient was finished, the doctor went back to closed-ended questions to get the remaining urinary questions answered.

Specific Phrasing for Each Part of the History: PAMHRFOSS

PAMHRFOSS: Previous Episodes of the Chief Complaint

“Have you ever had this before?”

You may already know the answer to this important question from asking about the symptom’s frequency during the Onset questions. If you find yourself asking this question earlier in the interview, that is completely fine. This is just a memory device to make sure that you know this information before you leave the patient’s room.

If a patient has multiple episodes of identical recurrent headache, for instance, the diagnosis is more likely to be migraine or muscle contraction headache. If it’s a new-onset headache in an older adult who doesn’t typically have headaches, then consider other diagnoses such as temporal arteritis, tumor, hydrocephalus, or any hemorrhage.

PAMHRFOSS: Allergies

“Do you have any allergies?”

This is the basic question that must be asked of the patient in every case. All patients need to be asked about drug allergies. Even though there is no treatment with drugs on the exam, it is essential to ask—and later document—this information. When this question is asked, patients frequently think about prescription medication allergies first, and they may or may not tell you about allergies in other categories. The four categories are:

- Medications
- Foods
- Plants or animals
- Environmental sources

If the case might be that of an allergic reaction—a rash, shortness of breath, runny nose, watery eyes, anaphylaxis, bee sting—a more detailed allergy history is indicated.

“Do you have any allergies to prescription medication?”
“How about any bad reaction to over-the-counter pills?”
“Any bad reactions to food?”
“Do you have any allergies to animals or plants?”

If you aren’t sure you covered all the categories, you may also ask:

“Anything else you can tell me about allergies?”
PAMHRFOSS: Medications

“Are you taking any medications?”

Medication history is essential to all histories. By knowing the medications that a patient takes every day, the physician has a good idea of what the chronic illnesses are going to be. The physician needs to know all drugs the patients are taking in addition to the prescription medication(s). The three categories are:

- Prescription
- Over-the-counter (OTC)
- Vitamins and herbs

A more complete line of questioning for medications is the following:

- “Do you take prescription medicines?”
- “How about over-the-counter pills?”
- “Do you take any vitamins or herbs?”

For most cases, you don’t need the dose, frequency, or route. You need only the name of the drug. Use whatever name the patient gives you; the trade name or generic name is acceptable.

If you are not familiar with a particular medication, ask the patient why he is taking it. Also, many medications are prescribed for multiple indications. This question is also a natural lead-in to the past medical history that comes next.

- “What do you take that for?”

If you still do not recognize what the patient is saying, ask:

- “Could you spell that for me, please?”

If the patient seems to be having a hard time remembering the names of his medicine(s), ask if he has the bottles with him. If he does, you can simply read the labels.

It is not a sign of weakness to keep asking questions until you are sure of the medications. It shows the patient you are concerned enough to understand his situation completely.

Checking compliance is important in some cases. Some patients on the exam will be sicker because they are not taking their medications regularly. The classic example here is the chronic congestive heart failure patient who stops taking his medicine and now is short of breath.

**Doctor:** “Are you taking the Lasix regularly?”

**Patient:** “Well, no—I stopped it 2 weeks ago.”

**Doctor:** “When did the shortness of breath start?”

**Patient:** “Just in the last 3 or 4 days.”

With this history, you would be justified to include “noncompliance with medications causing CHF exacerbation” in your differential. Compliance is also checked because medicine *can* make you sick! Some patients take their medicine exactly as prescribed.
### Common Medications and Their Side Effects

**Nonsteroidal Anti-inflammatory Drugs (NSAIDs)**
- **Common names**: Motrin, ibuprofen, naproxen
- **Adverse reactions**: Gastrointestinal (GI) bleeding, ulcer, allergic reaction, renal insufficiency

**Diuretics**
- **Common names**: Lasix, Furosemide, HCTZ, hydrochlorothiazide, spironolactone, Bumex
- **Adverse reactions**: Renal failure, hypotension, electrolyte disorder, syncope.
  Gout is caused by thiazide diuretics.

**Digoxin**
- **Common names**: Digoxin/Lanoxin
- **Adverse reactions**: Arrhythmias, headache, dizziness, fatigue, nausea/vomiting

**Beta Blockers**
- **Common names**: Atenolol, metoprolol, Toprol XL (anything that ends in “-ol”)
- **Adverse reactions**: Bradycardia, depression, erectile dysfunction, hypotension, wheezing

**ACE Inhibitors/Angiotensin Receptor Blockers (ARBs)**
- **Common names**: Lisinopril, captopril, Avapro (irbesartan), enalapril
- **Adverse reactions**: Renal failure, hyperkalemia, cough, angioedema

**SSRIs**
- **Common names**: Fluoxetine, Prozac, Paxil
- **Adverse reactions**: Confusion, fever, anxiety, hyperreflexia, tremors, insomnia, tachycardia, hypertension (serotonin syndrome)

**Statins**
- **Common names**: Atorvastatin (Lipitor), simvastatin (Zocor)
- **Adverse reactions**: Rhabdomyolysis—muscle pain, renal failure. Liver failure—jaundice

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and as a result have side effects. There certainly could be a case of side effects from medication presented to you.

As with the noncompliance case, find out the timeline of when the medicine was started or dosage was increased, and when the side effects began.

Patients also commonly take herbal medications to self-treat conditions. It may be useful to know a few common preparations and why patients might take them. Of course, to be sure, you should ask the patient why he is taking it.

- Saw palmetto: benign prostatic hypertrophy
- Cranberry: urinary tract infection
- Echinacea: upper respiratory infection
- Ginseng: stress and memory
- St. John’s Wort: depression
Past Medical History (PMH)

The PMH can be divided into four components:

1. Hospitalizations (H)
2. Major illness (I)
3. Significant trauma (T)
4. Surgical history (S)

Hospitalizations

“Have you ever been hospitalized?” or “Have you ever stayed overnight in the hospital?”

You need just a one- or two-word description of why the patient was hospitalized. There is no need for the name of hospital, attending physician, or date. If a hospitalization, surgery, or procedure was recent (i.e., within the last month), it’s possible that the current case may more likely be a complication or progression of disease.

Major Illness

“Have you ever had any major illness?”

In questioning adult patients about risk factors, ask about specific diseases individually:

“Have you ever had high blood sugar?”
“Have you ever had high blood pressure?”
“How about high cholesterol?”

Make sure you wait for the patient to answer “Yes” or “No” before asking the next question.

Trauma

“Have you ever had any major injuries?”

Usually, if there have been major injuries, you will find out about them when asking about hospitalizations or surgery. If it is a mental-status-change case, you could phrase the question as follows:

“Have you had any head injuries?”

Surgery

“Have you ever had any operations?”

Record on your Note all of the operations the patient has had. Not all operations are performed in hospitals these days, so ask this even if you already know all the hospitalizations.

Occasionally, during the physical exam you will find a surgical scar you did not expect. Ask the patient the following:

(Pointing to or touching the scar) “What is this scar from?”

Be sure to pay attention to what the patient is telling you.

Doctor: “Have you ever been hospitalized?”
Patient: “Yes, I had my gallbladder out 5 years ago. That’s it.”
Doctor: “Have you ever had any major illness?”
Patient: “No.”
Doctor: “Have you ever had any bad injuries?”
Patient: “No.”
Doctor: “Have you ever had any operations?”
Patient: “Yeah, I told you about the gallbladder, weren’t you listening?”
Doctor: “I’m sorry, I meant any other operations.”

However, this miscommunication could have been avoided by asking the following:

Doctor: “Besides the gallbladder, have you had any other surgery?”

**PAMHROSS: Review of Systems (ROS)**
Review of systems is the time to ask screening questions. It is the time to see if there are other major problems that you have not yet uncovered. You can ask about any organ system that you feel is relevant, but focusing on three systems is sufficient for most cases. Those three main categories are the following:
1. Urinary
2. Gastrointestinal
3. Sleep

**Urinary ROS Questions**
“Do you have any problems urinating?”
If the patient says “No,” go on to another organ system or the family history. If she says “Yes,” go through your urinary complaint questions.

“How often do you urinate?”
“How many times do you get up at night to urinate?”
“Do you have any burning with urination?”
“Any blood?”
“Is the stream weak?”
“Do you ever have any accidents?”

If the chief complaint was dysuria, all of the questions above would have been asked in the HPI.

**Gastrointestinal ROS Questions**
Two high-yield questions to ask the SP about weight and diet are the following:

“Has there been any recent change in your weight?”
“Are you on any special diet?”

The diet question frequently uncovers vegans with B12 deficiency.

Have prepared by Test Day the short differential for weight gain and weight loss:

- *Weight gain* can commonly be from depression, eating disorders, hypothyroidism, Cushing’s, and edematous states such as liver failure, heart failure, or nephrotic syndrome.
• Weight loss is seen with depression, eating disorders, cancer, hyperthyroidism, and amphetamine use, as well as many chronic diseases.

**Sleep ROS Questions**

“Has there been any change in how much you sleep?”

• *Increased sleep* may be due to depression, hypothyroidism, sleep apnea, or drugs.
• *Decreased sleep* may be due to depression, hyperthyroidism, mania, or drug use.

**PAMHRFOSS: Family History**

The family history is relevant only if the diagnosis you are considering has a genetic or familial component. Do not ask the family history if it isn’t relevant. If you do need a family history, do the transitional statement first. Then ask as many of the following examples as are appropriate.

“Does anyone in your family have what you have?”

“Does anyone in your family have high blood sugar?”

“How about high blood pressure?”

“Does anyone in the family have any serious illness?”

In some cases it may be important to express condolences. However, it is not generally necessary to express condolences to the patient about the death of a parent many years ago. Do offer condolences if the death was less than a year ago or if the patient's facial expression suddenly becomes sullen.

**Patient:** “My mother died last month.”

**Doctor:** “Oh, I’m so sorry.”

**Patient:** “Thank you.”

**Doctor:** “What health problems did she have?”

**Patient:** “Pancreatic cancer.”

**Doctor:** “And how is your father’s health?”

**PAMHRFOSS: Obstetrical and Gynecology History**

You should ask about Last Menstrual Period (LMP) with all women past the age of menarche; however, only women with complaints of abdominal pain, abnormal vaginal bleeding, dysuria, discharge, and perhaps syncope (ectopic pregnancy) will require a more detailed Ob/Gyn history.

**Obstetrical History**

How to determine a patient’s GPA status:

\[
\begin{align*}
G & = \text{Number of times pregnant; ask “How many times have you been pregnant?”} \\
P & = \text{Number of live births; ask “How many times have you given birth?”} \\
A & = \text{Number of miscarriages and abortions; ask “Have you had any miscarriages or abortions?”}
\end{align*}
\]
Do not use the terms "miscarriage" and "abortion" interchangeably when talking with patients. To the lay public, a miscarriage is a spontaneous abortion, and an abortion is an elective termination of the pregnancy.

For example, G2P1 describes a woman who is pregnant now and has had one live birth. G3P2Ab1 describes a woman who is not pregnant now and has had two live births and one miscarriage or abortion.

**Gynecological History**

Components of a comprehensive gynecological history are the following:

- Regularity
- Cramps/pain
- Flow
- Cycle length
- Age of menarche/age of menopause
- Spotting
- Vaginal discharge
- Last Pap smear

Suggested questions are:

- “When was your last menstrual period?”
- “Was it normal?”
- “Any change in your period recently?”
- “Do you have a period every month?”
- “How long between periods?”
- “Are you regular? How many days do you use pads or tampons?”
- “On a heavy day, how many pads or tampons do you use?”
- “When did you start having periods? When did you stop menstruating?”
- “Any mood swings or irritability around your period? Anything else?”

**PAMHRFOSS: Sexual History**

The sexual history or parts of the sexual history are needed only if they are relevant to the case, especially if you think the patient could have a sexually transmitted disease. Also, ask yourself if sexual function could be compromised by the diagnoses you are considering. Examples of this are angina precipitated by sexual intercourse; or erectile dysfunction caused by depression, diabetes, or beta blockers. The key is not to suddenly become nervous when asking these questions. Practice them over and over until you can ask them without embarrassment.

Standard sexual history questions are the following:

- “Are you sexually active?”
- “Do you use contraception?”
- “How many sexual partners have you had in the last six months?”
- “Are your partners men, women, or both?”
- “Have you ever been tested for HIV?”
- “Have you ever had a sexually transmitted disease?”
- “Do you have any concerns about sexual function?”
PAMHRFOSS: Social History
Taking a complete social history consists of asking about the following:

- Tobacco
- Alcohol
- Recreational drugs
- Diet (if not asked about in ROS)
- Exercise
- Work life
- Home life

Depending on the case, ask about parts or all of the social history.

**Tobacco**
An efficient way to determine smoking history is to ask the following:

**Doctor:** "Have you ever used tobacco products?"

**Patient:** "Yes, I smoked for 30 years and stopped last week. I also stopped using cigars and chewing tobacco last week."

**Incorrect:** "Do you smoke?"

If you asked the same patient, "Do you smoke?" he may reply "No," because he quit last week.

Even if the patient had just recently stopped smoking, he might still answer, "No, I don’t smoke." In this case, you would miss the entire tobacco history!

If the patient has a disease that is caused or exacerbated by smoking, it is helpful to know the total lifetime exposure.

**Pack-Years = (Number of Packs Per Day) × (Number of Years)**

So 20 pack-years could mean 20 years at 1 pack per day or 40 years at one-half pack per day.

If the chief complaint were that the patient wants to receive smoking cessation help, you would need to know all the details of when he started to smoke, what he has tried to do in the past to stop, and what methods of quitting have and have not been successful for him.

**Alcohol**
When will you need to counsel your patient to quit alcohol? You can certainly advise "No alcohol" when it is affecting your patient’s health (a jaundiced patient with hepatitis) or when there is a medical condition that requires the patient not to drink (a woman who is trying to conceive or who is pregnant).

If the patient tells you he is a "social drinker," it is hard to know whether that means one sip of champagne on New Year’s or a quart of whiskey per day. A good way to ask about alcohol use is the following:

**Doctor:** "Do you drink alcohol?"

**Patient:** "Yes."

**Doctor:** "How much alcohol do you drink?"

"Binge drinking" is loosely defined as more than five drinks (men) or four drinks (women) on any one occasion.

One drink is:

- 1 oz of liquor, or
- 4 oz of wine, or
- 12 oz of beer.
Quantify the number of alcoholic drinks your patient ingests a day. It doesn’t matter if the active ingredient is delivered in beer, wine, or whisky. If a man says he has more than two drinks a day, or a woman more than one, ask the CAGE questions.

A positive response to any of the CAGE questions or binge drinking suggests there may be an alcohol problem, and counseling should be advised. If you have already determined the patient meets the definition of binge drinking, there is no need to ask the CAGE questions. You already know there is a problem and can go directly to alcohol counseling.


**Recreational Drug Use**

The correct way to ask about drug use is the following:

*Doctor:* “Do you use recreational drugs?”

*Patient:* “Yes.”

*Doctor:* “What do you use?”

*Patient:* “Cocaine, when I can get it.”

*Doctor:* “How do you take it?”

*Patient:* “I smoke it.”

*Doctor:* “When did you last use?”

*Patient:* “About 20 minutes ago.”

If the patient uses recreational drugs, find out the specific names, what route is used (ingested, smoked, snorted, or IV), and when the drug was last used. Many patients also need to be asked if they are willing to quit, and you should find out what methods of quitting they have tried in the past.

SPs do make an effort to avoid using slang words in their speech. However, these phrases are in common usage and so it is worthwhile for you to understand their meaning. If you don’t understand the street name of a recreational drug it is fine to ask the patient.

*Patient:* “I use coke sometimes.”

*Doctor:* “Is that cocaine?”

*Patient:* “That’s right, Doc.”

**Common names for recreational drugs:**

- **Alcohol:** Booze, brews, brewskis
- **Amphetamines:** Speed, crank, crystal meth
- **Cannabis:** Hash, hashish, dope, pot, reefer, bud, ganja, weed, grass
- **Cocaine:** Blow, coke, toot, nose candy, crack
- **Downers:** Generic street name for benzodiazepines or barbiturates
- **Heroin:** Horse, brown sugar, smack
- **Phencyclidine:** PCP, angel dust
- **‘Roids:** Anabolic steroids in general
**Exercise**

This is good question for anyone who comes in for a general checkup, annual physical, or periodic health exam. It is not necessary for a patient who presents with acute problems.

“How much exercise do you get?”

**Work Life**

There are situations where the kind of work the patient does may give you clues about the diagnosis. A coal miner who is short of breath, for instance, may have pneumoconiosis. Also, the patient’s level of stress is important. Note that the stress level is what the patient reports, not how stressful you determine the job to be.

- **Doctor:** “Do you work?”
- **Patient:** “Yes, I’m a coal miner.”
- **Doctor:** “Are you having any stress from work?”

**Home Life**

There are two things you will need to know about the patient’s home life:

- Who does the patient live with?
- Is there any stress at home?

You can ask about home life in the following way:

- **Doctor:** “Who do you live with?”
- **Patient:** “My wife and our three teenagers.”
- **Doctor:** “Is there any stress at home?”
- **Patient:** “No, just the usual stuff with kids.”

**PEDIATRIC AND ADOLESCENT HISTORIES**

The pediatric cases on Step 2 CS will not have any patients for you to exam. These will be surrogate cases, meaning that the parent or caretaker will come to the office or call to speak to you about the patient who is not present.

For these cases, the advantage is that no physical exam is possible. Simply leave blank the Physical Exam portion of your note. The Board knows you cannot examine someone who is not present. The adolescent case will probably be a concerned parent acting as a surrogate. It would be possible to hire SPs in their early twenties to portray adolescents as well. You have permission to talk too, and exam and order tests on everyone you encounter in Step 2 CS.

**Pediatric History**

The younger the child, the more important the pediatric history. Once the child is an adolescent, the pediatric history is less relevant than the adolescent questions. A good way to organize your thoughts is to complete the usual introduction. Find out the name
of the patient, the name of person you are speaking with, and the relationship between
the family members. Complete the relevant parts of SIQORAAA PAMHRFOSS and
then the relevant parts of the pediatric and/or adolescent histories.

Pediatric history consists of six subparts:

- Prenatal
- Birth
- Neonatal
- Feeding
- Development
- Routine care

**Prenatal History**
Sample questions (of the mother) could include the following:

“How was your health during pregnancy?”
“Did you get regular prenatal checkups?”
“Did you smoke or drink during pregnancy?”
“Were there any problems with swelling or high blood pressure?” (preeclampsia)

**Birth History**
You’ll want to know if the child was full-term or pre-/post-mature, as well as how he
was delivered.

“Was the baby full-term?”
“Did you have a Cesarean section?”
“Were there any problems with your labor?”
“How much did the baby weigh at birth?” (All mothers know this information.)

**Neonatal History**
Typically, newborns stay in the hospital a day or two. A longer hospital stay likely indi-
cates a problem.

“How long did you and the baby stay in the hospital after delivery?”
“Did the child have any medical problems when she was born?”
“Any problems with breathing?”
“Any problems with feeding, having bowel movements, or infections?”
“Any problems with yellow skin?”

Do not ask the mother for the Apgar scores.

**Feeding History**

“Was the child breast-fed or bottle-fed?”

If the child is a newborn, ask about the success with breastfeeding.

“Are you having any problems breastfeeding?”
If the newborn is bottle-fed, get more details.

“What formula are you using?”
“How many ounces does the baby drink? How often? What is the feeding schedule?”

If the child is a bit older, ask about his eating habits:

“When did the child start eating solid food?”
“How is her appetite?”
“Is she taking a pediatric multiple vitamins?”
“Does she have any food allergies?”

Developmental History
We do not have a growth chart on Step 2 CS, so you will have to ask about growth.

“Has your child been gaining weight normally?”
“Has there been any sudden gain or loss of physical growth?”

Ask about developmental milestones as appropriate. This is more important for a toddler and less important for a 12-year-old with an earache.

“At what age did the baby start to say a few words? To social smile? To roll over? To walk?”
“At what age was the baby toilet-trained?”

Routine Care
This consists of two questions:

“Are the child’s immunizations up to date?”
“Is the child getting routine checkups?”

If the mother happens to have the immunization record in her purse, ask to see it.

Adolescent History
The typical adolescent case will hinge on the main problems of an adolescent. The cases you will most likely see will mimic real-life problems and will center on issues such as self-esteem, eating disorders, and/or drug use.

It might be easier if you break this down into the following categories: body image, eating disorders, education, friends and activities, drugs, sex, and suicide/depression. If you ask a little about each category, you have covered a lot of potential problems.

Body Image
“How is your child’s body image?”
(to the child) “Do you feel bad about yourself? Do you like your body?”

Eating Disorders
“Has your teen’s weight changed?”
“How much does your child exercise?”
“Does he frequently go to the bathroom during dinner?”
Education

"Has there been any change in your child's grades?"
"Is your child interested in school?"

Friends and Activities

"Do you know your child's friends?"
"Is your child secretive about his friends?"
"Does your child have friends and activities?"

Drugs

"Does your child drink alcohol?"
"Does he use recreational drugs?"
"Does he smoke cigarettes?"

Sex

"Have you talked to your child about sex?"
"Is your child sexually active?"
"Have you asked your child if he is sexually active?"
"Have you discussed contraception?"
"Has your daughter had the new shot that prevents cervical cancer?"

Suicide/Depression

"Does your child seem sad or hopeless?"
"Does your child seem to want to harm himself?"
"Does your child seem uninterested in activities?"

PHYSICAL EXAM

An Overview

<table>
<thead>
<tr>
<th>HEENT</th>
<th>CHEST</th>
<th>NEURO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection</td>
<td>Inspection</td>
<td>Mental status</td>
</tr>
<tr>
<td>Palpation</td>
<td>Palpation/Respiratory excursion</td>
<td>Cranial nerves</td>
</tr>
<tr>
<td>Eyes</td>
<td>Tactile fremitus</td>
<td>Motor</td>
</tr>
<tr>
<td>Ears</td>
<td>Percussion</td>
<td>Sensory</td>
</tr>
<tr>
<td>Nose</td>
<td>Auscultation</td>
<td>Reflexes</td>
</tr>
<tr>
<td>Throat</td>
<td></td>
<td>Cerebellar</td>
</tr>
<tr>
<td>Lymph glands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABDOMEN</td>
<td>CHEST</td>
<td></td>
</tr>
<tr>
<td>Inspection</td>
<td>CHEST</td>
<td></td>
</tr>
<tr>
<td>Auscultlation</td>
<td>Lying Back, Head Elevated 30 Degrees</td>
<td></td>
</tr>
<tr>
<td>Percussion</td>
<td>Jugular venous pressure (JVP)</td>
<td></td>
</tr>
<tr>
<td>Palpation</td>
<td>Point of maximum impulse (PMI)</td>
<td></td>
</tr>
<tr>
<td>–Light and deep</td>
<td>Auscultate a second time</td>
<td></td>
</tr>
<tr>
<td>–Rebound tenderness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The physical exam for the USMLE Step 2 CS is very focused on the patient's presenting complaint. This means simply that you should not do a complete head-to-toe physical exam like we were all trained to do in medical school. For most cases, you will have 4 to 5 minutes to complete the exam. No two physical exams of your 12 patients will be the same.

For the USMLE Step 2 CS, you can divide the physical into six systems.

1. HEENT (head, eyes, ears, nose, and throat)
2. Chest
3. Cardiovascular
4. Abdominal
5. Neurological
6. Joints

Your goal is to perform physical exam maneuvers that are most likely on the SP's Physical Exam Checklist. Do the most relevant organ system first. For example, if the chief complaint is abdominal pain, you'll start with the abdominal exam. If the chief complaint is headache, start with the HEENT and neurological exams. Generally speaking, you want to perform a complete or near-complete exam on the most relevant organ systems for your case.

After completing your exam of the most important organ systems, go on to the secondary organ systems. You generally don't have to do all of the physical exam maneuvers on the less important secondary organ systems for that case. So for abdominal pain, the secondary organ systems might be chest, cardiovascular (CV), and HEENT. For the headache case, chest and CV may be the secondary organ systems. Some organ systems you may skip completely on some cases.

After you finish taking the patient's history, you will wash your hands and say the following:

“Now I'll do your physical exam. Let me first wash my hands.”

Handwashing
Before you touch the patient for a physical exam, it is mandatory that you wash your hands. You should not wash your hands prior to giving the drape or shaking hands during the introduction.

Simply step on the foot pedal beneath the basin and the water will start. Take a squirt of soap from the dispenser and rub your hands under the water for 3 seconds. Take your foot off the water pedal, grab some paper towels, and dry your hands completely. Drop the paper towels into the garbage can and proceed with the physical exam.

Do not touch your own face after you wash your hands. If you sneeze or rub your nose, re-wash your hands before proceeding to touch the patient again.

Wearing gloves is not a substitution for washing hands. You should put on gloves after washing hands only if you have an open wound or infectious disease on your hands. Of course, if you are planning to touch the patient’s saliva, you should wear gloves to protect yourself. See if you can get comfortable examining the pharynx without ever coming into contact with saliva. That way you can save some time and not wear gloves.
The Patient Gown and Appropriate Draping

The drape should be given during the introduction at the beginning of the encounter. Otherwise you will lose this easy point from your CIS score.

The SP will be wearing a patient gown that ties in the back, and will be wearing undergarments. It is your job to keep the patient covered as much as possible; uncover only the part of the torso you need to examine. Then replace the gown to protect the patient’s modesty.

The abdomen and chest should not be exposed simultaneously. To examine the abdomen, you or the patient must raise the gown. Raise it up to an inch or so above the costal margin and do your exam. Replace the gown when you are finished with the abdominal exam.

To examine the chest you must lower the gown to an inch or so below the costal margin. This is for both male and female SPs. The gown must be replaced and retied when the chest exam is finished.

You or the patient can lower and raise the gown, depending on the circumstances. Let the patient know what is going to happen next.

   Doctor: “May I untie and lower your gown so I can examine your chest?”
   Patient: “Yes.”

Offer to remove the gown when it would be difficult or painful for the patient to do so herself. Perhaps she has a broken clavicle or is in respiratory distress. If the patient is in no distress, it is fine for her to lower her own gown.

   Doctor: “Could you please untie and lower your gown?”
   Patient: “Okay.”

Remember to retie the string ties on the back of the gown as soon as the gown is replaced.

Getting the patient undressed is the only time in the exam that we ask for permission. Please wait for the patient to answer before you start undressing her! You would also need permission to remove shoes and socks. This is a common CS exam challenge—you won’t find a diabetic foot ulcer (simulated physical finding) unless you look.

If the patient refuses to cooperate, explain the importance of the physical in order to determine the cause of her condition.

Physical Exam Maneuvers You Are Never Allowed to Do

You are never permitted to do the following on the Step 2 CS exam:

- Female breast exam
- Internal pelvic exam
- Rectal exam
- Genital or genitourinary exams, including inguinal hernia exam
- Corneal reflex exam
This list of forbidden maneuvers is part of the Doorway Information on each case for you to review. You also will never test the gag reflex or sense of smell.

A general guideline is that parts of the body covered with underwear are off-limits. If an SP has his underwear pulled up above the umbilicus and you need to examine his RLQ, you could ask him to lower his underwear slightly to the top of the iliac crests so you can do an exam.

Moreover, do not hurt your SP. The SP is subject to multiple exams every day. It is helpful for you to realize what is most uncomfortable for the patient.

Some other points to remember:

- Otoscopy might be the most potentially dangerous maneuver you are asked to perform. The key here is to not scratch the ear canal and give the patient a bloody ear. When you place the speculum into the external auditory canal, make sure not to insert it so deeply that the tip of the speculum touches the skin.

- When examining the pharynx, use a clean tongue blade and place it only one-third to one-half of the way back on the visible portion of the tongue. This way you will not gag your SP but will still be able to inspect the pharynx.

- Be sure to keep your fingernails off the patient’s skin.

- Be sure your hands are dry after you wash them before touching the patient.

- Use a gentle touch. There is no deep palpation of the abdomen.

- When checking for costovertebral angle (CVA) tenderness, do not “punch” your patient. A simple tap will do. On the pyelonephritis case, the SP will give you a simulated physical finding of pain.

Simulated Versus Real Physical Findings

This is probably the hardest concept on the exam, as many of the patients don’t actually have the disease they are portraying. The SPs are skillfully acting.

Accept All Physical Findings

Accept all actual physical findings on patients as real, with the exception of the vital signs. SPs are sometimes hired specifically to portray different diseases. The Board will hire some SPs who actually have physical findings, perhaps someone who has arthritis, old surgical scars, Bell’s palsy, atrial fibrillation, or thenar muscle wasting from carpal tunnel syndrome. Certainly this is not a complete list.

The vital signs are the heart rate, temperature, blood pressure, and respiratory rate. Always use the vital signs from the Doorway Information when writing your note. Even if you take the SP’s blood pressure yourself, write in your Note the blood pressure listed on the doorway. When considering the differential diagnosis and diagnostic workup, think only about the doorway vital signs.

Many patients will have simulated physical findings. It will be obvious that the SP is “acting” or pretending to have physical findings. Accept all of these simulated physical
findings as real. An example of this is a SP pretending to have an acute abdomen. When you palpate the abdomen, the SP will grimace and possibly complain of pain. It will probably be obvious that the patient is faking this reaction. It is a simulated physical finding. Write on your Note, “+ Abd tenderness” and think of the diagnosis that explains this simulated physical finding. Do not think that the patient is exaggerating or feigning illness; it is highly unlikely your cases will involve malingering.

It is easy for an SP to simulate weakness, abnormal reflex or sensory exam, and gait, among other things, but some physical findings are harder to simulate. If a patient is supposed to have a loud murmur due to Staphylococcus endocarditis, it would be nearly impossible to hire an SP who has severe tricuspid insufficiency. When you listen you may actually hear normal heart sounds. The patient will tell you the following:

**Patient:** “I know I have a heart murmur.”

**Doctor:** “Thank you for telling me.”

In this case, do the following:

- Write in the history: “Pt with hx of heart murmur”
- Write in the physical: What you actually heard (“S1 S2 – nl, no rub, gallop, and murmur”)
- Write in the diagnosis: “Endocarditis”
- Write in the workup: Tests for endocarditis (“blood culture × 3; echocardiogram,” etc.)

The sicker a patient the SP is portraying, the more often these very artificial scenarios occur when some physical exam findings are missing.

**Notice All Aspects of the SP’s Presentation**

Smell your patients. They may smell of beer if they are supposed to be intoxicated, or fruity if they are portraying diabetic ketoacidosis. Pay attention to their behavior. If the patient is doing something unusual when you enter, that is part of the case. The SPs are not making up things as they go along—they are following a script.

**Inspect the Skin Carefully**

Inspection is important! Inspect the skin and comment on any simulated physical findings that need clarification. Patients may actually appear sweaty by spraying on water before you enter the room. You may see discolorations or marks on the skin that may relate to the patient’s condition:

- White powder: Pallor, anemia
- Yellow powder: Jaundice
- Purple: Ecchymoses, bleeding disorder, trauma
- Red: Infection, inflammation

Let’s consider a jaundice case. The SP will have some yellow powder or makeup dabbed on her skin. She isn’t jaundiced in real life, so the sclera will be normal. Neither will the yellow color be all over the body, as it would with a real patient. So you’ll have to deduce that this is the jaundice case.
Doctor: “Let me take a look at your skin. I see some yellow color here.” (Pointing to makeup)

Patient: “Oh, yes, I’ve noticed my skin has been yellowing lately.”

The doctor here would receive credit for performing Inspection because he told the patient what he was looking for and what he noticed. The SP will role-play and confirm suspicions of jaundice.

On the Note, write “Pt has jaundice.” If you think the sclera exam is important, write down exactly what you saw: “Sclera clear.” This can be confusing, though it is not the Board’s intent to trick you.

Properly Examine the SPs

Even though you are going to perform a brief and focused examination, it’s important to do each step as you would for a real patient. This means actually listening to the heart and lungs for a few seconds. It’s possible for some SPs to have crackles or wheezes. Try to appreciate in 3 seconds whether the patient has normal or hyperactive bowel sounds.

Actually do the reflexes, motor strength testing, sensory exam, and HEENT exam. Inspect, auscultate, percuss, and palpate!

Don’t Worry about Missing Subtle Physical Findings

It will be very difficult to test you on certain physical findings because they are transient, are faint, or require better equipment to appreciate. The physical findings you will be expected to see generally will not be subtle. Hearing a 1/6 diastolic murmur is not on the Physical Exam Checklist, whereas completing heart auscultation in four different locations on the chest wall will be on the Physical Exam Checklist for certain cases.

Another source of anxiety is ophthalmoscopy. Relax. As long as you are using the ophthalmoscope correctly, you will be fine. You may not see much, aside from the red reflex. Without a dilated pupil and a dark room, it is unrealistic to expect a detailed exam. Simply write down whatever you do see of the retina.

Position the Patient

You may examine the patient from either side of the bed. Try to minimize the number of times a patient has to sit up, lie back, and stand, as having the patient move is time-consuming. It is better, however, to move the patient multiple times than to skip vital physical exam maneuvers that will be on the SP’s Physical Exam Checklist.

Communicate with the Patient during the Physical Exam

Tell the patient briefly what you are going to do next as you go through the physical exam. Do not give the patient the results of your findings now (unless, of course, the patient asks). If you think of more historical questions, you can certainly intersperse them with your exam.

Use new tongue blades, ear speculums, and cotton balls on each patient. Throw away your garbage. Try not to put the tuning fork and reflex hammer in your pocket—it is very easy to leave the patient’s room with them. Also, always keep your stethoscope on your body. This way you will always leave the patient’s room with it in your possession.
Remember to undress the portion of the body you are going to palpate. Do not examine through the clothes.

You have already completed your focused physical exam and have the patient’s vital signs from the Doorway Information. A common question is: When should the doctor take the SP’s HR and BP during the exam? Since you are not going to use the results you obtain, the answer is: Very infrequently. Certainly, if an SP asks you to check the BP you would comply. Also, do take the blood pressure (BP) on any case where the patient is coming in for a blood pressure check. Otherwise, stay away from repeating the vital signs.

By the time you formally begin the physical exam, some of the exam may have already been completed. You already know the vital signs, you have an impression of the patient’s general appearance (GA), and you have noted any unusual patient behavior. You may already have noted obvious visible skin findings and any other physical findings. You may also have completed the mental status and psychiatric exams. Remember to write in your note all of these physical exam findings that you identified—you have completed some of the physical exam before you wash your hands.

**Remember the Order in Which to Do Your Physical Exam**

Start with the most relevant system first and do it almost completely. Then do the less important organ systems less completely or not at all.

**COMPLETE PHYSICAL EXAM BY ORGAN SYSTEM**

The most important and challenging part of the physical exam on USMLE Step 2 CS is to know what to include in a focused examination. You will have a limited amount of time. Each maneuver should relate to determining the likely and possible cause(s) of the patient’s symptoms, or to evaluating the patient’s condition.

**Abdominal Exam**

Do a complete abdominal exam when the chief complaint includes:

- Abdominal pain
- Vomiting
- Diarrhea
- Jaundice
- Urinary tract problem
- Pelvic pain

**Aspects of an Abdominal Exam**

- Inspection: Look for actual scars, hernias, or makeup
- Auscultation: Listen for 3 seconds in each of the four quadrants
- Percussion: Two taps each on four quadrants; tap out liver size if you are seeing a jaundice case, liver case, or CHF case
- Palpation: Palpate all four quadrants and the epigastric area for 3 seconds each
Special Tests
Perform these as needed, such as Murphy's sign for cholecystitis, CVA tenderness for kidney, and appendicitis maneuvers.

Phrasing for the Abdominal Exam
"I'm going to examine your belly. May I lift your gown?" Help the patient get comfortable, raise the patient's knees. The head of the bed may be raised 20 to 30 degrees (optional).

- Inspection: "I'm looking at your belly. Have you noticed any changes?"
- Auscultation: Make sure that the SP is aware that you are warming the stethoscope before you begin auscultation. "Now I will to listen to your belly;"
- Percussion: "Now I'm going to tap on your tummy;"
- Palpation: Palpate the area of suspected tenderness last; otherwise, palpate from lower quadrant to upper quadrant. Say, "I need to press on your belly now."
  - Do rebound tenderness palpation if you want to check for peritonitis. (No need to do rebound if the abdomen is nontender on palpation.) Positive rebound means the patient has more pain when you let go suddenly compared to when you push down slowly. Ask, "Does it hurt more when I push down or let go?"

Special Tests
**Murphy's sign:** Do this if you suspect cholecystitis. Place your hand gently under the right costal margin and ask the patient to take a deep breath. Positive Murphy's sign means the patient has pain with deep breathing. Say, "Take a deep breath, please."

**Costovertebral angle (CVA) tenderness:** Do this only if you suspect kidney stones, pyelonephritis, or other kidney pathology. You may perform this with the patient sitting, standing, lying supine, or lying on his side. Positive CVA tenderness means the patient complains of pain with a light tap. Say, "I'm going to tap on your back; please let me know if it hurts."

**Tests for appendicitis:** Do these only when you suspect appendicitis (RLQ pain) as part of your differential diagnosis.

**Rovsing's sign:** Positive Rovsing’s is pain in the right lower quadrant with palpation of the left lower quadrant. Ask, “Any tenderness?” (while palpating LLQ): If it hurts ask, “Where does it hurt?”

**Obturator sign:** Positive obturator sign means pain in the right lower quadrant with flexion of the hip to 90 degrees and rotation of hip. Say, “I'm going to uncover your leg and bend it.”

**Psoas sign:** Positive psoas sign means pain in the RLQ with flexion of the right hip against resistance. Say, “Please bring up your leg. Do you have any pain?”

*When you percuss and palpate, look at the patient's face. He will grimace to simulate abdominal pain.*
Chest Exam
Do a complete chest exam when the chief complaint includes:

- Cough
- Shortness of breath
- Chest pain
- Respiratory tract infection
- Sputum production

Aspects of a Lung Exam

**Inspection:** Check the patient’s hands for clubbing, cyanosis.

**Respiratory excursion:** To do this test, stand behind the patient. With the back of the gown open, tell the patient before you touch him, “I am going to push on your ribs.” Then place both hands on either side of the lateral chest wall and say, “Now take a deep breath.” Remember to say thank you after he complies.

**Palpation:** Check for chest wall tenderness.

**Tactile fremitus:** Examine both sides at once in three places on the patient’s back.

**Percussion:** Tap two times in six places on the back.

**Auscultation:** Check six places on the back, four on the front. Listen for crackles, rhonchi, wheeze, or rub (listen from side to side). Listen to the back at the base of the lungs, bilaterally. Listen to the left and then the right. Next, move up and medially just below the scapula. Listen on the left and then the right. Finally, move up to about T3 dermatome level and listen between the spine and the scapula on both sides.

Phrasing for the Lung Exam

“I need to look at your back and examine your lungs. May I untie and lower your gown?”

**Inspection:** “I’m going to take a look at your back and chest.”

**Respiratory excursion:** “I’m going to push on your ribs. Take a deep breath.”

**Palpation:** “I’m going to push on your ribs.” Check for chest wall tenderness. Palpate the spine, paraspinal muscles, and costovertebral angle tenderness as needed.

**Tactile fremitus:** “Please say, ’ninety-nine.’” When the patient speaks loudly, fremitus is increased over the major bronchi and in consolidation of pneumonia. Fremitus is decreased when the patient speaks softly, when the doctor’s hands are placed farther away from the major bronchi, and in pneumothorax or pleural effusion.

**Percussion:** “I’m going to tap on your chest.”

**Auscultation:** “I’m going to listen to your lungs. Breathe deeply in and out through your mouth.”
Common Pitfalls in the Pulmonary Exam

<table>
<thead>
<tr>
<th>Pitfall</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examining through clothing</td>
<td>Stethoscope should be placed directly to skin, not on underwear.</td>
</tr>
<tr>
<td>Placement of stethoscope</td>
<td>Don't examine over scapulae.</td>
</tr>
<tr>
<td>Not comparing sides</td>
<td>Be sure to examine and compare right side to left side at each dermatome level.</td>
</tr>
<tr>
<td>Not listening to a full breath</td>
<td>Listen to complete respiratory cycle on each side.</td>
</tr>
<tr>
<td>Distractions</td>
<td>Do not talk when you auscultate!</td>
</tr>
</tbody>
</table>

The first time you use the stethoscope in a case, a nice interpersonal skill is to warm up the stethoscope. Simply hold the bell between your hands and say, “I’ll warm this up for you. Next I’m going to listen to your …” (in this case, lungs). By the time you finish giving this explanation, go ahead and use the stethoscope even if it’s still a little cold. It’s the thought that counts here.

Cardiovascular Exam

Do a complete cardiovascular exam when the chief complaint includes:

- Symptoms to suggest a myocardial infarction
- Chest pain
- Shortness of breath
- Pedal edema
- Syncope
- Palpitations

Aspects of a Heart Exam

A complete heart exam includes two exams: one with the patient sitting up and one with the patient lying back at 30 degrees.

Phrasing for the Sitting Exam

Auscultation of neck bruit: “I need to listen to your neck sounds. Please take a deep breath and hold it.” Listen for no more than 3 seconds.

Palpation of the carotid arteries: “I need to check the pulse in your neck.” Note: Never palpate both carotid pulses simultaneously. You may complete this aspect of the exam in the lying-back position or sitting up.

Pulses: “I’m going to check your hands and feet.” Do radial, dorsalis pedis, and posterior tibial, side-to-side or simultaneously. Check for atrial fibrillation (irregularly irregular pulse). This is a good time to check hands for clubbing, cap refill. There is no need to check brachial pulse if patient has strong radial pulse.

Extremities: “I’m going to check your legs for swelling.”
**Auscultation of the heart:** “I’d like to listen to your heart. Please breathe normally.” Press the stethoscope to the skin, 3 seconds for each cardiac area. Listen to as near the aortic, pulmonic, tricuspid, and mitral areas as possible.

With female patients, ask “Could you please lift your breast” if the breast is preventing auscultation of the mitral area. Do not be concerned if you are not listening in exactly the correct location. Be sure not to place the stethoscope over the clothes or underneath the clothes.

**Phrasing for the Lying Back Exam**
The exam table should be at a 30-degree incline.

**Jugular venous distention (JVD):** “I’m going to look at the vein in your neck. Please look to your left.”

**Hepatojugular reflux:** Do this if your patient has possible congestive heart failure.

**Palpation of carotid arteries:** You may do the carotid exam now instead of in the sitting position.

**Point of maximum impulse (PMI):** “I’m going to press on your heart area.”

**Repeat auscultation:** Listen again to all four areas.

**Additional heart sounds:** You can turn patient on his left side to listen for S3, S4 or to palpate PMI if it cannot be felt from the supine position (consider this in a CHF case).

**Neurological Exam**
Do a complete neurological exam when the chief complaint includes:

- Headache
- Dizziness
- Balance or vision problem
- Numbness or tingling
- Psychiatric problem
- Memory problem
- Muscle weakness

**Aspects of a Neurological Exam**
- Mental status
- Cranial nerves
- Motor
- Sensory
- Reflexes
- Cerebellar
- Specific tests
Aspects of a Mental Status Exam
There are five parts to a mental status exam:

- Orientation
- Memory
- Attention and concentration
- Language
- Obeys commands

It’s best to complete all five parts of a mental status exam in patients with psychiatric disease, dementia, or altered mental status. You may limit the mental status exam to the Orientation only when you are not sure about the patient’s mental status.

Phrasing for the Mental Status Exam

Orientation (to person, place, and time):

“I’m going to check your memory now.”
“Could you please tell me your full name?”
“What kind of place are we in?”
“What is today’s date?”

Memory: For immediate recall, ask the patient to repeat three simple words. For delayed recall, ask the same three words a minute later. (cat, apple, table)

Attention and concentration: Ask the patient to spell the word w-o-r-l-d backward.

Language: Ask the patient to name objects you point out, such as a pen or watch. Alternatively, ask her to repeat the phrase “No ifs, ands, or buts.”

Obeys commands: Ask the patient to close her eyes. Be sure to have the patient open their eyes after they comply to your request.

Phrasing for the Cranial Nerve Exam

Cranial nerve 2: Use the Snellen eye chart to test vision. If the patient cannot see the eye chart, try holding up fingers to count. If that fails, see if the patient has light perception. Test peripheral vision by traditional confrontation.

Cranial nerves 2, 3: Check that pupils are round, equal, and reactive to light and accommodation (PERRLA). Check for direct and consensual reaction.

Cranial nerves 3, 4, 6 (extraocular movements): Let patients continue wearing their contacts or eyeglasses when checking visual activity. Say, “Please hold your head still and follow my finger with your eyes.” For 3rd-nerve palsy, there is ptosis, a large pupil, and the eye is turned out. For 4th-nerve palsy, the patient can’t look downward and inward. For 6th-nerve palsy, the eye is turned in.
Cranial nerve 5: For motor, say, “Please clench your teeth.” Place your hands on the jaw and feel the muscle contract. For sensory, use the cotton balls to test light touch. Test all three branches of the 5th nerve. Say:

“I’m going to touch your face lightly.”
“Does it feel the same on both sides?”
“Do you feel this?”
“Now please close your eyes. Do you feel this?”
“How about this?”
“Thank you. You may open your eyes.”

Cranial nerve 7:

“Show me your teeth and lift your eyebrows.”
“Please smile and show me your teeth.”
“Please raise your eyebrows.” (not going to test taste)

Cranial nerves 9, 10, 12: Say, “Stick out your tongue and say, ‘Ah!’” Check the palate for symmetrical movement (9th and 10th nerves). Check to see if the tongue goes out straight (12th nerve).

Cranial nerve 11: Say, “Now shrug your shoulders.”

Phrasing for the Motor Exam
A general screening motor exam is good for finding gross abnormalities in a stroke patient. Say:

“Squeeze my fingers.” (finger flexion is also median nerve)
“Pull me in.”
“Kick out, kick out.” (lower leg extension is also L4)

To begin the motor exam, say, “Now I’d like to check your muscle strength.”

In some cases you may only need to check the muscle strength in the upper extremities. In other cases, just check the lower extremities.
The Motor Exam

<table>
<thead>
<tr>
<th>Action</th>
<th>What It’s Testing</th>
<th>Possible Phrasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull arms in Flexion of forearm</td>
<td>C5, C6</td>
<td>“Now I’ll check your arm strength. Do this (demonstrate the action) and don’t let me push out.”</td>
</tr>
<tr>
<td>Push arms out Extension of forearm</td>
<td>radial nerve</td>
<td>“Do this (demonstrate the action) and push hard.”</td>
</tr>
<tr>
<td>Push wrists up Wrist extension</td>
<td>radial nerve</td>
<td>“Put your wrist like this (demonstrate the action). Don’t let me push down.”</td>
</tr>
<tr>
<td>Finger flexion</td>
<td>median</td>
<td>“Squeeze my fingers.”</td>
</tr>
<tr>
<td>Keep fingers together Finger adduction</td>
<td>ulnar nerve</td>
<td>“Put your fingers together like this (demonstrate the action) and don’t let me pull them apart.”</td>
</tr>
<tr>
<td>Keep fingers apart Finger abduction</td>
<td>ulnar nerve</td>
<td>“Spread your fingers apart and don’t let me push them together.”</td>
</tr>
<tr>
<td>Knee kick out Knee extension</td>
<td>L3-L4</td>
<td>“Next, I’ll test your leg muscles. Please kick out.”</td>
</tr>
<tr>
<td>Knee bend Knee flexion</td>
<td>S1</td>
<td>“Using your strength, can you pull back your legs?”</td>
</tr>
<tr>
<td>Foot bend up Ankle dorsiflexion</td>
<td>L5</td>
<td>“Point your foot back and hold it like that, using your strength.”</td>
</tr>
<tr>
<td>Foot bend down Foot plantarflexion</td>
<td>S1</td>
<td>“Step on the gas, hard.”</td>
</tr>
<tr>
<td>Hip flexion</td>
<td>L2-L3</td>
<td>“Pick your knee up” (While seated, dangling feet)</td>
</tr>
<tr>
<td>Hip extension</td>
<td>L4-L5</td>
<td>“Push your leg back down.”</td>
</tr>
</tbody>
</table>

Aspects of a Sensory Exam
It is important to do the sensory exam if the patient is complaining of numbness or tingling, or has a history of diabetics.

- Check distal sensation for any orthopedic injury. Start distal and work proximal.
- If you have checked distal sensation and it is intact, as a rule do not also check proximal sensation.

Upper Extremity
- Tip of thumb (C6 dermatome)
- Tip of middle finger (C7 dermatome and median nerve)
- Tip of fifth finger (C8 dermatome and ulnar nerve)
- Dorsum of web space of hand (radial nerve)
Lower Extremity
- Just above patella (L4 dermatome)
- Lateral lower leg (L5 dermatome)
- Lateral foot (S1 dermatome)

Phrasing for the Sensory Exam

**Light touch:** When testing light touch, use cotton balls and work from side to side.

“I need to check your sense of touch.”
“I’m going to touch your hands lightly.”
“Do you feel this? (pause) Does it feel the same on the other side?”

**Pain sensation** (use the cotton swabs or toothpicks in the room): If using cotton swabs (sharp/dull), break a new cotton swab in half. Say, “I want to test sharp and dull feeling: This is sharp, this is dull. Please close your eyes and tell me what you feel.”

With toothpicks, examine side-to-side, distal to proximal.

“Do you feel this?”
“How about here?”
“Is it the same or different?”

Do each foot, keeping each hand in one place, and work side-to-side. Move proximally if the patient can’t tell the difference.

**Position sense:** Test position and vibration sense for diabetics or those complaining of numbness. “Tell me if I’m moving your finger/toe up or down.”

For vibration sense, say: “I’m going to put this tuning fork on your toe. Please close your eyes. Do you feel a vibration?” After the patient says he has felt it, say, “Tell me when it stops.” Use your other hand to stop the fork from vibrating.

Aspects of a Reflex Exam
- Compare reflexes from side to side.
- Only a couple of reflexes are needed in thyroid, suspected stroke, or suspected spinal cord lesion.
- For a suspected thyroid case, just test the biceps reflex. If the patient is hyporeflexic in the upper extremities, she will also be hyporeflexic in the lower extremities.
- For a sciatica case, just test the Achilles and patellar reflexes.
- For a stroke case, just test the biceps and patellar reflexes.

**Reflexes**
- Biceps: C5, C6
- Brachioradialis: C6 (only if you suspect C6 lesion)
- Triceps: C7 (only if you suspect C7 lesion)
- Patellar: L4
- Achilles tendon: S1
Aspects of a Cerebellar Exam
- Gait (most important of the cerebellar exams)
- Finger-to-nose
- Heel-to-shin

Aspects of the Specific Neurological Exams
- **Meningitis tests**: Check for stiff neck. If you have time for only one meningitis test, this is it.
- **Brudzinski**: Bring chin to chest. Test is positive if knees and hips flex spontaneously.
- **Kernig** (you’ll remember because you have to touch the knee to do test): Flex the hip and knee, and try to extend the lower leg. Test is positive if there’s pain and stiffness in the leg.
- **Plantar reflex (Babinski)**: “I’m going to scratch the bottom of your feet.” There are three possible responses: Normal response is flexion of the great toe (plantar flexion). Abnormal response is extension of the great toe and flaring of toes (extensor plantar response). This indicates an upper motor neuron lesion (in a patient older than 6 months of age). Withdrawal indicates that the reflex is too ticklish for the patient.
- **Romberg’s**: Good to check in balance-problems cases. This test is considered positive if the patient loses his balance. Say, “Keep your feet together, arms out, palms up, head back, and eyes closed. I’ll be behind you if you feel unsteady.”

**HEENT Exam**
Do a complete HEENT exam when the chief complaint includes:
- Headache
- Eye pain
- Vision change
- Ear pain
- Dizziness
- Hearing loss
- Pharyngitis
- Throat pain
- Swelling

Aspects of a HEENT Exam
- **Inspection**: For scars, abnormalities, deformities, and skin changes. Say, “I’m going to look at your head.”
- **Palpation**: For tenderness and deformities of head, face, and sinuses. Check the temporomandibular joint (TMJ) if relevant. Say, “I need to press lightly on your head and face” (palpate maxillary and frontal sinuses).
- **Examine lymph glands**: Submental, submandibular, anterior and posterior cervical chain, pre- and postauricular, supraclavicular as needed. Say, “I need to check your neck for swollen glands.”

*If you have only 30 seconds to complete your neuro exam, do the two best examinations: mental status (orientation) and gait.*
Examine the thyroid: gland (note that “thyroid” is medical terminology): You can use an anterior or posterior approach when checking the thyroid. Say, “I need to check your neck now.”

Auscultate for bruit for no more than 3 seconds.

Palpation of thyroid. Say, “I’m going to press lightly on your neck. I’ll need you to swallow. Would you like some water? Take a sip and hold it in your mouth. Now please swallow.”

Test visual acuity (Snellen eye chart): Say, “I’d like to test your vision. Please stand here. Keep both eyes open but cover one eye. What’s the smallest line you can read? Now the other eye, please.”

Otoscope and Ophthalmoscope
The tympanic membranes can be checked only with the otoscope, and funduscopy can be done only with the ophthalmoscope. Either tool can be used as a penlight to check pupils, pharynx, and nares.

**Using the Ophthalmoscope**
- **Check the eyes:** Look at the pupil, direct and consensual light response; note any abnormalities. Say, “Please look at a point on the wall. I need to check your eyes.” Look twice at each eye, once for direct and once for consensual.
- **Inspect the sclera:** Look for redness or jaundice.
- **Inspect the conjunctiva:** Look for pallor or discharge. Say, “I’m going to touch the skin below your eye.”
- **Funduscopy:** Dim the lights (if possible). Say, “Now I need to shine a light into your eyes. Please look at this spot.” Approach the patient from the side. Hold the ophthalmoscope in your right hand, hold it up to your right eye, and look in your patient’s right eye. Then do the same for the left side. Hold the ophthalmoscope in your left hand up to your left eye, and look at the patient’s left eye. Look for papilledema, cupping, AV nicking, and hemorrhages. In most cases you will just see the red reflex.

If the patient complains that the light is too bright, say, “Let me lower the brightness and try again. It’s important I get a look.” When doing funduscopy, be mindful of the electric cord so it doesn’t touch the patient.

**Using the Otoscope**
- **Check the throat and oral cavity:** Look at the tongue. This allows for examination of the 9th, 10th, and 12th cranial nerves and pharynx at the same time. Take a clean tongue depressor, lightly place it on the anterior tongue, and say, “Please stick out your tongue and say, ‘Ah.’” When you are finished, throw out the tongue depressor.

If you drop the tongue depressor or touch the end that’s going to go into the patient’s mouth, just get a new one. No one is counting how many you use.

- **Examine the ears:** Examine in patients with ear problems such as pain, discharge, or hearing loss. Put on a new clean ear speculum for each patient.

To inspect the pinna: “Next I’ll look at your ear.”
For palpation: "I'm going to touch and move your ear." Palpate the mastoid and wiggle the pinna for tenderness. Say, "Any pain? I'm going to look in your ear." Place the earpiece just on the inside of the tragus, and do not insert it deeply. When you are finished, throw out the earpiece.

- **Examine the nose:** Say, "I'm now going to examine your nose." Push the nose up gently and look inside from a distance. Palpate the outside of the nose as needed. Say:
  
  "Any discharge?"
  
  "Can you breathe through both sides of your nose?"

Be careful not to touch the otoscope to the throat, nose, or eyes.

**Cranial Nerve 8**

Check the patient's hearing for cases of ear complaints and in pre-employment physicals.

**Doctor:** "I'm going to check your hearing. Tell me on which side you hear my fingers moving."

**Weber and Rinne Tests for Hearing Loss**

Do the Rinne and Weber tests only if there is hearing loss on history or physical examination.

- **Rinne:** Say, "I'm going to put this tuning fork behind your ear. Can you hear it?" Move the fork to in front of ear. Say, "Is it louder now?"
- **Weber:** Say, "I'm going to put this tuning fork on your head. Do you hear it? Does it sound the same or different in both ears?"

Practice using a tuning fork before test day. Do not subject the patient to overly loud sounds when doing the Rinne.

**Use of a Tuning Fork to Determine the Cause of Hearing Loss:**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Hearing</th>
<th>Rinne</th>
<th>Weber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Normal</td>
<td>AC &gt; BC</td>
<td>Equal</td>
</tr>
<tr>
<td>Conductive loss</td>
<td>Decreased</td>
<td>BC &gt; AC</td>
<td>Louder on the side with the hearing loss</td>
</tr>
<tr>
<td>Sensorineural loss</td>
<td>Decreased</td>
<td>AC &gt; BC</td>
<td>Louder on the normal side. Softer on the side with the hearing loss</td>
</tr>
</tbody>
</table>

**Examining Joints**

**Aspects of a General Joint Exam**

- **Inspection**
- **Palpation**
- **Range of Motion (ROM):** With active ROM, the patient moves the joint on his own. With passive ROM, the patient relaxes completely and you move the joint. Do passive ROM only if there is pain or limited mobility with active ROM. Passive ROM helps determine whether you’re dealing with a problem inside the joint (intra-articular) or outside the joint from the muscle or tendon moving the joint.
(extra-articular). If the pain and limited mobility is the same on passive and active ROM, the problem is intra-articular. If the pain is less and range of motion better on passive ROM, the problem is extra-articular.

- Distal motor, reflex, sensation (MRS)
- Distal pulse

Aspects of a Back Exam

- Inspection: “I’ll need to take a look at your back. May I untie your gown?”
- Palpation: “I’ll need to push all along your back.” Palpate along the bony prominences of the cervical, thoracic, lumbar, and sacral spine. Do not touch the patient’s underwear.
- Muscle test of legs:
  
  “I need to check your leg strength.”
  “Kick out.”
  “Pull back.”
  “Step on the gas.”
  “Pull up.”
- Reflex: “Now I’ll tap your legs.” Do patellar and Achilles reflexes.
- Plantar reflex: “I need to push on the bottom of your foot. It may tickle a little.”
- Sensation: For light touch, say, “I’m going to touch your legs lightly. Do you feel that?” (Pause) “Now close your eyes. Do you feel that?” (Pause) “Is it the same or different?” Check L4, L5, S1 areas.

  For sharp/dull touch, say, “I need to check sharp and dull. This is sharp and this is dull. Now close your eyes. What’s this?” Check the same areas as you did with light touch.
- Gait: “I’ll need to see you walk. Let me pull out the footstool. Can I help you down? Can you walk a few steps? I’ll be nearby.”
- Straight leg raise: With the patient supine, lift the leg (knee extended), stretching the nerve roots. When the patient is in pain in a nerve root distribution (i.e., pain radiates below the knee and not merely in the back or the hamstrings), the test is positive. Compare left and right legs.

Consider a quick abdominal exam, and in your Patient Notes order rectal examination for tone and a prostate exam.

Nerve Root Pain Distribution in the Lower Extremities

- At L4: Pain along the front of the leg; weak extension of the leg at the knee; sensory loss about the knee; loss of knee-jerk reflex
- At L5: Pain along the side of the leg; weak dorsiflexion of the foot; sensory loss in the lateral lower leg; no reflexes lost
- At S1: Pain along the back of the leg; weak plantar flexion of the foot; sensory loss along the back of the calf and the lateral aspect of the foot; loss of Achilles reflex
Knee Exam

With any paired organ, you must compare both sides. In fact, many physicians like to examine the “normal” side first. Advise the patient that you do know which is the bad knee before you begin. Say, “I’m going to check the good knee first.”

- Inspection: Look for any deformity, ecchymosis, or swelling. Compare to the other side. Say, “I’m looking at your knee. Have you noticed any redness or swelling?”
- Palpation: Say, “I’m going to push on your kneecap.”
  - Check the skin for warmth.
  - Palpate the patella for fracture and ballot to check for effusion.
  - Palpate the lower femur and tibia and fibular head.
  - Palpate both menisci for tenderness.
- Range of motion: Say, “Can you bend your knee back and forth?”

Don’t forget distal motor, sensation, reflexes, and pulses.

- Check pulses: Start with posterior tibial and dorsalis pedis. If these are absent or decreased, check popliteal pulse.
- Check the distal sensation: Light touch, sharp and dull, in L4, L5, and S1 distribution
- Deep tendon reflexes (DTRs): Check patellar and Achilles DTRs
- Check joint stability:
  - Anterior cruciate ligament (ACL): Check for anterior drawer sign. Bend the knee to 90 degrees, pull the tibia anterior, and see if there is any pain or laxity. Negative is normal.
  - Posterior cruciate ligament (PCL): Check for posterior drawer sign. Bend the knee to 90 degrees, push on the tibia posteriorly, and see if there is any pain or laxity. Negative is normal.
  - Medial and lateral collateral ligaments (MCL, LCL): With the patient supine, support the thigh and knee flexed 20 degrees. Check for pain or laxity.
- McMurray meniscus test: Place the patient supine, hip flexed, knee completely flexed.
  - Laterally rotate the tibia and extend the leg. This is positive if it causes pain or snapping in the medial meniscus. This indicates a medial meniscus tear.
  - Medially rotate the tibia and extend the leg. This is positive if it causes pain or snapping in the lateral meniscus. This indicates a lateral meniscus injury.

Hip Exam

Suspected Fracture

History: Patients with a fracture or a dislocated hip are typically in significant pain. Patients with previous hip replacement are more prone to dislocation.

Physical Exam: If you have a case with a fracture of the femur, the patient will not get up and walk. Be careful not to shake the leg when examining distal function; shaking the leg will make the fracture hurt. When an SP simulates a fractured hip or pelvis in the
Step 2 CS, the site of fracture may be under the SP’s underwear. Since all guidelines have exceptions, try asking permission and then palpating over the clothing in this case only. Do not ask permission to examine or examine over clothing on any other case.

**Physical Findings:** If the leg appears shortened and externally rotated, consider hip fracture or anterior dislocation. If the leg appears shortened and internally rotated, consider posterior hip dislocation.

**Inspection:** Say, “I’d like to take a look at your leg. May I raise your gown?”

**Range of Motion:** Check flexion, extension, internal rotation, external rotation, abduction, and adduction. Don’t forget to check distal motor, sensation, reflex, and pulses.

**Ankle/Foot Exam**

**Palpation:** It is very important to palpate for any tenderness. Use your fingertips and palpate the small bones of the foot. With the typical inversion injury that causes a sprained ankle, also check for associated injuries. Palpate the Achilles tendon, medial malleolus, base of the 5th metatarsal, tibia, and proximal fibula.

**Range of Motion of the Ankle:** Check plantar flexion, dorsiflexion, inversion, and eversion. Don’t forget to check distal motor, sensation, and pulses.

**Hand Exam**

**Inspection**

**Palpation**

**Range of Motion and Strength**

**Distal Vascular (capillary refill)**

**Sensation**
- Light touch, sharp, dull, and two-point discrimination
- Ulnar nerve: fifth finger pad
- Median nerve: third finger pad
- Radial nerve: dorsum of hand at web space between thumb and second finger

**Motor Exam**
- Ulnar nerve: finger adduction, finger abduction
- Median nerve: finger flexion, thumb opposition
- Radial nerve: wrist extension and finger extension

**Carpal Tunnel Tests**
Positive will give pain/tingling over medial nerve distribution

- Tinel sign: Tap on wrist over median nerve
- Phalen sign: Put dorsum of hands together
Elbow Exam

**Inspection**

**Palpation:** Pay attention to the radial head

**Range of Motion:** Extension, flexion, supination, pronation

Shoulder Exam

**Inspection:** Lower the gown and compare the shoulders; this is a good way to check for third-degree acromial-clavicular separation. Look for redness or deformity. Say, “I need to look at your shoulders.”

**Palpation:** Say, “I need to examine your good shoulder first.” Feel for heat, crepitus, and pain. Check the entire clavicle, AC joint, humeral head, humerus, scapula, and anywhere else the patient complains of pain.

**Range of Motion (ROM):** Check active ROM. If any pain or limited ROM, then check passive ROM.

**Strength:** Test external rotation with the hands behind head (as if combing the hair). Test internal rotation as if patient is touching his own scapula with his thumb. Check forward flexion; backward extension, adduction, and abduction.

Check distal function: pulse, ulna, radial and median nerve, sensation, motor and reflex (see Hand Exam, above).

**Palpation of Bicipital Groove (test for bicipital tendonitis):** Ask the patient first to sit and then to flex his arm to contract the biceps muscles. Palpate the bicipital groove to attempt to elicit pain.

**Impingement Syndrome:** Pain with abduction of shoulder.

**Adson’s Test for Thoracic Outlet Syndrome:** Radial pulse is less or absent when arm is abducted more than 90 degrees.

### GUIDE TO A BRIEF EXAMINATION

Now that we have studied each organ system in detail, let’s review how to do quick torso and neurological exams.

**Brief Torso Exam**

Do a complete brief torso exam when the chief complaint includes:

- Back pain
- Rash
- Depression
- Mental status change
- Fatigue
- Extremity problem(s)
You should also do a complete brief torso exam any time a complete heart, lung, and belly exam is not indicated but you want to make sure there are no surprises.

**Phrasing for the Brief Torso Exam**

**Transition:** “I’d like to take a look at your back; may I untie and lower your gown?”

**Inspection:** “Now I’d like to take a look at your back.”

**Auscultation of the lungs:** “Now I’ll listen to your lungs. Please breathe in and out through your open mouth.” Lungs: Listen at four places on back.

**Auscultation of the heart:** “Now I’ll listen to your heart.” Listen to four places in the heart. Don’t forget to retie the gown.

**Transition:** “Now I’d like to look at your belly. Let me fix the bed to make it comfortable. Can you please lie back? May I raise your gown?”

**Auscultation of the abdomen:** “Now I’ll listen to your belly.” Check bowel sounds in one place for 3 seconds.

**Palpation:** “I need to press on your belly now.” Palpate four quadrants.

For an exam with normal findings, you could write the following on the Patient Note:

“Normal-appearing chest. Lungs clear to auscultation.

Heart: regular S1, S2 without murmur, rubs, or gallop.

Abd: BS+, no bruits heard. Soft, nontender, no masses 4 quadrants.”

**Brief Neurological Exam (Evaluating for Gross Abnormalities)**

A brief neurological exam is indicated when the chief complaint includes headache, mental status change, dementia, or head trauma. Below is a suggested exam that will cover most situations. As always, no two physical exams will be exactly alike.

Add or delete physical exam maneuvers depending on the history, the findings, and your clinical suspicions. For example, if the patient is not oriented to person, place, and time, do the rest of the mental status exam as well (that includes memory, attention and concentration, language, and commands). If you have no concerns at all that the patient’s mental status is abnormal, skip the testing of mental status altogether and start with cranial nerves.

1. Mental status (person, place, and time): Say, “I need to test your memory. Can you tell me the date? (Pause for response) Can you tell me where we are? (Pause for response) Please tell me your full name. (Pause for response) Thank you.”

2. Cranial nerves: Check cranial nerves 2, 3, 4, 6, 7, 9, 10, 12, and 5. Do the 5th nerve last. Say, “Clench your teeth,” and demonstrate the action. Then check the 5th sensory with cotton balls last.

3. Sensory exam: Do a sensory exam at this point while you still have the cotton balls in your hand. Say, “I need to check the feeling in your hands”; “Now the feet.” Check just the tip of the third finger on each hand and the top of the foot where the great toe and second toe meet (of the four extremities, check one place...
each). Check both sides at once. Ask, “Do you feel it?” (Pause) “Same or different?” (Pause)

4. Motor strength: Say, “Let me test your strength.” Test both sides of the upper extremity at once. Say, “Squeeze my fingers; pull me in; kick out, kick out.” Test the upper extremities at the same time but test the lower leg strength one leg at a time.

5. Deep tendon reflexes: Check brachial and patellar only. Say, “I need to tap your arm. Let me put your arm like this.” Ask the patient to relax his arm if he is tense.


For an examination with normal findings, you could write the following on the Patient Note: “A & O x 3, cranial nerves 2–12 intact. Motor, light touch sensation intact all 4 ext. DTR nl, patella, brachial. Gait normal.”

If you did not check hearing or CN 11, write, “cranial nerves 2–7, 9, 10, 12 intact.”

If you find an abnormality or have more time, do a more complete neurological exam.

PATIENT NOTE WRITING

The Patient Note is a component of the ICE score and is the only component of the exam that is graded by a physician. As long as you are communicating your thoughts logically and clearly, you will score well. Physicians are not primarily concerned with grammar, punctuation, capitalization, or sentence structure. Even an occasional misspelled word—as long as it can be deciphered—is acceptable. Of course, before Test Day you should practice spelling words that are commonly misspelled, such as pneumonia, abscess, inflammation, and ischemia—or any other common medical term that gives you difficulties. However, it is better to write down something misspelled than to leave the paper blank.

Physicians grading the Patient Note are concerned with content. The key to writing a good history and physical involves putting down on paper what you asked of the patient, what exam you did, and what you observed about the patient. This includes all negative as well as positive findings you uncover. If you run through the mnemonic SIQORAAA and PAMHRFOSS in your mind while writing your Note, you will remember the interview you just completed and be able to write an excellent history. Do not write “SIQORAAA PAMHRFOSS” on your Note. Instead consider using the bullet-point style:

- substernal chest pain
- 8/10 intensity, heavy crushing pain
- started 1 hour ago
- radiates to L arm
- nothing makes it better, worse with walking
- positive SOB, diaphoresis, syncope. Negative vomiting, fever.

You may also write out the history in complete sentences, although that makes it more difficult to finish on time and doesn't convey additional information. The note below
would be scored identically to the note above. If you were a busy attending physician, which note would you rather read?

Patient presents with chest pain described as substernal. He rates the pain as 8/10 intensity. The pain began 1 hour ago. The pain radiates to his left arm. The patient has noticed that nothing makes the pain better. The patient complains that walking exacerbates the pain. Additionally, the patient complains of shortness of breath, diaphoresis, and syncope. The patient denies vomiting or being febrile.

Physicians are concerned with legibility. If you are handwriting, you can print in block letters, use cursive, or use any combination.

Fortunately, unless there are major computer problems the day of your exam, you will be typing your note.

It is essential that you become comfortable using the data entry form for recording your note prior to your test day. (At the time of publication, the USMLE Step 2 CS practice note can be found at http://www.usmle.org/practice-materials/step-2-cs/patient-note-practice2.html.) Familiarize yourself with the various scroll bars, and practice how to move from one section to the next. Also acquaint yourself with the arrow buttons that can move your diagnosis from the first position to any other position. This saves time deleting and retyping. The keyboards at the test center will be the QWERTY type. If you are accustomed to another kind of keyboard, it would be worthwhile to get the correct keyboard to speed your data entry.

The form you will write on contains four sections: History, Physical, Differential Diagnosis, and Diagnostic Workup. For most cases you will need to write something in each section. But make sure you cover all four sections—it is not in your benefit to write a detailed History for the entire 10 minutes and leave the other three sections blank. As with the scoring for the ICE and CIS components, graders use a checklist for guidance in scoring your Note.

The Note form has a black box around the perimeter. Anything you write outside the black box will not be counted. Use simple headings in the History to orient the physician grading your Note.

A possible format for the Patient Note is to use headers, as shown below.

**History**

HPI:

Allergies:

Meds:

PMH:

ROS:

FH:

Ob/Gyn:

SX:

SH:
The only place you will get credit for obtaining the proper history is on the note. So, it is essential to record all the history you obtained in the SP’s room. As the old saying goes, “If you didn’t document it, you didn’t do it.”

Physical Exam
When considering what to write on your Patient Note, follow this rule: If you observed it, asked it, and/or examined it, then write it down in your Note. Do not fabricate sections of the history and physical that you did not conduct. (In cases where the patient is not present—in a surrogate or phone case, perhaps—leave the Physical Exam section blank.)

Remember, a physician is grading your Note and is more concerned with communication of ideas than with format, punctuation, or spelling. There are many ways to write a Note, just as there are many ways to ask a question. This section will show you just one way to write an effective Note.

When considering which abbreviations to use, follow this rule: There are many abbreviations commonly accepted by the USMLE. (See Appendix A for a list.) There are other abbreviations, as well, which are frequently recognized by American attending physicians. However, when in doubt, write out the full word.

In the following paragraphs, text in **bold** is what you could write on a Note. Text in brackets is how you could describe the patient. So: **The patient is [good, bad]** means on some cases you might write **The patient is good** and on other cases **The patient is bad.** (Do not write brackets on your Note.)

When considering how to take notes, follow this rule for general headings:

**VS or Vital Signs**  
**GA:** General appearance  
**HEENT:** Head, eyes, ears, nose, throat  
**CV:** Cardiovascular  

**Ch**est or **Lungs:** Chest  
**ABD** or **Abd:** Abdomen  
**Neuro:** Neurological exam  
**Joints:** Joints in general

For a detailed exam of a single joint, write the name of the joint and always label it right or left. For example: **R wrist, L hand, R elbow, R shoulder, L hip, R knee, R ankle, R foot.** If the pain is in the right arm, you could use **R upper ext.** for “Right upper extremity.” Be as specific as time allows.

Vital signs should be noted on every chart. Always write the vital signs that appear in the Doorway Information.

Vital Signs  
“**Vital Signs–WNL**” or “**Vital Signs–NL.**” If you are not sure if a vital sign is normal, simply write out the vital sign. You do not get a higher score for indicating a vital sign is normal or abnormal than for writing it out. You could write **“VS–NL except BP = 160/100.”** Or you could just write out the vital signs that are on the doorway: **“VS 160/100, 82, 20, 37.6.”**

If you think there could be confusion about the vital signs because they are abnormal, write out labels: **“VS–90/60, HR=38, RR 40,” or “VS: HR–100, T–102, RR–24, bp–60 systolic.”**
Height and weight should be noted if relevant to the case. That would include a general physical or periodic health exam, a pre-employment physical, life insurance, or whenever you think it relevant. Since this doesn't appear on every Note, it is best to use labels such as “WT-100 lb” or “Wt-100 kg.” Also, use units, as a patient can weigh 100 pounds or 100 kilograms. Height can be “Ht-162 cm,” “Height-162 cm,” or “Ht-5ft, 2in.”

General Appearance
This is the place to describe what you see and to comment on any unusual behavior. It's fine if you have some components of psychiatric or mental status here as well. Some examples are:

- GA: NAD (no acute distress)
- GA: in [mild/moderate/severe] distress from [pain/SOB]
- GA: no distress, A&O×3 (alert and oriented times three)
- GA: pt is pacing about the room in [pain/anger/rage]
- GA: dirty, torn clothes; smells of beer and body odor
- GA: quiet, flat affect; will not make eye contact
- GA: track marks on arms, multiple bruises

Skin
There is no reason you could not describe skin on its own instead of describing it as a part of each organ system. Describe location, color, tenderness, warmth, pattern, and flat/raised as much as possible. For example:

- Skin: multiple blue/red rash on upper and lower ext in sun-exposed areas. Warm & tender. No streaks.
- Skin: jaundice; or Skin: yellow powder on face
- Skin: [track/needle] marks on both arms

HEENT
Writing the note for each organ system follows the same outline you memorized for the physical exam (Inspection, Palpation, etc.). There is no need to write subheadings for eyes, ears, etc.

A normal HEENT is given below:

HEENT: normocephalic/atraumatic, nontender. PERRLA. Fundi-red reflex intact, EOMI. TMs, pharynx–WNL. No nasal discharge. Lymph glands, thyroid not enlarged.

If abnormalities on the HEENT are found, be as specific as possible. For example:

- HEENT: tender, red, swollen pre-auricular node and pinna
- Head: deformity, tender, and bloody nose
- Head: tenderness of B/L [maxillary sinus, cheek]
- Head: fine, thin hair. Exophthalmos [diaphoretic, sweating], large thyroid. [Tenderness, deformity, crepitus] to [nose, cheek, maxilla, jaw, zygoma, orbit, forehead].
Further examples of HEENT note-writing:

- **PERRL**: (pupils equal, round, reactive to light)
- **PERRLA**: (the “A” stands for “and accommodation”)
- **PERRLA**: sclera clear, EOMI (extraocular movement intact). Extraocular muscles intact except [R 6th nerve palsy, R lateral gaze deficit].
- Visual fields intact, or R [temporal, nasal] visual field deficit
- Visual acuity: VA–20/20 OU (OU = both eyes, OS = left eye, OD = right eye).
  VA: 20/200 R eye, counting fingers 5 ft L eye.
- Visual acuity: L eye light perception only, OD–20/200. Fundi: flat (no papill-edema), or Fundi: Not visualized, or Fundi–NL red reflex.

**Nose**

Be as specific as possible:

No nasal discharge and/or good air entry B/L, or B/L thick yellow discharge or nasal septum [intact/perforated/with hole]

**Ears**

- Pinna NL. TM WNL B/L (tympanic membrane normal bilaterally)
- R TM red bulging, L NL. (Right tympanic membrane is red and bulging, L tympanic membrane is normal)
- TMs both with [perforation/holes] B/L

**Throat**

- Pharynx [clear, red, with exudates, NL]

**Teeth**

- [Dentition/Teeth], [poor/normal]

**Thyroid**

- Thyroid: [nontender/tender], [normal size/enlarged]. No nodules.
- Nontender, NL size, no nodules, trachea in midline; or Tender, enlarged, trachea shifted L

**Lymph Gland**

You may reference specifically or generally, depending on its importance to the case.

- Lymph glands: not swollen or tender
- Hard, tender supraclavicular lymph node
- Diffuse lymphadenopathy (seen with mononucleosis)

You may also list the particular glands that are swollen and tender, such as the following: [submandibular, submental, preauricular, postauricular, ant cervical, post cervical, supraclavicular, subclavicular] adenopathy.
Chest
Remember to do the complete chest exam (inspection, palpation, respiratory excursion, tactile fremitus, percussion auscultation) and document all of your findings. Be sure to document everything that you do so you can receive a higher score.

A normal chest exam may be documented as follows:

- Chest appears NL, nontender, NL resp, excursion, fremitus, percussion NL and equal B/L. Lungs clear to auscultation.
- Chest without deformity, skin WNL. Lungs clear to A&P B/L (A&P means “auscultation and percussion”).

An abnormal chest exam may be documented as follows:

- Inspection: Increase AP diameter, or pursed-lip breathing, or chest with deformity or [ecchymoses/bruise] R flank, or thoracotomy scar
- Palpation: Tenderness on [R lat 8th rib, L CVA, lumbar spine, R costochondral margin]. Be as specific as possible about the area of tenderness.
- Respiratory excursion: Poor respiratory excursion or paradoxical chest wall excursion
- Fremitus: [increased/decreased] fremitus [R/L] [base/midlung field/apex]
- Percussion: [dull/hyperresonant] percussion [R/L] [base/midfield/apex]
- Auscultation: [decreased/absent] breath sounds [L/R]. Or you may have heard abnormal sounds: [wheeze, rhonchi, rub, rales] [L/R] [base/midlung/apex]

Cardiovascular
Think about the entire cardiovascular exam and write down the parts that you conducted.

A normal cardiovascular exam may be documented as follows:

CV- S1,S2-WNL, Regular rate & rhythm. No rub/gallops/murmur sitting and supine. No JVD. PMI not displaced. No clubbing, edema. Carotid, radial, DP, PT pulse NL & equal B/L. No carotid bruits.

Note: JVD means “jugular venous distension,” and JVP means “jugular venous pressure.” For the normal person, you could write “No JVD” or “JVP NL.” Both notations are correct.

In fact, you may also write “CV S1,S2 WNL, RRR, no RMG.”
RRR means regular rate and rhythm. RMG means rubs, murmur, and gallop.
If abnormalities are found on the cardiovascular exam, be specific as possible.

Pulses
When documenting pulses, use the pulse grading scales as follows:

0 = no pulse
1 = decreased pulse
2 = normal pulse
3 = bounding or increased
4 = aneurysmal dilatation
You may chart an abnormal or normal pulse in the following way:

“[R/L] [radial/brachial/popliteal/DP/PT] pulse [absent/decreased/NL/bounding]”

**Point of Maximal Impulse (PMI)**

PMI: PMI displaced. If you felt the apex, you can describe its location.

For example: PMI at anterior axillary line, 8th rib.

**Heart Rate and Rhythm**

[RRR, irregularly irregular rhythm] (Note: An irregularly irregular heart rhythm is often atrial fibrillation.)

+ gallop rhythm (write this when you hear an S3 or S4 heart sound)

[1/6, 2/6, 3/6, 4/6] [diastolic/systolic] murmur is the basic notation for murmur. A murmur can be pansystolic, early, or late.

The grading scale for murmur is as follows:

- 1/6 = faintest murmur
- 2/6 = soft murmur
- 3/6 = loud murmur
- 4/6 = very loud murmur with palpable thrill when you check PMI
- 5/6 = heard with stethoscope partly off the chest
- 6/6 = heard with stethoscope off the chest

**Abdomen**

Think about the entire cardiovascular exam and write down the parts that you conducted. Remember Inspection, Auscultation, Percussion, and Palpation.

A normal abdomen exam may be documented as follows:

ABD: normal appearance, BS+ all 4 quadrants, no bruits heard, tympanic all 4 quadrants, liver size—10cm. No tenderness or masses to light or deep palpation 4 quadrants.

If you did any additional abdominal tests, be sure to list them. When all additional tests are normal, they may documented as follows:

Neg Rovsing’s, psoas, obturator. No CVA pain. Neg Murphy’s.

If any abnormalities are found on the abdomen exam, be as specific as possible:

- ABD: [distended/obese/visible peristalsis]. Be sure to comment on any makeup or real changes in the skin.
- ABD: R subcostal scar, ecchymosis periumbilical. Bowel sounds BS+, or BS+ all 4Q, or BS+, no bruits heard. Everyone in this test has bowel sounds! Write something like this depending on how many quadrants you listened to.
- Percussion: It is very unlikely you will have a patient with significant ascites. However, if you do need to document this, simply write: + shifting dullness, or dullness in flanks to percussion.
- Palpation: + tender [epigastrium/periumbilical/RUQ,RLQ,LUQ,LLQ], [+/-] rebound. For tenderness you must describe where the patient is simulating tenderness, and if there is rebound or not. To be more thorough, describe whether deep or light palpation elicits pain.
Another example of an abnormal abdomen exam:

**ABD:** + tender to epigastrium to deep palpation only. No rebound. Neg Murphy’s. Tender RLQ to lite touch. Positive rebound. + obturator, psoas, and Rovsing’s.

### Neurological

Think about the entire neurological exam and write down the parts that you performed.

A complete normal cardiovascular exam may be documented as follows:

**Neuro:** A&O×3. CN 2-7, 9, 10, 12 NL. Sensation intact all 4 ext. To light touch. Position sense and vibration sense NL B/L lower ext. Motor 5/5 all 4 ext. DTR 2/4 brachial, patella, B/L. Gait-WNL. No Kernig or Brudzinski. Neck supple. Straight leg raise negative B/L. Romberg negative. Babinski—downgoing toes B/L.

If abnormalities are found on the neuro exam, be as specific as possible.

#### Mental Status

If the patient only knows his/her name but not the place or date:

**A & O × 1, or Alert and oriented to person only.**

#### Cranial Nerves

You can interpret the physical finding or just describe it. For instance, **Pt points tongue out to L.** This is the same as writing: **L 12th nerve palsy.**

Writing: **Entire R side of face is weak, pt cannot close R eye** is the same as **R peripheral 7th CN lesion.**

#### Sensation

Describe where the patient is experiencing numbness.

- [Decreased/No] light touch below knee B/L; no position sense L toe, R WNL
- **Numbness R ulnar nerve distribution.** (You could draw a picture or write: Numb 5th digit R hand.)

#### Motor

Motor function is traditionally graded on a 5-point scale:

- 0/5 = flaccid
- 1/5 = just a flicker of movement
- 2/5 = so weak that the patient cannot overcome gravity
- 3/5 = can overcome gravity
- 4/5 = somewhat weak
- 5/5 = normal

Some people also include 4−/5 and 4+/5 in the scale.

- **Motor: 3/5 RUE, other ext NL** describes someone with a weak R arm and the other three extremities normal.
You may also use regular language to describe the degree of weakness. For instance:

- Motor: [Mild/Moderate/Severe] weakness RUE
- Motor: Pt with [dense paralysis/0/5] entire R side of body, L side WNL

**Reflexes**
Reflexes are traditionally graded on a 4-point scale.

- 0/4 = no reflex
- 1/4 = decreased
- 2/4 = normal
- 3/4 = somewhat hyperreflexic
- 4/4 = very hyperreflexic

- DTR: 1/4 brachial B/L (decreased reflex brachial DTR both sides)
- DTR: R brachial & patella 4/4, L 2/4 (a patient who is hyperreflexic on one side of the body)

**Gait**
- Gait: Ataxic if unsteady. Pt unable to walk is fine if patient cannot walk.
- Romberg: Positive if patient cannot perform the test and falls to one side.

**Meningeal Signs**
- Meningeal signs: + stiff neck, + Kernig, + Brudzinski

**Straight Leg Raising**
- Straight leg raise: + R, neg on L is how to chart the straight leg raise test.

**Differential Diagnosis**
One component of the Patient Note (and in advising the patient about your initial impressions) involves coming up with a Differential Diagnosis. This will also be asked of you for some patients on whom you have not done a physical exam. Guidelines for writing diagnoses include the following:

- Write the most likely diagnosis on the first line. You do get a little extra credit if you get the diagnosis correct on line #1.
- Try not to use abbreviations on your diagnosis.
- Be as specific as possible. Congestive heart failure is correct, but SOB is not. In that case, no credit will be given.
- Write diagnoses lower on the list only if they explain some of the patient's symptoms or physical findings.
- It is better to leave a couple of lines blank than to write down a diagnosis that has absolutely no support in the history and physical.
- Remember that “noncompliance with medicine” or “medication side effects” are legitimate diagnoses.
Unlike the Differential Diagnosis, the Diagnostic Workup gives no extra credit for putting the best test on the first line.

As of spring 2012, for each diagnosis you must list positive and/or negative findings that support your diagnosis. There is no set minimum number of history findings and physical exam findings stated. However, avoid leaving this section blank. You will be writing a lot of the same phrases here that you also used in the History and Physical sections of the note.

The test now requires you to give supporting information from the history and physical, both positives and negatives that support your diagnosis. It is helpful to have in mind a broad differential diagnosis for likely chief complaints and the kind of historical facts and physical exam elements that are likely to be on the grading checklists. Certainly you should have a differential in mind for sites of pain in all parts of the body, as well as common presenting complaints.

For a wide variety of examples of supporting documentation using the new exam format, refer to Appendix C: Differentials and Common Supporting Documentation for Assorted Chief Complaints.

**Diagnostic Workup**

Another component of the Patient Note includes ordering the INITIAL workup on the patient. This component of the Patient Note is also required for surrogate and telephone cases, unless otherwise specified. The best approach to writing the Diagnostic Workup is to follow a certain pattern; that way, you will not forget to document any important tests. Guidelines for writing the workup include the following:

- Make a habit of writing on the first line any prohibited physical exam maneuvers that the patient needs. For example, “rectal exam with hemoccult” or “complete physical exam.”
- If you do not need to order any further physical exam maneuvers, go ahead and begin documenting diagnostic tests on the first line.
- Write on the first line any labs or x-rays that are needed now.
- First, order the simple baseline tests that the patient needs now.
- There are no mandates or rules about what line should have blood tests or what line should have x-rays. It does make sense, however, to group things together as you do in real life. “CBC, lytes, glu, Cr, BUN.”
- You should assume that all of the tests will be done now, at one time, unless you write otherwise.
- It is incorrect to write diagnostic tests on the same line as the particular diagnosis.
- The tests you do order should help support or exclude the diagnosis you are considering. For instance, if your only diagnosis is “trauma to the foot,” it would be wrong to order pulmonary angiography, or screening colonoscopy.
- There is no cost containment on this test. In other words, graders are not looking for the single best test.
- If no testing is indicated (a rare event, but possible), simply write in this section, “No tests indicated.”
SECTION TWO

43 Core Cases
Case 1: Ankle Pain

DOORWAY INFORMATION

Opening Scenario
Mary Smith is a 21 y/o female who comes to the clinic complaining of ankle pain.

Vital Signs
- Temp: 38.3°C (101.0°F)
- BP: 120/80 mm Hg, right upper limb sitting
- HR: 80/min, regular
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Consider listing several causes of ankle pain along the right side of your blue sheet. Thinking about the diagnosis now allows you to do a more relevant history and focused physical. Consider the following conditions as part of your differential before you enter the room:

- Fracture
- Ligament injury
- Infection, e.g., Staph, gonococcal
- Deposition: crystals, gout

The HPI you obtain will help you quickly narrow down the list.
FROM THE STANDARDIZED PATIENT

History

HPI: Ms. Smith states that she twisted her right ankle one week ago when stepping off a curb. She scraped off a little skin from the outside of the ankle but had just a few drops of blood. She felt a sudden popping sensation on the outside part of her right ankle. The pain is severe and sharp, and moves into her foot. She rates the pain as a 7/10 on the pain scale. Ms. Smith notices it is better when she elevates her leg and puts ice on the ankle. It hurts much worse when she walks on it, and she can walk only a couple of steps. She says her right foot and ankle had been bothering her more for the last 3 days. She also noticed increasing redness and swelling in her right ankle with some oozing. She has not noticed any fever. Before last week she never had any problems with her feet or ankles.

PMH: She has no allergies. She takes no medications. She has had no prior hospitalizations, trauma, major illness, or surgery.

Ob/Gyn: LMP: 1 week ago. Her previous period was normal. She is G0P0.

Social Hx: She lives with her parents, and denies any tobacco, alcohol, or drug use.

Physical Exam

Upon entering the room you notice that the patient is in obvious discomfort. She is holding her right ankle and foot. There is redness about the ankle joint, centered on the lateral malleolus. She is alert and cooperative, and her speech is normal. The abdomen is soft and nontender without masses. Bowel sounds are normal.

Extremities: Inspection reveals normal L ankle. R ankle is red and swollen. No red streaking up the leg. There is also some red/purple discoloration under the lateral malleolus with small amount of discharge from small open wound. Palpation shows a nontender L ankle and very tender R lateral malleolus.

Normal range of motion on the L ankle. The R ankle has very limited ROM because of pain. She will not cooperate with strength testing at the R ankle because of pain. There is normal ROM in both knees. Left ankle strength (motor) is 5/5. Sensation to light touch is intact bilaterally. Dorsalis pedis and posterior tibial pulses are equal 2/4 bilaterally.

THE CLOSING

As with all cases, it is important to explain to your patient your clinical impression and discuss the next steps in working up her condition. It is important to provide some indication about the length of time she may be unable to walk, as this may affect her transportation and employment options. Be sure to answer any additional concerns she may have.

Doctor: "Ms. Smith, I have finished my physical exam and would like to discuss what might be causing your ankle pain. You told me you stepped off the curb and had a popping feeling and sudden pain in your ankle. Is that correct?" (Wait for response)

"You have also told me that the ankle you scraped has been increasingly red and swollen for a week. Is that right?" (Wait for response)

"I believe you may have a broken ankle. However, I am also considering the possibility of an infection in your ankle because of your fever. So that we can treat you appropriately, I am going to take a blood test..."
to look for an infection, and an x-ray picture of your ankle to look for a broken bone. I can do these tests right now, and then we will meet to discuss the results and plan treatment. Do you have any questions?"

**CHALLENGING QUESTIONS**

Be prepared to answer the following types of challenging questions for this particular case:

- "Is it fractured or is it just broken?"
- "I'm part of a tennis team. When do you think I'll be able to play again?"

Answer: "A fracture and broken bone are the same thing. I will take a picture to find out if the bone is injured. When we meet again I will have the x-ray and will be better able to tell you when you can play tennis."
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** “My ankle hurts.”

**HPI:**
- R ankle pain maximum at lateral malleolus
- Pain is severe, sharp, without radiation; 7/10 intensity
- Began suddenly when stepping off a curb; twisted ankle and felt a “pop”
- Also got abrasion to R lateral malleolus 1 week ago, now with redness and swelling
- Denies fever or prior episodes of ankle problems

**Meds:** None, NKDA

**PMH:** No hospitalizations, major illness, trauma, surgery
LMP “1 week late.” GOPO.

**SH:** Lives with parents, denies tobacco, EtOH, or drug use

SAMPLE PATIENT NOTE

**Physical Exam:** Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** NL except for T = 101.0°F

**GA:** In mild distress 2nd ankle pain

**R Ankle:** Swollen, red, tender over lateral malleolus. Some ecchymosis also present. Unable to check ROM, motor due to pain. No lymphangitis. Small open wound at lateral malleolus, discharge. No popliteal adenopathy bilaterally. Distal sensation intact.

**L Ankle/Leg:** NL skin, nontender; Full NL dorsiflexion, plantar flexion, eversion, inversion. Strength 5/5.

**Ext:** 2/4 DP, PT B/L. Light touch sensation intact both feet B/L.
### SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

**Diagnosis #1: Cellulitis of ankle**

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion 1 week ago</td>
<td>Fever</td>
</tr>
<tr>
<td>Increasing redness and swelling</td>
<td>Red and swollen</td>
</tr>
<tr>
<td></td>
<td>Tender to touch</td>
</tr>
<tr>
<td></td>
<td>Open wound with discharge</td>
</tr>
</tbody>
</table>

**Diagnosis #2: Sprain of ankle**

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twisted ankle and heard pop sound</td>
<td>Tender lateral ligament of ankle</td>
</tr>
<tr>
<td></td>
<td>Decreased ROM</td>
</tr>
</tbody>
</table>

**Diagnosis #3: Fracture of ankle**

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twisted ankle and felt pop</td>
<td>Point tender at lateral malleolus</td>
</tr>
<tr>
<td></td>
<td>Ecchymosis at ankle laterally</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- X-ray R ankle
- Wound C&S
- CBC, blood C&S
CASE DISCUSSION

Notes about the History-Taking

For this case, it is best not to offer to shake the patient’s hand during your introduction. This patient is in obvious pain and is preoccupied with using her hands to splint her painful ankle. The most appropriate step when first entering the room is to attend to the patient’s comfort and offer support. Offer her the drape and some assistance in finding a more comfortable position so that she can rest her leg on the exam table.

The initial history of stepping off a curb, twisting her ankle, and feeling a popping sensation is typical of an ankle sprain and/or fracture. However, it is important that you are able to recognize pertinent findings such as fever, which is listed in the doorway information and is not consistent with ankle sprain or fracture. In this case, the history that she also had an abrasion is important. The abrasion, fever, and redness all suggest cellulitis.

Notes about the Physical Exam

The physical exam checklist highlights the importance of documenting the findings of both sides of any paired structures in the body. Had you documented physical exam findings on only one extremity, you would have missed about half of the physical exam checklist items. As a general rule, inspect and palpate at least one joint above and one joint below the site of injury. With a fall, injury is possible anywhere on the injured extremity and may be in more than one location. Specifically for the ankle, the lateral malleolus is most commonly injured from an inversion injury. Associated areas to palpate, because they are sometimes also injured, are both malleoli, the Achilles tendon, and the base of the 5th metatarsal, as well as the proximal fibula.

In this case the pain is so intense that the patient will not cooperate and move the ankle no matter how nicely you ask or how well you explain your intent. In most cases the patient will cooperate with physical exam maneuvers when you show empathy and explain their importance. If you have made two attempts to get a patient to cooperate with a physical exam maneuver and the patient still refuses, recognize that this is part of the case and simply move on to your next step in the physical examination.

Had you listened to the heart and lungs and written it on your note, you would not have been penalized for the action; however, you would not have received additional points. As with all CS cases, it is important to remain focused on pertinent physical examination maneuvers because there is limited time allotted for completing the case.

Be sure to comment on any discolorations or skin markings you may observe, even if these markings are due to makeup (a technique used in order to simulate physical findings). Consider any diagnosis that includes inflammation and infection in any patient with red-powdered skin.

Checking for lymphangitis and enlarged popliteal or femoral nodes is important, in order to look for spread of the infection.

X-rays of the lower extremity that can commonly be ordered are hip, femur, knee, tibia-fibula, ankle, foot, and calcaneus. You should order as many of the x-rays as are clinically relevant.

Comments about the Patient Note

All notes should contain a comment about the vital signs and general appearance. A common mistake on a case of an isolated extremity is to write only the physical exam of the injured extremity. It is essential to compare the good side to the bad, and include in your note the physical findings of the normal side as well. Be sure to write down the entire history you collected and physical exam you did. Remember to include everything you just observed about the patient while in the room.

“C&S” stands for “culture and sensitivity.”
Case 2: Back Pain

DOORWAY INFORMATION

Opening Scenario
James Jones is a 35 y/o male who comes to the clinic complaining of back pain.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 140/90 mm Hg, right upper limb sitting
- HR: 80/min, regular
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Because there are many different causes of back pain, you will first need to determine the site of the back pain (cervical, thoracic, or lumbar). For all levels of the spine there may be a fracture, infection, tumor, disk disease, or paraspinal muscle pain. However, not all pain in the back is coming from the spine and musculoskeletal system. Kidney, aorta, pancreas, stomach, duodenum, ovary, heart, and lung problems all can cause pain in the back at different levels. Knowing what organs cause pain in the back will be your cues for the organ systems you will ask about and examine. From the Doorway Information, you know you will need to inspect and palpate the back.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Jones states that his back hurts. The pain is located 2 inches to the right of the midline at the level of his belt. It is 3/10 pain if he is completely still. The pain increases to 7/10 on the pain scale with any movement or twisting. He had to call his neighbor to tie his shoes this morning, as he wasn’t able to bend over without the sharp pain. It started a little bit last night after work but by morning it was really hard to get out of bed. He thought maybe he hurt it at work yesterday lifting something heavy. He felt a sudden twinge when picking up a car transmission by himself yesterday.

The patient took two aspirin right away and put some ice on his back as soon as he felt the pain yesterday. He was able to finish the workday. He felt a little better after the aspirin but not back to normal. “No work, no pay,” Mr. Jones explains. The pain doesn’t radiate. He denies any pain, numbness, or weakness in the legs. There has been no incontinence of stool or urine. Mr. Jones looked surprised when you asked about any numbness in the genitals. He states everything there is “100% fine.” He has had no fevers.

PMH: He has had back pain once before, when he had a kidney stone 5 years ago. He states that pain was worse with the kidney stone 5 years ago because he could not find a comfortable position. Today the pain is bearable if he is completely still. He has no allergies. He takes no medications other than an occasional ASA for a headache. He was hospitalized once, at age 18 for appendicitis. No traumatic injuries other than a sprained ankle in high school once. Denies diabetes and hypertension.

Review of systems: No difficulties urinating. No blood in urine.

Family history: “Come to think of it, I think my dad missed a few days of work once from a sore back.”

Social Hx: Divorced, lives alone with two large dogs. Denies any tobacco, alcohol, or drug use. Works as an auto mechanic. His only stress is worrying about missing work and the mess the dogs are going to make if he doesn’t get home soon.

Physical Exam

Upon entering the room you notice that patient is in obvious discomfort. He is standing up, perfectly still, at the side of the exam table, bent slightly forward at the waist. His right hand is holding his sore back and his left hand is on the exam table to steady himself. Mr. Jones is alert and cooperative verbally but doesn’t want to sit down. His breathing is normal. Lungs are clear to auscultation. Respiratory excursion is normal. Heart sounds are normal without murmur or rub. Inspection of his back shows no bruising or erythema. Palpation of the spinous process in the cervical, thoracic, and lumbar area are nontender. Palpation of the right paraspinal muscles at about T11–L2 is very tender and reproduces the pain. His gait is very slow, with small steps, as his back hurts. He has very limited ROM in the lumbar spine because of pain. There is minimal pain to palpation of the right CVA area as it is near the site from which most of his pain is emanating. The left CVA area is normal.

With great coaxing, the patient agrees to lie down on the exam table if you pull out the footstool and help him. The abdomen is soft, with bowel sounds present. No masses or tenderness. Extremities are without deformity or rash. Plantarflexion, dorsiflexion of the foot, and extension of the lower leg strength are normal and equal bilaterally. Patella and Achilles reflexes are intact, 2/4 bilaterally. Sensation to light touch is intact just above the kneecap, over the lateral lower leg, and over the lateral aspect of the foot bilaterally. Dorsalis pedis and posterior tibial pulses are normal bilaterally.
THE CLOSING

As with all cases, it's important to explain your clinical impression to the patient and discuss the next steps in working up his condition. It's also important to speak about how he can get some assistance with daily activities for a couple of days. Be sure to answer any additional concerns he may have.

Doctor: “Mr. Jones, I have finished my physical exam and would like to discuss what might be causing your back pain. First, let me make sure I understand correctly. Your back started hurting after you lifted something heavy at work yesterday, and by this morning the pain is a lot worse. Is that correct?” (Pause and wait for patient to answer. If he says something is incorrect, find out what the correct history is.)

“On your exam, you are most tender over the muscles of the lower back. There wasn’t any pain when I pushed on the spine. Your exam of the nerves in the legs is normal, which is very important.

“I believe you most likely have a painful back strain. It sounds like this pain is different from when you had the kidney stone, but I would like to check a urine sample to be sure. This might take a couple of days to get better; you’ll need your rest. Do you have anyone who can help with the dogs?” (Pause for response) “I will have the urine test back tomorrow and I’ll give you a call to see how you are doing. Now, what questions can I answer for you?”

CHALLENGING QUESTIONS

Be prepared to answer the following type of challenging question for this case:

Mr. Jones: “Why do you want to know about my private parts, Doc?”

Doctor: “I ask that to be sure all the nerves in the spine are uninjured.”

GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site of pain</td>
<td>General appearance</td>
</tr>
<tr>
<td>Intensity of pain</td>
<td>Inspect the cervical, thoracic, and lumbar posteriorly</td>
</tr>
<tr>
<td>Quality of pain</td>
<td>Palpate lower thoracic and lumbar spinal processes</td>
</tr>
<tr>
<td>Onset of symptoms</td>
<td>Range of motion of spine</td>
</tr>
<tr>
<td>Radiation of pain</td>
<td>Motor strength L4, L5, S1 B/L</td>
</tr>
<tr>
<td>Alleviating factors</td>
<td>Sensation L4, L5, S1</td>
</tr>
<tr>
<td>Aggravating factors</td>
<td>Reflex: Achilles and patellar B/L</td>
</tr>
<tr>
<td>Previous episodes of the chief complaint</td>
<td>Check pulses in feet B/L</td>
</tr>
<tr>
<td>Allergies</td>
<td>Palpate abdomen</td>
</tr>
<tr>
<td>Medicines</td>
<td></td>
</tr>
<tr>
<td>Hospitalizations, surgery, major illness, trauma</td>
<td></td>
</tr>
<tr>
<td>R: Any hematuria</td>
<td></td>
</tr>
<tr>
<td>S: Find out who patient lives with, as he may need some help for a couple of days</td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Back pain

HPI: Sharp pain in the R lower back, 3/10 intensity at rest, 7/10 with any movement. Began yesterday when lifting a “transmission.” Somewhat relieve by OTC meds yesterday but pain much worse this morning. No radiation to legs. No weakness or numbness. No perineal paresthesia or incontinence. No blood in the urine.

PMH: Hospitalized for appy at age 18 and had kidney stone 5 years ago. No trauma, DM, HTN.

Pain with kidney stone was colicky

Meds: None, NKDA

FH: No chronic back pain in family

SH: Lives alone with two dogs. No alcohol, drugs, or tobacco. Works as mechanic.

SAMPLE PATIENT NOTE

Physical Exam: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: WNL

GA: In distress secondary to lower back pain. Pt standing still, slightly bent over in pain. Pt is holding his back with his hand.

Inspection: No skin change, no bruise, no deformity.

Back: No point tenderness in spinal processes cervical, thoracic, or lumbar. Mild R, CVA tenderness. Very tender R lumbar paraspinal muscle at lower thoracic and upper lumbar level.

Abd: Soft, BS+, no masses or tenderness

Neuro: L4, L5, S1 Motor intact 5/5 lower ext B/L

L4, L5, S1 Light touch sensation intact B/L

Achilles, patellar reflex 2/4 BL

Pulse: 2/4 DP, PT B/L
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Muscle strain of back</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Sudden pain with lifting</td>
</tr>
<tr>
<td>No leg weakness, numbness</td>
</tr>
<tr>
<td>No hematuria</td>
</tr>
<tr>
<td>No colicky pain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Renal colic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Back pain</td>
</tr>
<tr>
<td>History of renal stone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3: Fracture of spine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Severe pain lifting heavy object</td>
</tr>
<tr>
<td>Worse with movement</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Rectal exam to check tone
- U/A
- Thoracic x-ray
- Lumbar x-ray
CASE DISCUSSION

Notes about the History-Taking

Both the Step 2 CS and Step 2 CK exams present to you cases that look less like textbook presentations and more like real life, where combinations of usually related problems are possible. To make matters more challenging, there are sometimes several different valid workups and approaches to any one unique patient. Being a first-year resident is very different from medical school days when each problem had one and only one correct answer. Because the Step 2 CS exam is designed to simulate realistic patient encounters, you may need to identify old problems that have similar symptoms. Even though this patient had back pain in the past from a kidney stone, closer look at the history and physical make muscle pull much more likely, as this pain is somewhat different from when he had the stone.

This man has a back strain by history and physical, a very common ailment. Certainly, starting by shaking Mr. Jones’s hand is contraindicated. You don’t want to cause him extra pain in the first minute you meet him. Some patients with back pain find that standing or lying flat provides some relief and is better than sitting. It is perfectly fine to take the history while the patient stands. Obviously, you cannot drape a standing patient. But you should help adjust the drape when the patient does eventually lie down.

Your introduction might go something like this:

**Doctor:** "Hello. I'm Dr. First-Name Last-Name. I will be your physician today. I see you're in a lot of pain. Would you be more comfortable lying down? I can help."

**Mr. Jones:** "I'd rather stand, Doc."

**Doctor:** "Sure, that's fine. Tell me all about what happened."

Whenever you ask the patient a question, wait for the response. It would be wrong to start guiding the patient into bed before you have his permission. Note that in this situation you would not have to wash your hands if he wanted help getting into bed at the beginning of the interview. However, you will still wash your hands before you do the formal physical exam.

The fact that the pain began when the patient lifted something very heavy, and the fact that he wants to stand perfectly still, both indicate a musculoskeletal problem. Colicky pain from kidney stones frequently gives you a patient who can’t sit still and is pacing about the room.

- Ask about hematuria for the less likely possibility of a kidney stone.
- Ask about pain, paresthesia, and weakness in the legs for the possibility of a herniated disc.
- Patients with bowel or bladder incontinence, decreased rectal tone, and paresthesias of the perineum may have cauda equina syndrome.

The family history was on this patient’s checklist. The fact that Mr. Jones’s father once hurt his back for a couple days is not a risk factor for our patient, as back strain is such a common non-genetic ailment. The physician grading the note is not giving credit for taking a family history in this case. The social history is important in any case where the illness is possibly affecting his ability to dress, eat, ambulate, toilet, and perform hygiene on his own.

DEATH is the mnemonic to assess disease states for ability to perform daily functions:

- **D** = Dress
- **E** = Eat
- **A** = Ambulate
- **T** = Toilet
- **H** = Hygiene
Notes about the Physical Exam

Since the chief complaint is back pain, it's best to start with the back exam. That way, if you're short on time you can be sure you have completed an important step on the checklist. During palpation, be sure to palpate the midline and spinous processes separately from the CVA areas and the paraspinal areas. A meticulous physical can save a lot of unnecessary tests and, more importantly, gets you an accurate diagnosis. Detailed testing of the L4, L5, S1 nerve-root motor, sensory, and reflex will be on every checklist that possibly has sciatica as a potential diagnosis.

The abdominal exam cannot realistically be done in a standing position, so you will have to offer to assist Mr. Jones in lying flat. Make sure to prepare the bed by adjusting the footstep and footrest on the cart.

This is the perfect time for the patient to challenge and say he doesn't want to lie down. It might go something like this:

**Doctor:** "Thank you, Mr. Jones. I am going to have you lie down briefly so I can check your belly."

**Mr. Jones:** "Oh, Doc, I just can't."

**Doctor:** "I'll help you, and I'll be as gentle and quick as I can. The more I know about your pain/problem, the better I'll be able to help."

**Mr. Jones:** "Okay."

If the patient refuses to cooperate, just skip that exam and go on to something else. It is part of the script of the case. It is not proof that you have done anything incorrectly.

An abdominal exam is suggested for Mr. Jones because pancreatitis, abdominal aortic aneurysm, and a posterior penetrating ulcer all can cause back pain. There is such a low clinical suspicion for these entities that the physical is probably enough to exclude them for most practitioners without the need for additional testing.

Comments about the Patient Note

It's been recognized that doctors with many years of clinical experience find the Differential Diagnosis section more challenging than fourth-year medical students do. Attending physicians tend to think in terms of one or two diagnoses for the majority of patients. New doctors, less sure of their clinical acumen, feel more justified in broader differentials and workups.

For the purpose of Step 2 CS, if you find yourself agonizing about whether a diagnosis or test is correct, go ahead and write it down. Err on the side of a little too broad a differential and an extra test if you are not sure. That being said, do not add diagnoses that have no basis in the history and physical; likewise, do not list tests that are irrelevant and dangerous just to fill up the blank lines. Some cases are designed so that no (or minimal) testing is needed.

Did you want to get a spine x-ray on Mr. Jones? He is young, without osteoporosis, and he did not fall or have direct trauma, such as being hit with a baseball bat. He has no fever, no drug use, no steroids, and no sciatica symptoms or neurological deficits. The yield of significant findings on x-ray in this population is very low.

In contrast to this, people with cervical spine pain over the spinous processes from the typical car accident should have plain films and CT scans of cervical spine. The cervical spine is much less robust and less well-protected than the lumbar spine when suddenly flexed or extended, and it is possible to have an injury that needs to be addressed in this situation.

The U/A was ordered as an initial screening test to look for hematuria in this patient with a low suspicion of renal colic. The rectal tone exam was requested just to rule out an injury to the spinal cord or nerve roots.

Do not use abbreviations in the differential diagnosis. You may use abbreviations in the diagnostic workup.
Case 3: Sore Throat

DOORWAY INFORMATION

Opening Scenario
Pat Johnson is a 19 y/o female who comes to the clinic complaining of sore throat.

Vital Signs
- Temp: 38.0°C (100.4°F)
- BP: 130/84 mm Hg, right upper limb sitting
- HR: 90/min, regular
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Knowing the differential diagnosis of common chief complaints before test day will increase your confidence: You will know you can easily pass the ICE and be better able to concentrate on the SEP and CIS.

Consider the following conditions as part of your differential before you enter the room:
- Pharyngitis
- Upper respiratory infection
- Infection, e.g., bacterial (Strep), viral
- Epiglottis
- Peritonsillar abscess
FROM THE STANDARDIZED PATIENT

History

HPI: Ms. Johnson has had a 4/10 intensity sore throat for 1 week. She complains of a scratchy feeling. The pain has not radiated to any other part of the body. She has felt feverish and sluggish for the past 3 weeks. She has not taken her temperature. She feels like she has no energy. Tylenol makes her feel better for a few hours. Nothing seems to make it worse. It has been difficult for her to go to ice hockey practice even though she is team captain. Ms. Johnson has no cough or sputum, no shortness of breath. She states she has had decreased appetite and lost 3–4 lb because it hurts when she swallows. She complains that her neck seems swollen. She has been sleeping more than usual. Her roommate was diagnosed with Strep throat last month.

PMH: She is allergic to penicillin. She was just a child when she first received it, but she remembers that it made her very short of breath. She takes no medications. She has had no prior hospitalizations, trauma, major illness, or surgery.

Ob/Gyn: LMP was 2 weeks ago and normal. She is not sexually active.

Social Hx: She lives in her college dormitory with her roommate. She denies any tobacco, alcohol, or recreational drug use.

Physical Exam

Upon entering the room you notice that patient is in no obvious discomfort. There is no rash or skin discoloration. Her head is normocephalic and atraumatic. Her sclera are clear and not jaundiced. Her pupils are equal, round, reactive to light. Tympanic membranes are normal. Nares are without congestion. Pharynx is red and inflamed. No exudates. Tonsils are enlarged. She has diffuse adenopathy, most prominent in the posterior cervical lymph nodes. Neck is supple. Her anterior neck hurts when the lymph glands are palpated. Lungs are clear to auscultation. Heart auscultation is normal. Her abdomen appears normal. She has tenderness in the abdomen just below the left costal margin upon palpation. Her spleen is not palpable. Bowel sounds are present. She is alert and oriented to person, place, and time. She is not sad; no feelings of guilt or hopelessness. Her gait is normal.

THE CLOSING

As with all cases, explain your clinical impression to the patient and discuss the next steps in working up her condition. It is important to provide some counseling about how her illness will affect her role as hockey captain. Be sure to answer any additional concerns she may have.

Doctor: “Ms. Johnson, let me tell you what I’m thinking. First, let me make sure I understand you correctly. You have had a sore throat for a week, but have been feeling tired and low-energy for 3 weeks. Is that correct?” (Pause for patient response, and if she corrects you, be sure to paraphrase again to prove you understand)

“On your physical exam I saw that your throat is very red, you have a little fever, and there is some tenderness in your tummy. I think you could have an infection in your throat.”

Patient: “I figured that. Could it be Strep?”

Doctor: “Yes, it could. I’d like to take a throat swab to check. Also, I’d like to take a blood test to check for mono.” (All college students know what mono is, so likely no definition is needed) “Then we will meet again and discuss the results. Until next visit, I’d like you to not play any hockey or any contact sports.”
## GRADING CHECKLISTS

### History Checklist
- ☑ Site of pain
- ☑ Intensity of pain
- ☑ Quality of pain
- ☑ Onset of symptoms
- ☑ Radiation of pain
- ☑ Alleviating factors
- ☑ Aggravating factors
- ☑ Associated symptoms
- ☑ Past medical history
- ☑ Allergies
- ☑ Medicines
- ☑ LMP
- ☑ Sexual history
- ☑ Exposure to other sick individuals

### Physical Exam Checklist
- ☑ Inspect pharynx
- ☑ Inspect nares
- ☑ Inspect nares
- ☑ Inspect eyes
- ☑ Inspect the neck
- ☑ Palpate for cervical adenopathy
- ☑ Auscultate lungs
- ☑ Auscultate heart
- ☑ Palpate abdomen

## CHALLENGING QUESTIONS

**Patient:** "Why can’t I play hockey?"

**Answer:** “You might have some swelling in the tummy from the infection that makes it easy to get bleeding inside the belly from a minor fall. Just for a few weeks, hold off until you are better.”
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: Sore throat

HPI:
- Scratchy-feeling sore throat for 1 wk, front of neck feels swollen.
- Positive: 3 wks of feeling feverish, tired
  Negative: cough, coryza, SOB, or sputum
  Roommate recently treated for Strep throat

Meds: None. Allergic to PCN made her SOB, or (allergic to PCN-SOB).

PMH: No hospitalizations, major illness, trauma, surgery
LMP: 2 wks ago, NL

SX: Not sexually active

SHx: Lives in college dorm. Spends a lot of time with boyfriend. Denies tobacco, EtOH, or drug use.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: NL except for T = 100.4°F

GA: NAD

HEENT: Pharynx red with swollen tonsils. Airway intact. TMs, nares NL, PERRL.

Neck: Supple, diffusely tender cervical adenopathy

Lungs: Clear to auscultation

CV: S1, S2 NL, no murmur; rub, or gallop

Abd: Soft, with tenderness in the RUQ, no masses or rebound. Spleen not palpable.

Neuro: Alert and oriented. Gait NL. Not feeling sad or hopeless.
## SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Mononucleosis

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 weeks feeling tired</td>
<td>Erythema of pharynx</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Diffuse neck adenopathy</td>
</tr>
<tr>
<td>Swollen neck</td>
<td>Tender liver</td>
</tr>
<tr>
<td>Feverish</td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #2: Strep pharyngitis

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sore throat</td>
<td>Fever</td>
</tr>
<tr>
<td>Exposure to strep</td>
<td>Erythema of pharynx</td>
</tr>
<tr>
<td>No coryza</td>
<td></td>
</tr>
<tr>
<td>Feverish feeling</td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #3: Viral pharyngitis

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sore throat</td>
<td>Fever</td>
</tr>
<tr>
<td></td>
<td>Erythema of pharynx</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- CBC
- Mono spot
- Throat culture
- T. bill, ALT, AST
CASE DISCUSSION

Notes about the History-Taking

At the doorway you should begin thinking of a differential diagnosis for sore throat. Since this patient is in no distress, it is appropriate to shake hands with her as you introduce yourself.

In addition to the differentials listed in this case, you can also consider:

- Adult epiglottitis, which causes a severe sore throat accompanied by a very hoarse voice
- Peritonsillar abscess, which presents with a severe sore throat and trismus. Trismus is the inability to open the mouth completely
- Upper respiratory infection
- Allergic rhinitis, the absence of coryza making it much less likely that the patient has this condition

Ms. Johnson's lack of energy or sluggish feeling preceding the sore throat is a clue that this is a mononucleosis case. Even though the patient complained of lack of energy, you do not need to consider major depression as a diagnosis because she has no additional symptoms of depression. The fact that the patient has a fever excludes the possibility of a depression diagnosis in this patient.

Asking about exposure to Strep throat is an additional standard question frequently asked of patients who present with sore throat. The social history of living in a college dormitory, which typically has crowded conditions, can often be included in cases of other infectious diseases such as influenza, meningococcemia, or even TB.

Notes about the Physical Exam

The physical exam checklist highlights the importance of recognizing that a temperature of 100.4°F or greater represents a fever case. The focused physical exam concentrates on the organ systems involved. So for pharyngitis, a fairly complete HEENT exam is needed. Whenever you are considering an upper respiratory infection (URI), an exam for a lower respiratory tract infection (pneumonia) is also indicated. Since this patient has had no pulmonary symptoms (cough, sputum, or SOB, for instance), auscultation is sufficient. Had the patient also experienced positive pulmonary symptoms or abnormal lung auscultation, then the rest of the chest exam would have been indicated.

A patient may tell you about simulated physical findings when you start to examine an organ. Accept what she says and write it in your note in the History section. In this case, when you are checking for cervical adenopathy, the SP may comment:

Patient: "Ouch, that's tender, Doctor."

Doctor: "I'm sorry; can you show me where in the neck it is tender?" *(Patient points to cervical lymph nodes)*

Doctor: "Have you noticed any swelling also?"

Patient: "Yes, my neck seems swollen."

Doctor: "Any problems breathing?"

Patient: "No."

Mononucleosis causes hepatosplenomegaly, which in this case is causing her abdominal tenderness to palpation. Even though Ms. Johnson does not complain of abdominal pain, an abdominal exam is still indicated with complaint of sore throat in a younger person, in order to look for this possibility.
Liver function tests (LFTs) were obtained because most patients with mononucleosis have some elevation in their liver enzymes. Ordering LFTs would be mandatory if she also mentioned skin yellowing, or if she had yellow makeup dabbed on her as a simulated physical finding. Finally, a throat culture was ordered in this case. A Strep screen would also have been correct.

**Comments about the Patient Note**

In this chart, the bullet style is used. This technique takes less time to write than traditional complete sentences. It relays the important information efficiently to the attending physician. Note that at the end of the HPI the associated symptoms are simply listed as “Positive,” followed by a list of positive findings, and “Negative,” followed by a list of negative findings. Pertinent negative findings that are relevant to the case are on the note checklist and are just as important as the positive findings. You could use the headings “-” and “+” as well.

Be specific as possible in your diagnosis. In this case, the sample note listed only four possible differential diagnoses. It is acceptable to leave a line blank if you have fewer than five diagnostic possibilities.

In the Differential Diagnosis, it’s good to be as specific as possible. In this case, listing the different types of pharyngitis, such as viral and Strep, is appropriate.

To generalize this concept: If it’s an arthritis case, write down all the types of arthritis on the Differential Diagnosis. If it’s an anemia case, write down all the types of anemia and you can quickly complete the Differential Diagnosis part of the note.

Regarding abbreviations, try not to order “LFTs,” a generic term. It is much better to state exactly what you want—in this case, T. bili, ALT, AST. By contrast, the Patient Note uses the abbreviation “NL,” which is acceptable for “normal.”
Case 4: Car Accident

DOORWAY INFORMATION

Opening Scenario
Bill Rodgers is a 59 y/o male brought to you at the hospital after having been in a car accident.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 160/90 mm Hg
- HR: 110/min, irregular
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: The challenge in this case is to obtain a history but to then focus most of your attention on the physical examination. The physical exam for acute trauma emphasizes inspection and palpation of all areas of the body. On a blunt trauma case you will need to inspect and palpate each section of the body to see if there are any “hidden” bruises or fractures. Rapidly palpate each extremity in two or three places with your open hand. If you are close to a simulated physical finding, the patient will grimace and then you can slow down and determine exactly where the injury is located. Pay attention to all information on the doorway.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Rodgers was not wearing his seat belt when his car was hit from behind 30 minutes ago. Mr. Rodgers says he was stopped at a red light when this happened. He doesn’t really remember the accident, and the first thing he can recall afterward is waking up with a sore neck while the paramedics were knocking on the window. Mr. Rodgers quickly regained consciousness and then unlocked the door. The neck pain is described as sharp, 5/10 intensity. He states that pain is worse when he tries to bend his neck, and better if he keeps perfectly still. He has no prior neck problems or any other injury, nor does he have any chest pain, shortness of breath, abdominal pain, or problems with his extremities.

PMH: Patient is allergic to strawberries. He was started on Coumadin and metoprolol 1 week ago after having new-onset palpitations for which he was diagnosed with atrial fibrillation. He has never had any surgery or other trauma. He has had a history of hypertension for 20 years for which he takes Lisinopril.

SH: Mr. Rodgers has smoked one pack of cigarettes a day for the last 20 years. He has not had any alcohol for the past week, as he was advised to eliminate his daily glass of wine with dinner. He lives with his wife.

Physical Exam

The patient is alert and oriented to person, place, and time. He comes in walking normally, rubbing his neck. He has an obvious purple/blue ecchymosis to the forehead. The skin is intact. There is no deformity to the calvarium. PEERL. Pharynx and nares are normal. There is no hemotympanum. His neck is tender in the midline posteriorly as well as in both trapezius bilaterally. His chest is normal-appearing, and he has a normal respiratory excursion. Palpation of the chest wall reveals no tenderness or deformity. Radial pulses are 2/4 and equal bilaterally. Lungs are clear to auscultation. Heart tones are irregular without murmur. The abdomen is soft and nontender in all quadrants. No ecchymosis or abrasions present. There is no CVA tenderness.

His extremities are free of any trauma. He has no facial asymmetry, CN 9, 10, 12 are also intact. His motor strength is 5/5 all four extremities.

THE CLOSING

The closings seem more artificial the sicker the patient is portraying. Even had this been a multiple trauma case with life-threatening injuries, you would still do the closing. Remember, there is no treatment in Step 2 CS.

Doctor: “Mr. Rodgers, I have completed your physical exam and I would like to tell you what I’m thinking. First of all, let me be sure I understand. You started Coumadin recently for abnormal heartbeat, and today you bumped your head and hurt your neck in a car accident. Is that correct?” (Wait for the response)

“On your physical exam I see a bruise on your forehead, and your neck seems pretty sore. You most likely have a sprained neck, but I will ask you to have an x-ray to be sure. I will also take a picture of your head, and a blood test to check the Coumadin level. As soon as the x-ray is completed, I’ll come and tell you the results. Do you have any questions?”
### GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Checklist:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ Symptom: Neck pain</td>
<td>✅ HEENT: Pupils, TM, pharynx</td>
</tr>
<tr>
<td>✅ Intensity</td>
<td>✅ HEENT: Inspection and palpation of the head</td>
</tr>
<tr>
<td>✅ Quality</td>
<td>✅ HEENT: Inspection and palpation of the spine</td>
</tr>
<tr>
<td>✅ Onset</td>
<td>✅ Chest: Inspection and palpation of the chest</td>
</tr>
<tr>
<td>✅ Radiation</td>
<td>✅ Chest: Auscultation</td>
</tr>
<tr>
<td>✅ Alleviating factors</td>
<td>✅ Abd: Inspection and palpation of the abdomen</td>
</tr>
<tr>
<td>✅ Aggravating factors</td>
<td>✅ Extremities: Inspection and palpation for any fracture</td>
</tr>
<tr>
<td>✅ Associated symptoms: LOC, chest pain, SOB, weakness in extremities</td>
<td>✅ Neuro: Mental status</td>
</tr>
<tr>
<td>✅ Allergies</td>
<td>✅ Neuro: Cranial nerves</td>
</tr>
<tr>
<td>✅ Medications</td>
<td>✅ Neuro: Motor strength</td>
</tr>
<tr>
<td>✅ PMH: Major illness—atrial fibrillation, HTN</td>
<td>✅ Neuro: Gait</td>
</tr>
<tr>
<td>✅ Social Hx: EtOH</td>
<td>✅ CV: Auscultation</td>
</tr>
<tr>
<td></td>
<td>✅ CV: Peripheral pulses</td>
</tr>
</tbody>
</table>

### CHALLENGING QUESTIONS

**Mr. Rodgers:** "I should have taken my Coumadin a half-hour ago. May I take my own tablet? I have it with me."

Answer: “Please wait and let’s get a picture of your head first. Then I’ll know if you should take it or not.”

Any patient who wants medication for any reason should always get the same response: You always need to do a history and physical, do a test, and then you’ll know the correct medicine to give.

**Mr. Rodgers:** “Can you call my wife? She will think I was in accident when I don’t show up on time.”

Answer: “Yes, certainly. It will take a couple of minutes to finish examining you, and then I will call her.”
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: MVA (motor vehicle accident)

HPI: Patient states he was rear-ended in the car 30 minutes ago while stopped at red light. No seat belt. Refused paramedic help and insisted on walking into hospital himself. Neck pain is sharp/burning feeling, 5/10 intensity. Radiates to both shoulders bilaterally. Better with rest. Hurts with any movement of the neck. Denies chest pain, SOB, Abd pain, or extremity pain. Denies any weakness in the extremities. Also states had brief LOC as he hit his head.

Allergies: Strawberries

Medications: Coumadin (1 wk), metoprolol (1 wk), lisinopril

PMH: No prior trauma. Hospitalized for first presentation of sustained atrial fibrillation last week, and started on the medication. Hx of HTN as well. No surgical hx.

SH: States drank 1 glass of wine per day but stopped on advice of cardiologist last week. Still smokes 1 pack of cigarettes/day. Lives at home with his wife.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: HR 110 and irreg, BP 160/90, T 37.0°C, RR 20
GA: Awake, alert, mild distress, complaining of neck pain
HEENT: Contusion and tenderness to forehead. No laceration. PERRL. TMs clear. Pharynx: clear; no other facial bone tenderness.

Cervical spine: Tender in the midline and both trapezius bilaterally. No thoracic, lumbar, or CVA tenderness.

Chest: No bruising, NL respiratory excursion. No chest wall tenderness. Lungs clear to A.
CV: S1 S2 WNL no RMG, radial pulses strong and irregular; 2/4 B/L.

Abd: Nontender
Ext: No tenderness to palpation all 4 ext
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Acute cervical strain

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in neck after MVA</td>
<td>Tender postcervical muscles</td>
</tr>
<tr>
<td>Pain worse with movement</td>
<td>Normal distal neuro exam</td>
</tr>
</tbody>
</table>

Diagnosis #2: Cervical vertebrae fracture

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in neck after MVA</td>
<td>Tender post c-spine in midline</td>
</tr>
<tr>
<td>Pain worse with movement</td>
<td></td>
</tr>
</tbody>
</table>

Diagnosis #3: Intracranial hemorrhage

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blunt head trauma + LOC On Coumadin</td>
<td>Bruise on head</td>
</tr>
<tr>
<td></td>
<td>Tender forehead</td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

- CBC, INR
- C-spine x-ray
- CT of brain
- ECG
CASE DISCUSSION

Notes about the History-Taking
This case is primarily designed to test your skills in handling a trauma patient. There are other elements in the history that in a normal office visit would require more thorough questioning. Though this patient is a smoker and has a history of hypertension, you will not be required to thoroughly question general health-maintenance issues. The possible neck injury and/or other possible injuries (fractures or bleeding) are the more important problems to address.

Notes about the Physical Exam
In this case, it would be incorrect (and potentially dangerous) to check the neck's range of motion prior to x-ray. In an ordinary emergency room setting you would provide immediate treatment with a cervical collar and c-spine immobilization. However, the Step 2 CS exam does not test your management and treatment skills; instead, you are tested on your clinical reasoning skills relating to the history and physical examination. Offer to help, hold the patient's head and neck still to prevent pain while the patient is lying down or changing position. Try not to move the neck throughout the entire encounter. Providing assistance to the SP during the encounter shows concern for the patient, and he will appreciate that you have helped to prevent the sharp pain that occurs when he moves his neck.

Note that in a case such as this you may or may not find the SP to have an irregular pulse from chronic atrial fibrillation. Be sure to check the radial pulse for 3–5 seconds to determine if it is regular or not.

Comments about the Patient Note
You may document the loss of consciousness at the very beginning of the HPI. What’s important is that you have documented both the neck pain and the loss of consciousness. Where exactly you document the loss of consciousness (LOC) in the HPI narrative is less important.

Note: In a true clinical setting, the initial acute management of multisystem trauma integrates history, physical, and treatment. Advanced Trauma Life Support (ATLS) is a multiday class that has a different approach to the order of taking the history and physical from that presented here. If you are familiar with ATLS techniques, you may also use them in Step 2 CS—except for the treatment, which is not a component of the Step 2 CS exam. However, it is not necessary or advantageous to have taken ATLS training in order to pass Step 2 CS. Check the pulse on your SP. If it is irregular, write that in your physical exam.

Checking the INR on this patient, who is on Coumadin, is mandatory. Anyone with even a brief loss of consciousness needs a head CT to look for bleeding inside the skull. In this case, write Epidural and Subdural on one line of the diagnosis. Using two separate lines is equally correct.

Atrial fibrillation did not make the list of top 3 diagnoses. Focus on the reason for today's visit with the doctor: the car accident. The a-fib is old news. Of course, getting the history of being on Coumadin is important.
# Case 5: Left-Arm Weakness

## DOORWAY INFORMATION

### Opening Scenario
Kenneth King is a 69 y/o male with left-arm weakness.

### Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 160/100 mm Hg
- HR: 80/min, regular
- RR: 20/min

### Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

## BEFORE ENTERING THE ROOM

**Clinical Reasoning:** Left-arm weakness can have many causes. Nervous system, vascular (blood flow), and musculoskeletal problems are all possible causes of weakness. A detailed examination of the arm, with close attention to motor strength, range of motion, and distal pulse, is an important part of this case. The weakness may also be coming from the spinal cord or nerve roots. Lastly, stroke is a common cause of weakness and should always be considered in an older patient. Be sure to include other questions about stroke in your history. Before you enter the room you will already be able to anticipate that a complete neurological exam will be needed in this patient.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. King tells you that about an hour ago he just recently started to have problems moving his left arm. He is right-handed. He was sitting at his computer typing when it started. These symptoms started 1 hour ago. When he got up and walked, he noticed that his left leg was dragging a bit.

The deficit came on pretty suddenly over the course of a couple of minutes. It now is getting neither better nor worse. Mr. King is getting worried that something bad is happening, as he could not put on and button his own jacket when he came over to see you. He took an aspirin tablet, but that doesn’t seem to help. Nothing makes it worse. He has also noticed that he has trouble swallowing, and his face seems droopy. He almost choked while getting down the aspirin and a little water. He has no chest pain, headache, nausea, vomiting, or recent palpitations over the last few days.

He has never had anything this severe before, but last week his left arm got a little weak and numb but it only lasted several hours. Mr. King dismissed it as just being a little tired.

Allergies: None

Meds: HCTZ, lisinopril, ASA, Plavix, metoprolol, Lipitor

PMH: He was hospitalized for aortofemoral bypass surgery 1 year ago for claudication. He had a heart attack 2 years ago and had angioplasty with a stent performed. No diabetes or history of stroke. No trauma. Mr. King has a 5-year history of hypertension.

SH: He has been sleeping normally; is trying unsuccessfully to eat a low-cholesterol, low-fat diet; and has no problems urinating.

He lives with his wife of 48 years; she is disabled and he is responsible for taking care of all of her needs, including feeding and toileting. Mr. King stopped smoking years ago. He has one shot of whiskey every Sunday afternoon.

Physical Exam

Patient appears somewhat sloppily dressed, and his left shoelace is untied. He prefers to look to the right. He has some droopiness to the left-lower face. His forehead is wrinkled, and he can close his eyes when asked. He has normal carotid artery pulses and no bruises. His chest appears normal. His breathing is normal and his lungs are clear. He has normal regular heart tones. Pulse is regular. He is alert and oriented to person, place, and time. He has difficulty looking to the left. His pupils are equal, round, and reactive to light. The fundi show a normal red reflex. He has left temporal and right nasal visual field loss.

His motor strength is significantly weaker on the left side of the body than the right. His left arm is weaker than his left leg. He has decreased reflexes on the left patellar and brachial compared to the right. His gait is difficult because of the unilateral weakness. He has decreased sensation on the left side of the body.
THE CLOSING

Doctor: "I have finished your exam and would like to be sure I understand you correctly. These symptoms of weakness started today, about an hour ago, and you had something similar but not as bad last week. Is that correct?" (Wait for response)

"On your exam, I see that your strength is decreased on one side. What you could have is a lack of blood going to your brain. I'd like you to have a picture of your head to find out why this is happening.

"I also want you to have a blood test to check how your blood is clotting. Then we'll meet again and I will have more information for you. At that point I can get you treatment. Do you have any questions?"

CHALLENGING QUESTIONS

Mr. King: "Someone has to take care of my wife while I am here. She is helpless on her own."

Answer: "Yes, I can have the visiting nurse (or social worker) make an emergency visit and help her now."
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: Weakness LUE

HPI: R-handed patient began experiencing L arm and leg weakness 1 hour ago. Started suddenly. Not improving. Also has noticed problems with vision. Is having difficulty dressing himself. Took ASA without relief. Also noted trouble swallowing. Nothing makes it better. No headache, nausea, vomiting, or chest pain. No headache.

Allergies: None

Meds: ASA, Plavix, Lipitor, metoprolol, lisinopril, HCTZ

PMH: Last week had L arm numbness and weakness for several hours. Hospitalized for aortobifemoral bypass 1 yr ago. AMI 2 yrs ago with stent. No trauma, stroke, or DM. + HTN.

SH: Lives with wife who is bedridden. Mr. King is her primary caretaker. Stopped smoking years ago. Has one shot of whiskey every Sunday afternoon.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: BP 160/110 mm Hg, HR 80/min and regular, RR 20/min, afebrile

GA: Pt appears in distress due to weakness. Shoe is untied on L.

HEENT: PERRL. Fundi: red reflex intact. Pt gaze is to the R with both eyes. Visual field L temporal & R nasal loss.

Chest: Lungs CTA


Neuro: Alert and oriented x3

L lower face droopy
Motor RUE 5/5, RLE 5/5, LUE 2/5, LLE 3/5
DTR: R brachial, patellar 2/4, L brachial, patellar 1/4.
Sensory: Decrease light touch L side of body
Gait: Difficult with leg weakness, no ataxia
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Acute cerebral vascular accident</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>1 hr left-sided weakness</td>
</tr>
<tr>
<td>History of vascular disease</td>
</tr>
<tr>
<td>Possible TIA last week</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Transient ischemic attack</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>1 hr left-sided weakness</td>
</tr>
<tr>
<td>History of vascular disease</td>
</tr>
<tr>
<td>Possible TIA last week</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Head CT (noncontrast)
- CBC, lytes, BUN, Cr, glucose, INR
- ECG, CXR
- Carotid duplex scanning
CASE DISCUSSION

Notes about the History-Taking
With some patients, like this one, you will need to show patience, speak slowly and clearly, and position yourself where you can be seen.

On the CS exam, you will not have patients that are mute, unresponsive, or pretending to have a Glasgow Coma Scale of 3. This type of case would prevent testing your SEP and CIS skills.

Mr. King gives you the history that he has vascular disease. Since he has known peripheral vascular disease and known coronary artery disease, it is not surprising that he had a transient ischemic attack (TIA) last week and today is having either another TIA or a stroke. It is important to ask about headache, since headaches are more common in hemorrhagic stroke than ischemic stroke. You still need neuroimaging to confirm that a stroke is ischemic or hemorrhagic.

In real life this patient would be an extreme emergency, as he may be a candidate for thrombolytic therapy. However, for the Step 2 CS, treatment is not a component of the encounter. Simply collect your history and physical within your 15 minutes.

The family history does not seem relevant in this patient with known vascular disease. In Mr. King's case, the sexual history also can be skipped inasmuch as it will shed no light on the cause of his stroke. Save time here to concentrate on the neurological exam.

The social history that Mr. King is the sole caretaker of his wife presents an additional problem. You'll need to address this during the closing. It is appropriate to offer to send a social worker to check on the wife and make arrangements for her care while Mr. King is with you.

Notes about the Physical Exam
The physical exam in this case concentrates on the neurological exam. In this case, there should be some testing of mental status, cranial nerves, motor, sensation, reflexes, and cerebellar function. Certainly, checking the carotid artery, auscultation of the heart, and lungs will complete the checklist.

Comments about the Patient Note
While this man probably has a right middle cerebral artery stroke, the important thing for Step 2 CS is to recognize the need for a good neurological exam and CNS workup. Be as specific as possible if you recognize a stroke syndrome, but remember: the CS exam is designed primarily to evaluate whether you can collect the history and physical exam findings. It is acceptable if you write other, more general possibilities for the Differential Diagnosis.

In this case, it's important to note that the pulse is regular, since so many strokes are from atrial fibrillation.

Patients with middle cerebral artery stroke tend to look toward the side of the brain that has the lesion, and tend to ignore the side of the body that is weak. (Notice that this patient had untied shoelaces on his left side.)

Similarly, you may also describe motor strength and DTRs in the patient note via the use of stick-figure diagrams, as discussed in Section I.

It is important to note that a CT scan was ordered in the workup plan. An MRI shows acute ischemia much sooner than CT, but a CT scan is more accurate in determining if an acute hemorrhage has occurred. It is also correct if you wish to also include an MRI. In a real patient setting this patient might be a candidate for thrombolitics.
Case 6: Positive Pregnancy Test

DOORWAY INFORMATION

Opening Scenario
Mrs. Linda Williams is a 23 y/o female who has come to the clinic because a home pregnancy test is positive.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 110/70 mm Hg, right upper limb sitting
- HR: 72/min, regular
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Home pregnancy tests are accurate, so the diagnosis is likely to be pregnancy. Other causes of an elevated HCG, such as ovarian cancer, are extremely unlikely in a young woman. While you are outside of the room, it is important to begin thinking about common complications of pregnancy and what you should screen for during early stages of pregnancy, as well as how you will counsel this mother-to-be. A detailed sexual history and Ob/Gyn history will be needed.
FROM THE STANDARDIZED PATIENT

History
As you enter the room, the patient is smiling broadly and says, “Hello, Doctor, nice to meet you.”

HPI: Mrs. Williams states she did a home pregnancy test 3 days ago and it was positive. This past week she noticed that her breasts are tender, and she felt a little nauseated without vomiting just this morning. She has no abdominal or back pain, and has had no vaginal bleeding since the end of her last period. She has no dysuria or frequency.

PMH: She has no allergies. She takes no medications. She has had no prior hospitalizations, trauma, major illness, or surgery. She remembers having chickenpox as a child, but is not sure about German measles. No history of hepatitis or skin turning yellow.

Immunizations: Had all the shots she needed to pass high school.

ROS: Mrs. Williams has no change in her normal sleep pattern and is on no special diet.

FH: There are no genetic diseases in the family, though her 75 y/o grandmother has diabetes. Her parents are healthy.

Sexual Hx: Mrs. Williams is sexually active with her husband. She has not had any other partners since they were married 3 years ago. They were using condoms for contraception but lately they have “forgotten” to use them most of the time. Mrs. Williams reports both she and her husband are happy and excited about the pregnancy. Five years ago, she was tested for a sexually transmitted disease and was positive for gonorrhea. She received treatment for it.

Gyn Hx: Her LMP began exactly 40 days ago. She had a normal period, which lasted 5 days. Her previous period was normal also. Menarche was at age 12 and she has had regular 29-day cycles for years.

OB Hx: She is now G1P0. She and her husband were thinking about having a baby but hadn’t decided for sure when she found out she was pregnant.

Social Hx: She lives with her husband. She denies any tobacco or drug use, though when she goes out dancing with her husband once a week, she drinks two alcoholic beverages. She works as a secretary. She denies any domestic violence and states that she and her husband are very much in love.

Physical Exam
She states she is 5 feet 4 inches, 130 lb.

HEENT: No jaundice. PERRL, pharynx clear.

The neck appears normal and there is no thyroidmegaly to palpation. The chest shows no chest wall deformity. There is no deformity to her spine on inspection. She has normal respiratory excursion. The lungs are clear to auscultation. Her heart has normal S1 S2, WNL; no rub, murmur, or gallop.

Patient's abdomen appears normal, as are bowel sounds. To palpation, her abdomen is nontender without masses or organomegaly. There is no suprapubic mass or tenderness. There is no swelling or edema in her legs. She is alert and in no distress. Her gait is normal.
THE CLOSING

Explain your clinical impression to the patient and discuss the next steps. For this case, the diagnosis is straightforward and a lot of time will need to be spent counseling the patient. Be sure to answer any additional concerns she may have.

Doctor: “Mrs. Williams, I have finished my physical exam and would like to talk with you. I agree that most likely you are pregnant. I would like to collect another urine sample for a pregnancy test and do a pelvic exam to confirm the pregnancy. I would also like to do blood tests to check your general health and make sure there are no infections. These are standard tests for all pregnant women. Your physical exam is normal and I will be seeing you regularly throughout your pregnancy. Any questions so far?”

Mrs. Williams: “No.”

Doctor: “The danger signs of pregnancy are bleeding and abdominal pain. Also, if you feel faint I want you to call me. I’m not expecting any problems based on what you told me, but you should know what to look for.”

Mrs. Williams: “Yes, Doctor.”

Doctor: “I want you to not drink any alcohol, and to limit your caffeine intake, all while you are pregnant. Is that all right with you?”

Mrs. Williams: “Of course. I stopped drinking as soon as I found out I was pregnant. I think I had four glasses of wine total when I was pregnant. Do you think I hurt the baby?”

Doctor: “No.”

GRADING CHECKLISTS

History Checklist

☑ Symptoms of pregnancy
☑ Ask about complications of pregnancy, bleeding, and abdominal pain
☑ Onset of symptoms
☑ Past medical history
☑ Allergies
☑ Medicines
☑ SH: Ask about diet
☑ Family hx: Ask about genetic diseases
☑ Sexual hx: Ask about contraception, planned pregnancy
☑ Sexual hx: Ask about any hx of STD
☑ Complete gynecological history
☑ Social hx: Ask about domestic violence
☑ Social hx: Ask about drugs, alcohol, smoking

Physical Exam Checklist

☑ Ask patient’s height and weight
☑ Palpate the thyroid
☑ Inspect the chest and back
☑ Auscultate the chest
☑ Auscultate the heart
☑ Inspect the abdomen
☑ Auscultate the abdomen
☑ Palpate the abdomen and suprapubic area
☑ Inspect the legs
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Positive home pregnancy test

HPI: Tender breasts 1 week ago. + home pregnancy test. Felt nausea this a.m. No vomiting. Pt denies dysuria, frequency, abdominal pain, or vaginal bleeding.

Meds: None, NKDA

PMH: No hospitalizations, major illness, trauma, surgery. She recalls having varicella but not rubeola as a child. No history of hepatitis.

ROS: On no special diet, no recent change in sleep

SX: Sexually active, monogamous, stopped using condoms recently. Hx of Gonorrhea 5 years ago; treated.

Gyn: LMP began 40 days ago. Regular periods for 5 days. 29-day cycle. Menarche age 12. No heavy bleeding.

SH: Lives with husband, denies tobacco or drug use. EtOH: 2 drinks per week. Denies domestic violence.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: WNL. Reports 5 ft 4 in, 130 lb.

GA: No distress, pt happy

HEENT: PERRL, pharynx clear. No thyroidmegaly.

Chest: No deformity, NL respiratory excursion, lungs clear to A

Back/Spine: No deformity

CV: S1 S2 NL; no murmur, rub, or gallop

Abd: Soft, nontender. BS+. No masses all 4 quadrants and suprapubic.

Legs: No swelling or tenderness. Neuro: alert, gait-NL.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>+ home preg test</td>
</tr>
<tr>
<td>– late period</td>
</tr>
<tr>
<td>Tender breasts</td>
</tr>
<tr>
<td>Morning sickness</td>
</tr>
</tbody>
</table>

**Differential diagnosis and diagnostic reasoning**

**Diagnosis #2:**

**History Finding(s)**

**Physical Exam Finding(s)**

**Differential diagnosis and diagnostic reasoning**

**Diagnosis #3:**

**History Finding(s)**

**Physical Exam Finding(s)**

**Diagnostic Study/Studies**

- Pelvic exam, Pap smear, gonorrhea culture, Chlamydia culture
- CBE, blood type, and Rh
- U/A, UCG, TSH
- VDRL, HIV, rubella titer
- Hepatitis B serology
CHALLENGING QUESTIONS

Mrs. Williams: “What else can I do to help the baby? And can I still go out dancing once a week? I really enjoy that.”

Answer: “Eat a healthy diet with plenty of calcium and green leafy vegetables. And yes, go ahead and dance. You should still be physically active, and many women still remain active the entire pregnancy.”

CASE DISCUSSION

Notes about the History-Taking

This scenario would be the perfect situation to initiate a handshake with the patient. She is smiling and happy, and begins conversing as soon as you enter the room. In the interest of time, it’s best to limit small talk and get straight into her reasons for the visit.

The challenge in this case is not in determining the actual diagnosis but in obtaining the necessary family, Ob/Gyn, sexual, and social histories; asking focused questions about medical issues that may affect the pregnancy; and counseling her on the pregnancy. This patient has come in not just with a positive home pregnancy test but also describing the symptoms of early pregnancy. You will need to then follow the rest of the history and physical by asking questions that may alert you to complications or problems that suggest an abnormal pregnancy (such as a threatened abortion or ectopic pregnancy). Because your goal is to screen for likely problems that would appear in a first-trimester pregnancy, this case tests your ability to collect a fairly complete Ob/Gyn and sexual history.

Since the estimated date of confinement is calculated from the first day of the last period, it is essential that you take a detailed gynecological history and determine when her last period was.

As with other cases, you will need to ensure that when speaking with the patient you use lay terms for medical conditions, such as “chickenpox” or “measles.” You will then document these in appropriate medical terms in the patient note (“varicella,” “rubeola”). However, if you can’t remember the medical terms it is acceptable to use the lay terms on your note as well. The attending physician who grades your note is familiar with both sets of terms.

In the sexual history, be sure to ask if this is a planned pregnancy, or “Is the baby coming at a good time for you and your husband?” This is a good way to gauge the patient’s reaction and give her an opportunity to voice any concerns over the pregnancy. As with other cases, in the closing, always ask if the patient has any questions or concerns.

In some scenarios you will need to respond to a sudden change in the patient’s tone of voice. This patient shifted tone when discussing her history of sexually transmitted diseases; she appeared sad and looked down at her feet when you asked about sexually transmitted diseases. The best approach is to discuss the topic as follows:

Doctor: “Have you ever been tested for any sexually transmitted disease?” (Patient looks down at her feet and doesn’t answer. She avoids eye contact.)

Doctor: “You look sad all of a sudden. Can you tell me why?”

Mrs. Williams: “It’s embarrassing, and if my husband ever found out …” (Her voice gets quiet)

Doctor: “Remember, everything we talk about is confidential. The more I know about you and your medical history, the better I’ll be able help you.”
Mrs. Williams: (Wiping away a tear) “Before I met my husband, five years ago I got gonorrhea.”

Doctor: “Thank you for telling me. I can see that this must have been difficult for you.”

Notes about the Physical Exam
Vital signs: Unlike a real clinic, here you have no scale to take the patient’s weight or tape measure to get the height. So in cases where it is important, you have to ask the patient for the height and weight and list it after the vital signs. Ask the patient for this information. Do not guess. Simply say “How tall are you?” (pause for a response), “How much do you weigh?” (pause for a response). American patients will typically answer in pounds for weight and feet and inches for height.

As with all case scenarios, begin the physical exam with the most important organ system. Certainly, the most important part of this physical exam is the pelvic exam. Since this is prohibited on the test you will simply list it in the Diagnostic Workup section. The next most important aspect of the physical is the abdominal exam. Of course, examining the heart and lungs and checking for any obvious or severe scoliosis is in order. This particular physical exam checklist also includes a thyroid examination. Checking for subclinical hypothyroidism is done because adequate thyroid hormone is needed for fetal brain development.

Comments about the Patient Note
There is only one diagnosis that seems credible at this time. It is perfectly correct in this case to leave the other diagnosis lines blank. The Diagnostic Workup in this case is not to make a diagnosis but to check for conditions that could harm the pregnancy, and to list an appropriate workup for a first-trimester pregnancy.
Case 7: Pre-Employment Physical

DOORWAY INFORMATION

Opening Scenario
Robert Davis is a 40 y/o male who needs a pre-employment physical.

Vital Signs
- Temp: 38.1°C (100.6°F)
- BP: 140/90 mm Hg, right upper limb sitting
- HR: 110/min, regular
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Find out early in the interview what type of job the patient is applying for. You may find this patient a little nervous since his employment relies on this visit and on obtaining clearance from the physical exam you perform. Good eyesight and hearing, a normal neurological exam, and normal exams of the knees and spine are important for most jobs that involve physical labor. The PMH is also relevant because this may guide you to other issues that may need to be addressed in this visit.

In this case the patient has fever, tachycardia, and an elevated blood pressure reading. You will need to find out why the vital signs are abnormal, not just do a history and physical so he can get a job.
FROM THE STANDARDIZED PATIENT

History

**HPI:** Mr. Davis states that he just needs a note from you so he can get this job. He wants to be a taxi driver and he needs clearance from his physician saying he is fit for the job. He denies any other complaint such as cough, sputum, or dysuria. He didn’t realize he had a fever or was shaky. He responds that he “gets like this sometimes but it always goes away.” He thinks it might be nervousness, and suggests you not worry about it. He denies any weight loss, night sweats, joint problems, or difficulty with his hearing or eyesight.

**PMH:** Patient takes no medications. He has no known allergies. One hospitalization last month, when he fell and had a concussion. He just stayed overnight in the emergency room and was released the next morning. When you ask about surgery, he says he just needed some stitches on his head, no operations.

**ROS:** States he is on no special diet, his sleep pattern has not changed, and he has no problems urinating.

**Family Hx:** Mr. Davis states he has lost contact with his family and really doesn’t know how they are doing. He doesn’t know of any medical conditions in his family.

**Social Hx:** Lives alone, has shelter and food, but admits to some stress over finances. He has smoked tobacco regularly for the past 20 years (1.5 packs a day for 20 years). He also occasionally smokes “grass.” He drinks two to three beers on Friday and Saturday nights, and sometimes during the week. Mr. Davis states he drinks “only beer, none of the hard stuff.” He is CAGE-positive.

He frequently needs a drink in the morning to prevent the shakes. He suspects he should feel guilty, and he sometimes wakes up on the floor and isn’t sure what happened. Last week it took him a long time to wake up, and he noticed that his tongue was bleeding. His pants were also wet from urine. Mr. Davis believes he “must have been punched in the mouth or something.” He used to be very annoyed by his ex-wife criticizing his drinking, but she left him last year.

**CAGE Questionnaire:**
- Have you ever felt you should Cut down on your drinking?
- Have people Annoyed you by criticizing your drinking?
- Have you ever felt bad or Guilty about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (Eye-opener)?

**Physical Exam**

Upon entering the room you notice that the patient is somewhat diaphoretic and tremulous. He isn’t smiling and looks vaguely irritated. His speech is somewhat slow. His clothes are dirty and he has poor hygiene. He weighs 160 lb; his height is 5 feet 11 inches.

You see a healed scar over his forehead from last month. There is some tenderness still over the temple nearest the laceration. PERRL. Fundi shows the red reflex intact. His face has a spider angioma (Note: This is likely to be a simulated finding through the use of makeup). The pupils are equal, round, reactive to light. His cervical spine is not tender. His ribs are nontender. Lungs are clear. Heart tones are normal to auscultation. His abdomen is soft and nontender. His extremities show palmar erythema (Note: This is likely to be a simulated finding through the use of a little red makeup on the palms). There is no jaundice.
Patient is alert to person, place, and time. Short-term memory is poor. Extraocular movement appears intact, but he does have lateral nystagmus. Motor strength is equal in both arms and legs. He can walk unassisted but looks tremulous.

**THE CLOSING**

As with all cases, it is important to explain your clinical impression to your patient and discuss the next steps in working up his condition. Explain why you cannot sign the note that clears him for employment, and be sure to answer any additional concerns he may have.

**Doctor:** "Mr. Davis, let me tell you what I am thinking. You told me you hit your head last month. Is that right?"

**Mr. Davis:** "Yes."

**Doctor:** "Also, you get shaky sometimes in the morning and take a drink to feel better. Is that correct?"

**Mr. Davis:** "Yes."

**Doctor:** "On your exam I found you have a fever, your heartbeat is fast, and you look very shaky."

**Mr. Davis:** "I just need a drink, Doc, and I’ll be fine."

**Doctor:** "We have medicine that is better treatment than drinking. I also need to take a picture of your head, and blood tests to check your liver. Then we can talk about the rest of your treatment."

**Mr. Davis:** "I don’t have no money for tests."

**Doctor:** "I will have our social worker come and talk to you to help you with that. Also, I’d like for you to meet our alcohol counselor. You need to stop drinking in order to improve your health. Do you have any other questions I can answer right now?"

**CHALLENGING QUESTIONS**

Be prepared to answer the following type of challenging questions for this case:

**Mr. Davis:** "You could just give me the note now and I’ll be on my way. Also Doc, just to let you know, I have the cash on me to pay you."

Answer: "I cannot write that note today. I am concerned about your drinking and the falls you have had. I believe you may put yourself and others at risk if you drive a taxi in your current state of health. I would like you to see our alcohol counselor, and we will meet soon after you have the picture of your head. In fact, I’d like to arrange to take the picture now."

Apart from not providing the note, the key here is to remain nondefensive and nonjudgmental about the fact that an attempt was just made to bribe you. Just smile, and do what is in the patient’s best interest.

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**KAPLAN MEDICAL**
CASE DISCUSSION

Notes about the History-Taking

For this case, it may be appropriate to not offer a handshake. If the patient offered to shake your hand, he may lose his balance and begin to fall to the side. If this were to occur, you would be expected to catch him to prevent a fall.

For the average pre-employment case, find out a little about what the patient’s job entails. Many jobs require checks of eyesight, hearing, height, weight, general flexibility, and cardiovascular fitness, with attention to knees and spine as well as little neurological (coordination, strength). An employer will not hire someone who is not oriented to person, place, or time. For the pre-employment case, you should ask:

Doctor: “Besides coming in for the physical for your new job, do you have any other health concerns?”

If the patient says no, go directly to a complete PMH. Mr. Davis, however, is a complex case in that he is obviously quite ill, judging from his vital signs and initial appearance. As the doctor, you must shift his focus to the more acute health problems. Ask for associated symptoms for fever that relate to common conditions, e.g., pneumonia and UTI-type complaints.

By the time you complete the social history, it is evident that Mr. Davis may be suffering from alcohol withdrawal syndrome and/or possibly a seizure disorder. The history of head trauma should raise the possibility of intracranial bleeding. Never assume just because he was hospitalized for a day that everything is okay or that a subdural hematoma was ruled out.
**SAMPLE PATIENT NOTE**

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Pt requests pre-employment physical clearance note

**HPI:** Pt denies complaints, wants physical exam to get job as taxi driver. However, presents with tremors, fever, and healing cuts on his tongue and forehead. States had concussion last month and “woke up” on floor with bloody tongue last week. He was not sure what happened. Denies cough, URI, sputum, or dysuria. + incontinence.

**Meds:** None, NKDA

**PMH:** One hospitalization last month for head trauma, no surgery

**SH:** Lives alone. 30-pack-yr smoking, “occasional” marijuana. Drinks 2–3 drinks/day. CAGE+, drinks frequently to stop shakes

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**SAMPLE PATIENT NOTE**

**Physical Examination:** Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** 100.6°F, 140/90 mm Hg, 110/min, RR = 20/min. Skin: palmar erythema, spider angioma.

**GA:** Unkempt, dirty, tremulous

**HEENT:** Healing, still-tender laceration to forehead and tongue. PEERL EOMI, + nystagmus.

**Chest:** Clear to A, CV tachy, S1 S2 intact, no murmur, rub, and gallop

**Abd:** Soft, nontender, no organomegaly

**Neuro:** A + O x 3. Pt obeys commands and language is intact. Motor 5/5 B/L, gait shaky.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

**Diagnosis #1: Alcohol withdrawal syndrome**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 drinks a day</td>
<td>Increased HR, BP, RR</td>
</tr>
<tr>
<td>CAGE+</td>
<td>+ tremulous</td>
</tr>
<tr>
<td>Needs a drink to stop shaking</td>
<td>+ nystagmus</td>
</tr>
</tbody>
</table>

**Diagnosis #2: Alcohol dependence**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>+ tremulous</td>
</tr>
<tr>
<td>Needs a drink to stop shaking</td>
<td>+ nystagmus</td>
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</tbody>
</table>

**Diagnosis #3: Seizure disorder**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syncope with fall</td>
<td>Recent head wound</td>
</tr>
<tr>
<td>Incontinent of urine</td>
<td></td>
</tr>
<tr>
<td>Tongue bite</td>
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</tbody>
</table>

**Diagnostic Study/Studies**

- CBC, INR, lytes, glucose
- EtOH, drug screen
- CT brain
- T. bilirubin, AST, ALT
- EEG
Notes about the Physical Exam

The physical exam shows how important the general appearance is and the importance of your commenting on all of the simulated findings (e.g., makeup on the SP's skin). This case is centered around performing a good neurological exam with attention to the mental status.

Comments about the Patient Note

“Focus on the chief complaint” is the usual advice, but explaining the abnormal vital signs in the Doorway Information is the key to the success here. Some students worry that the patient in this case will have some additional form to be filled out. There is nothing on the USMLE website to suggest this will happen. If a patient does hand you a form to fill out, however, it is just a challenging question.
Case 8: Nosebleed

**DOORWAY INFORMATION**

**Opening Scenario**
Kevin Green is a 45 y/o male with a nosebleed.

**Vital Signs**
- Temp: 36.8°C (98.2°F)
- BP: 110/80 mm Hg
- HR: 88/min, regular
- RR: 18/min

**Examinee Tasks**
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

**BEFORE ENTERING THE ROOM**

**Clinical Reasoning:** With a bleeding case, always consider three things:
- Patient's hemodynamic status
- Patient's ability to clot
- Underlying disease that may cause bleeding

With someone who has blood loss, it's important to check the hemodynamic status. Is the patient tachycardic? Does the Doorway Information show that he has a low blood pressure or a narrow pulse pressure? Is he portraying diaphoresis by spraying his face with water before you enter the room? Does he have chest pain or shortness of breath, hypotension, confusion, syncope, or dizziness would be good questions to ask for associated symptoms.
The other thing you know is that a detailed examination to look for the source and type of bleeding is needed. For example, what primary nose problems cause a bloody nose? Answer: Typically, dry air, nose-picking, and trauma. Less common causes include polyps, allergies, and upper respiratory infections. Asking about cocaine is also relevant.

Finally, anyone presenting with bleeding as the primary problem might have a bleeding disorder. Be sure to inquire into the family history for diseases such as hemophilia or Von Willebrand disease. Also, is the patient taking aspirin or Coumadin? Does he have bone marrow failure? Perhaps the patient has liver disease and a coagulopathy?

FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Green has had a bloody nose off and on for the past 3 months, always in the left nostril. Sometimes it just drips a little; some days it doesn’t bleed at all. On two occasions it bled so much that Mr. Green thought he might have to call 9-1-1. The nosebleeds started with a bad cold at the beginning of winter. The cold resolved, but the nosebleeds are continuing. It is now February in Chicago, and the air has been dry in the house for the last 3 months. He has no pain.

The patient has been treating himself by pushing tissues up his nose. Sneezing and blowing his nose make it worse; nothing really seems to make it better. He has no nasal discharge (other than blood). He has had no trauma to the nose. He has also noticed that he has been bruising easily. He had never had problems with bleeding after dentistry. He has never had the current problem before.

Allergies: Cats, dogs

Meds: Tylenol (15 tabs a day)

PMH: Other than for multiple knee surgeries from college football, the patient has never been hospitalized. He is still a little bitter that his college injuries kept him from playing for a professional team. He has no history of diabetes, hypertension, or heart disease.

The patient’s last doctor informed him that he has premature osteoarthritis of the knees as a result of so many football injuries. He switched from aspirin to Tylenol when the nosebleed first began because he knows aspirin is a blood thinner. He denies any recent trauma or injuries.

He sleeps through the night, unless it’s a night when he wakes up with a nosebleed. He is on no special diet and usually eats junk food. He has had no problems urinating.

Family Hx: There is no family history of easy bruising.

Social Hx: He lives alone. He never leaves the house because he is on home-detention house arrest. He can leave only for medical appointments, and had to notify his parole officer that he was seeing you today. He smokes two packs of cigarettes a day and admits that a friend buys a gallon of bourbon for him each Sunday.

The SP will not admit that his friend buys him a gallon of bourbon each Sunday unless you make a statement of confidentiality during your transition to the social history.

You will need to build trust and emphasize confidentiality with this case. The patient denies using cocaine or recreational drugs, stating, “I never got into that shit!” He admits to drinking in the morning but argues that that isn’t why he’s here.
Physical Exam
This patient's general appearance is slightly disheveled. He smells of alcohol and has some bloodstained tissue protruding from his left nares. His speech is slightly louder than usual, and he tries to give you a big hello and a slap on the back. His gait is slightly wobbly and his speech is a little slurred. His face appears yellow (yellow powder on skin). His sclera are clear. You will need to recognize that this is a jaundice case even though the patient will not be yellow all over.

**Doctor:** "Your skin looks a little yellow."

**Mr. Green:** "Yeah, yeah, my buddy has been telling me that. I think it's because I never go outside."

**Doctor:** "I'll take a blood sample to find out why..."

Mr. Green's pupils are equal, round, and reactive to light. His extraocular movements are intact. His tympanic membranes are clear. There is no hemotympanum. His head is nontender to palpation. He removes the Kleenex from his right nostril upon your request, and your examination of the nose reveals no mass or active bleeding. The nose is nontender. There is no perforation in the septum. His neck is supple.

His lungs are clear to auscultation and his heart tones are regular. You may see that he has some palmar erythema (simulated by red powder on the hands) and spider angiomata on the skin (spidery marks drawn with a red pen). His abdomen is soft, with mild tenderness to the right upper quadrant. There is no pain under the right costal margin when the patient takes a deep breath. Liver span is normal to percussion. His extremities show some edema, and there are multiple old scars on his knees. He is alert to person, place, and time. He cannot remember three objects for a minute. He cannot spell the word *world* backward. He may appear defensive over your questions and refuse to answer them, exclaiming that he is "not in school anymore!" There is no facial asymmetry and his cranial nerves are intact. His motor strength is normal bilaterally. His gait is best described as wobbly.

THE CLOSING
By now you realize your patient is probably very intoxicated. This does not change how you act toward him. Show Mr. Green the same courtesy you show patients who are not intoxicated.

**Doctor:** "Mr. Green, I have finished your physical exam. You told me you have had the bloody nose off and on for 3 months."

**Mr. Green:** "Yeah."

**Doctor:** "You also have been using a lot of Tylenol, and have been drinking about a gallon of whiskey a week."

**Mr. Green:** *(Somewhat defensively and loudly)* "So?"

**Doctor:** "On your exam I noticed that your skin is yellow and you are tender over the liver. The bloody noses are likely to be linked to a possible liver problem."

**Mr. Green:** "But I stopped taking aspirin!"

**Doctor:** "The Tylenol and bourbon are known to damage the liver. I will need to take some blood tests to confirm this, but you need to stop taking both of these immediately to prevent further damage."

**Mr. Green:** "I'm not sure I can do that."

**Doctor:** "I know it's difficult. I will have my alcohol counselor come and talk with you. He will be able to help you through this."
Mr. Green: “Are you going to tell the police that I’ve been drinking? I stopped at a bar before coming to see you. If they test my alcohol level now, I’ll be going to jail for sure!!”

Doctor: “No, I’m not going to call them. Remember, what we talk about is confidential.”

Mr. Green: (sloppily) “You’re not so bad, Doc!”

Doctor: “Thank you. I’ll call you when I get the results of the tests. Do you have any questions for me?”

**CHALLENGING QUESTIONS**

Be prepared to answer the following type of challenging questions for this case:

Mr. Green: “Could you put me in the hospital? Anything would be better than being locked up at home all the time.”

Answer: “I will call when I get your test results back. Then we can talk about the best treatment and where it should be done.”

**GRADING CHECKLISTS**

**History Checklist**
- Site/symptoms of nosebleed
- Intensity or quantity: How much has the nose been bleeding?
- Onset: When did it start?
- Onset: Course: How often?
- Onset: Duration of nosebleed
- Alleviating factors
- Aggravating factors
- Associated symptoms: Trauma, other easy bruising, no recent nasal surgery
- Allergies
- Medications: Critical to realize Tylenol is making his liver dysfunction worse
- PMH: Surgery
- PMH: Hospitalizations
- SH: Living conditions
- SH: Drug use
- SH: Smoking
- SH: Alcohol

**Physical Exam Checklist**
- General appearance: Skin—notice skin jaundice and stigmata of jaundice
- HEENT: Inspect nares
- HEENT: Palpate nares
- HEENT: Inspect ears
- HEENT: Inspect throat
- Chest: Auscultate lungs
- CV: Auscultate heart
- Abd: Inspect
- Abd: Auscultate
- Abd: Percuss
- Abd: Palpate
- Abd: Murphy’s sign
- Neuro: Mental status
- Neuro: 7th, 3rd, 4th, 6th cranial nerves
- Neuro: Motor—all five extremities
- Neuro: Gait
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

**CC:** Epistaxis

**HPI:** 3 mo of intermittent nosebleed. Sometimes heavy. Treated with tissue placed in the nose. It started after a URI. Always the L nares. Sneezing makes it worse, nothing makes it better. Denies trauma or discharge. Pt has noticed easy bruising lately.

**Allergies:** Cats, dogs

**Meds:** Tylenol, (15 tabs a day) for chronic knee pain. No aspirin or blood thinners.

**PMH:** No past history of nosebleeds or nasal surgery. Hospitalizations—multiple orthopedic knee procedures in college. + osteoarthritis of knees. No DM/HTN. Heart disease.

**FH:** No familial bleeding disorders

**SH:** Lives alone, no cocaine or drug use, + smokes 2 ppd, 1 gal whiskey a week. Last drink was right before he came to the clinic.

---

**SAMPLE PATIENT NOTE**

**Physical Exam:** Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** 38.6°C, BP 110/80, HR 88, RR 18

**GA:** Pt smells of alcohol. Appears intoxicated and jaundiced. Palmar erythema, spider angiomata.

**HEENT:** Nares—Bloody tissue in R nare. no active bleeding, no discharge tenderness or perforation of septum. TM—clear, pharynx clear.

**Chest:** Clear to Auscultation

**CV:** SI 52 WNL, no MRG

**Abd:** Soft, BS+, mild tenderness without rebound RUQ. Neg Murphy’s sign. Liver span NL to percussion.

**Neuro:** A + O x 3, memory poor, attention and concentration poor. No facial symmetry. PERRL EOMI. Motor 5/5 all four ext. Gait—ataxic.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Epistaxis

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurrent nosebleed</td>
<td>Blood in nose</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>Jaundice</td>
</tr>
<tr>
<td>Acetaminophen ingestion—too high a dose</td>
<td></td>
</tr>
<tr>
<td>Easy bruising</td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #2: Liver insufficiency/failure

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol abuse</td>
<td>Jaundice</td>
</tr>
<tr>
<td>Acetaminophen ingestion—too high a dose</td>
<td>Tender liver</td>
</tr>
<tr>
<td>Easy bruising and bleeding</td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #3: Alcohol intoxication

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admits to drinking last few hours</td>
<td>EtOH on breath</td>
</tr>
<tr>
<td></td>
<td>Ataxia</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- CBC, platelets
- T. bili, AST, ALT, NH3
- Acetaminophen level, EtOH
- INR, lytes, glucose
- Ultrasound RUQ
CASE DISCUSSION

Notes about the History-Taking
This case is a test of your ability to remain calm, cool, and professional during the challenges of dealing with a difficult patient. Mr. Green tells you he is under house arrest, he is obviously alcohol-intoxicated now, and he even curses during the encounter. The house arrest is not really part of the case and there is no need to find out what his offense was. (If you do inquire about the offense, you will learn that it was for killing a pedestrian with his car while driving under the influence of alcohol.)

Be sure to ask how much Tylenol he is taking. Only if you ask why he takes Tylenol and how much he takes will you learn that he’s taking about 5 grams of acetaminophen a day.

This case is complex because you need to delve deeper into the situation than just looking at the patient’s nose. Examining the underlying problems of liver failure caused by a toxic combination of alcohol and Tylenol is the key to the case.

Notes about the Physical Exam
In alcoholic patients, always suspect head trauma, even if patients don’t present with any complaints of trauma or head pain. Looking in the ears for hemotympanum provides valuable information because bleeding can sometimes be found with basilar skull fracture. Looking at the nose for possible trauma or lesions is important. As with all patients with a history of alcohol or drug use, be sure to do a mental status exam. Be sure to tell the patient about the simulated findings you see (the yellow makeup for jaundice and the red marks for spider angiomata).

Comments about the Patient Note
In addition to the differential diagnoses listed, hypoglycemia may also be present in this patient; it is common in alcoholics with poor liver function.

In any situation where the mental status is not normal, always consider a subdural hematoma. The serum ammonia level (NH₃) may be useful in checking for hepatic encephalopathy. Patients with severe liver dysfunction may show hypoglycemia and/or elevated INR.
Case 9: Sudden Abdominal Pain and Syncope

DOORWAY INFORMATION

Opening Scenario
Sharon Hall is a 24 y/o female with sudden abdominal pain and syncope 20 minutes ago.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 80/70 mm Hg
- HR: 120/min
- RR: 24/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: You will have noticed that this patient has three abnormal vital signs. Whatever has caused her to faint is still an active problem. In cases like this on the Step 2 CS, where the SP is portraying a very ill person with a life-threatening illness, you will need to pay very close attention to the doorway vital signs. When you enter the room the SPs may not really appear as ill as the cases they are portraying. You will also need to resist the temptation to treat SPs portraying critically ill patients. Remember, this exam is not testing you on your ability to treat a patient; rather, this exam tests your ability to take a focused history and physical as well as your communication and interpersonal skills and English proficiency. Despite alarming vital signs, you will need to maintain a calm and reassuring tone throughout the encounter.
What are the causes of syncope in a young patient?

- Vasovagal syncope is the first thing most people think of and the last thing ever tested on exams. If the patient had vasovagal syncope, you would expect bradycardia during the fainting spell, with the vital signs rapidly returning to normal.
- Subarachnoid hemorrhage causes syncope; however, it is not likely in this patient inasmuch as the patient does not have a bad sudden headache.
- Pulmonary embolism can cause syncope; however, this is not likely in the present case because the patient had no sudden onset of SOB and chest pain.
- Abdominal aortic aneurysm causes back pain and syncope. This patient, however, is too young for this condition.

Ms. Hall is hypotensive, has a narrow pulse pressure, and is tachycardic and tachypneic. Hypovolemia is certainly a possibility. Think of causes of hypovolemia and abdominal pain in a young woman and you will have the correct diagnosis.

FROM THE STANDARDIZED PATIENT

History

HPI: The patient states she got a bad left lower abdominal pain about 3 hours ago. It is 6/10 intensity and seemed to start instantly. The pain has not been getting any better or worse since it started. It feels really hot and sharp, and is continuous. It radiates up to her left shoulder. She thought going to the bathroom would make it better. Urinating and defecating did not help. She looked, and there was no blood in the toilet. She stood up from the toilet and felt very dizzy, with no power to stand up. She is pretty sure she fainted completely. She woke up on the floor, kind of sweaty. She denies any injury from the fall. At that point her husband drove her to see you at the hospital. She denies headache, shortness of breath, back pain, or dysuria. She feels nauseated. She denies vomiting or diarrhea. She has never had anything like this before.

Allergies: PCN, bee stings
Meds: Asthmacort, Ventolin inhaler, multivitamins

PMH: She was hospitalized 5 years ago for asthma attack. Her asthma is controlled with medications. She also had tubes put in her ears as a child for recurrent otitis. She has no history of trauma. She has been sleeping fine, with no special diet and no problems urinating.

Ob/Gyn: Upon questioning about her menstrual cycle, she suddenly appears sad and says she got her period 2 days ago. It is a little lighter than usual and 2 weeks later than her usual 28-day regular cycle. She is G0P0. She usually uses three to five pads on the first and heaviest day; however, this period she has had little more than spotting.

Sexual Hx: She is sexually active and does not use contraception. She stopped taking the Pill a couple months ago and she is trying to get pregnant. She tells you she is monogamous with her husband since their marriage 4 years ago. She never has had a sexually transmitted disease.

Social Hx: Ms. Hall lives with her husband and her cat and works as an editor. She does not smoke, drink, or use recreational drugs.
**Physical Exam**

She looks a little pale and is sweaty. Her mental status is normal but she is slightly anxious from her abdominal pain. Pharynx is normal. Lungs are clear to auscultation. Ms. Hall's heart tones are rapid. Her abdomen appears normal. Bowel sounds are present. She has marked tenderness to light palpation in the left lower quadrant. She has rebound tenderness. No mass is appreciated. There is no CVA tenderness. She is alert. If asked to walk she gets dizzy, has a lot of pain, and almost faints on you.

**THE CLOSING**

Despite this patient having peritonitis and impending hypovolemic shock, it is still necessary to go through the standard closing. As a transitional statement, tell the patient you are finished with the physical. Paraphrase the key historical points and describe a few key physical findings.

Tell the patient in lay terms what might be wrong and which tests will provide the answer. Be sure to inform her of when the results will be ready for the next doctor–patient contact. Counsel her about any behaviors that impact her health. Finally, ask if she has any questions.

**Doctor:** "Ms. Hall, I have finished your physical exam. Thanks for cooperating. I can see you are in a lot of pain."

**Ms. Hall:** "Just please don't shake the bed."

**Doctor:** "Of course. You told me the pain came on suddenly 3 hours ago. Before that you felt fine and had no faint feeling."

**Ms. Hall:** "That's correct."

**Doctor:** "On your physical exam your heart rate is fast and you are very tender in the belly. I think this is most likely related to your period that is late. You could have a ruptured cyst. I want you to have a pregnancy test and an ultrasound wave picture of your tummy. Then we can know what is causing the pain for sure, and can plan treatment."

**CHALLENGING QUESTIONS**

**Ms. Hall:** "Am I pregnant?"

**Answer:** "I'm concerned that with this much pain it could be a very abnormal pregnancy, a tubal pregnancy. Let me get this ultrasound for you quickly so we can find out."
GRADING CHECKLISTS

History Checklist
- Site of pain
- Intensity of pain
- Quality of pain
- Onset of pain
- Onset: Course and duration
- Radiation of pain
- Aggravating factors
- Alleviating factors
- Associated symptoms
- Previous episodes of the chief complaint
- Allergies
- Medications
- PMH: Hospitalizations
- PMH: Illness
- PMH: Surgery
- Ob/Gyn: LMP—complete gyn hx needed
- Ob/Gyn: complete OB hx needed
- SX: Sexually active, trying to get pregnant
- SHx: Lives with husband. No smoking, drugs, or alcohol.

Physical Exam Checklist
- General appearance
- Chest: Auscultate lungs
- CV: Auscultate heart
- CV: Check pulses
- Abd: Inspection
- Abd: Auscultation (before percussion)
- Abd: Percussion
- Abd: Palpation
- Abd: Check for rebound tenderness
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Acute abdominal pain

HPI: Sudden onset 3 hrs ago, sharp/hot, 6/10 intensity LLQ pain. Pain is constant and radiates to L shoulder. Nothing makes it better. Standing up from toilet, had syncopal episode and was diaphoretic. No vomiting, diarrhea, dysuria, or blood in urine or stool.


Gyn: LMP now, 2 weeks late and just spotting, lighter than usual. Periods usually regular with 3–5 pads on heaviest day. GOPO.

SX: Active, no contraception, trying to conceive

SH: Lives with husband. No smoking, EtOH, or drugs.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

GA: In acute distress 2nd to pain. BP 80/70, HR 120, RR 24, afebrile.

Chest: Clear to auscultation

CV: Rapid heart tones

Abd: Appears NL, scaphoid. BS+, very tender LLQ. No mass felt. + rebound LLQ. No CVA tenderness. Extremities: Too dizzy and lightheaded to walk.
## SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Ruptured ectopic pregnancy

**History Finding(s)**
- Late period
- Syncope
- Abdominal pain
- Radiates to shoulder

**Physical Exam Finding(s)**
- Hypotension, tachycardia
- Diaphoretic
- + rebound lower abdominal pain

### Diagnosis #2: Ruptured ovarian cyst

**History Finding(s)**
- Syncope
- Abdominal pain
- Radiates to shoulder

**Physical Exam Finding(s)**
- Abdominal pain

### Diagnosis #3: Threatened abortion

**History Finding(s)**
- Late period
- Irregular spotting

**Physical Exam Finding(s)**
- Abdominal pain

**Diagnostic Study/Studies**
- Complete pelvic and rectal exam
- CBC, type, and Rh
- U/A, UCG
- Quantitative HCG
- Pelvic ultrasound
CASE DISCUSSION

Notes about the History-Taking
You may find it a challenge to stick to the script for SPs portraying patients with life-threatening surgical problems. In real-life situations it is likely that you would be resuscitating and getting the operating team assembled while taking a history and physical. However, in the Step 2 CS exam you are being evaluated on your initial workup and diagnosis, and not on your treatment of or therapy for this patient’s condition. Pain radiating to the shoulder suggests diaphragmatic irritation. Record the history of asthma. However, in this case the patient has currently no symptoms of asthma and it is not an active problem.

Notes about the Physical Exam
A complete abdominal exam consisting of inspection, observation, percussion, and palpation is warranted. You would not do deep palpation because there is already pain on light palpation, though you would still go ahead and do the test for rebound tenderness. In fact, do rebound tenderness only if the patient is tender on either light or deep palpation. The rebound test is to see if the patient has peritonitis. The SP will be trained to have more pain “when you let go” in order to simulate a surgical abdomen.

Comments about the Patient Note
When the chief complaint is pain, it does not take long to chart the site, intensity, quality, and onset. You may also sketch the abdomen to indicate your findings. Differential diagnosis includes ruptured cysts that also can cause hemorrhage. The present case seems less likely to be an incomplete abortion because there is not much bleeding; however, it is possible. Renal colic seems even more unlikely. However, listing just about any diagnosis that can cause LLQ pain or vaginal bleeding would be appropriate. In this case a quantitative HCG is in order because it is useful in interpretation in conjunction with the ultrasound in some cases of ectopic pregnancy. Pregnancy test should be ordered on all cases of lower abdominal pain or any menstrual irregularity.

Don’t forget to use your interpretation of vital signs as part of your Diagnostic Reasoning.
Case 10: Vaginal Bleeding in a 40-Year-Old

DOORWAY INFORMATION

Opening Scenario
Carol Roberts is a 40 y/o with vaginal bleeding.

Vital Signs
- Temp: 37.1°C (98.8°F)
- BP: 130/70 mm Hg
- HR: 100/min
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Looking at the chief complaint, realize that a good Ob/Gyn and sexual history will be needed. You already know that a complete abdominal exam is indicated and that a pelvic exam will have to be ordered in the Diagnostic Workup.

Tachycardia can commonly be caused by hypovolemia, anemia, fever, or pain. Vaginal bleeding in a 40 y/o woman will have a limited differential diagnosis, and you can fill out a preliminary Differential Diagnosis on your notepaper before entering the room. Your list should include:

- Menstruation
- Dysfunctional uterine bleeding
- Spontaneous miscarriage
- Infections such as cervicitis, vaginitis, endometritis
Case 10

- Ectopic pregnancy can be found in 40 y/o women as well as in younger women
- Endometrial cancer (less likely but always a possibility)

FROM THE STANDARDIZED PATIENT

History

HPI: Ms. Roberts complains of really heavy periods lately. She states she has only had maybe two normal periods in the last 6 months. Normally her period lasts 3 to 5 days, but it is now lasting 8 to 10 days. She is using six to eight pads a day. There is no pain or cramps. She denies any fever or discharge. She states she is not having hot flashes.

Sometimes she gets a little irritable around her period, but not always. That has not changed in many years. She is just finishing her period for 10 days now. She made an appointment because she felt a little lightheaded when she stood up suddenly and ran for the bus yesterday. There was mild shortness of breath with running, though no chest pain, syncope, or palpitations. This is the first time she has experienced this. She states that she’s never had an elevated blood pressure reading in the past.

Allergies: Amoxicillin

Meds/vitamins: She has not used birth control pills in 5 years.

PMH: She has been hospitalized for 2 C-sections only.

Ms. Roberts denies diabetes mellitus, hypertension, or heart disease.

She has had no changes in her sleep pattern. She is not a vegetarian. She has had no problems urinating.

Ob/Gyn: Her previous period was 4 weeks ago and also long and heavy. She started have periods at age 12. Ms. Roberts has been pregnant three times; she had two children and had one elective miscarriage when she was 16. She is now sexually active with three different partners in the last 6 months. (she has two different partners currently). She is sexually active with men only. She tries to have her partners always use a condom but sometimes they don’t want to. She was tested for sexually transmitted diseases when her period was first irregular 6 months ago, by a different physician, and the results were negative. Ms. Roberts is divorced and has two college-age children that usually live at school. She works as the day manager of a small retail business. She smokes one pack of cigarettes per day and drinks two drinks maybe once a week, when on a date. She does not use any recreational drugs. She states she is well adapted to being single and an “empty-nester.”

Physical Exam

The patient appears slightly pale (the SP may demonstrate that by having a little white makeup on her cheeks or forehead). You need to recognize this as anemia and can confirm it with the following conversation.

Doctor: “I see you have a little white powder on your face.”

Ms. Roberts: “Oh, that, people have been telling me I look pale.”

In this way the SP can give you the simulated physical finding of pallor, indicating anemia.

Ms. Roberts is awake and alert. Her pharynx is clear. Her thyroid is not enlarged. There is no jugular venous distention. Chest is clear to auscultation. Heart tones are regular. Her abdomen appears normal. Bowel sounds are normal. There are no masses or tenderness, specifically in the suprapubic and lower quadrants on both sides. There is no costovertebral angle tenderness. There is no cyanosis or edema to the extremities. Her gait is normal.
THE CLOSING

The key to this closing is to counsel Ms. Roberts on practicing safe sex. This needs to be done without a stern tone of voice. With the proper tone of voice, you will not appear judgmental. You simply need to tell her what type of sexual behavior will protect her health.

**Doctor:** "Ms. Roberts, I'm ready to tell you what I am thinking. First, I want to make sure I understand. For the last 6 months you have been having periods that are lighter than normal."

**Ms. Roberts:** "No, Doctor—heavier than normal."

**Doctor:** "Excuse me, periods that are heavier than normal. And they have been lasting a lot longer also."

**Ms. Roberts:** "That's correct."

**Doctor:** "And yesterday you got a little lightheaded and short of breath."

**Ms. Roberts:** "Yes."

**Doctor:** "Well, I think you may be anemic from the heavy periods. That would explain all your symptoms and being pale too."

**Ms. Roberts:** "What do we do about it?"

**Doctor:** "I would like you to have a blood test to see how anemic you are. I will also need you to have a pregnancy test and tests to make sure you don't have an infection. I would like to take a picture of your chest and a heart tracing to be sure there are no other problems. I will call you with the results."

**Ms. Roberts:** "All right."

**Doctor:** "I can tell you now that I want you to practice safe sex every time. That means use a condom every time. It is still possible for you to get pregnant or contract a sexually transmitted disease."

**Ms. Roberts:** "Okay."

**Doctor:** "Do you have any questions?"

This doctor would not lose any points for paraphrasing the patient incorrectly because he corrected himself and eventually paraphrased the history correctly.

Paraphrasing is very important to do. The sample exchange above delicately addresses the patient's lifestyle of having two different sexual partners. At the same time, it provides a firm recommendation that safe sex be practiced all the time.

CHALLENGING QUESTIONS

**Ms. Roberts:** "Should I go back on the Pill to regulate my periods?"

**Answer:** "I need to see the results of the blood tests to decide the best medicine for you. Can you come back tomorrow so we can discuss the results?"
GRADING CHECKLISTS

**History Checklist**

- Site/symptom
- Intensity: Quantity of bleeding
- Onset: Duration
- Onset: Course
- Associated symptoms
- PMH: Surgery and hospitalizations
- PMH: Major illness
- Allergies
- Medications
- Ob/Gyn: LMP, menarche
- Ob/Gyn: Gravida, para status
- SX: Number of partners
- SX: Any history of STD and testing
- SX: Contraception
- SHx: Smoking
- SHx: Alcohol
- SHx: Drug use

**Physical Exam Checklist**

- HEENT: Skin color
- HEENT: Pharynx
- CV: Auscultate heart
- CV: JVD
- CV: Edema
- Chest: Auscultate lungs
- Abd: Inspection
- Abd: Auscultation
- Abd: Percussion
- Abd: Palpation
- Abd: CVA tenderness
**SAMPLE PATIENT NOTE**

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Vaginal bleeding

**HPI:** Periods were normal until last 6 months of irregular painless heavy periods. Blood loss up to 8 pads/day. Periods can last 10 days. No fever, chills, dysuria, abdominal pain, or discharge. + dyspnea with exertion and some lightheadedness when stands up fast. Has never had irregular periods before. Was tested ~5 mo ago for STD—negative.

**PMH:** Allergies—amox. Meds—vitamins, not on hormones for past 5 years. Hospitalized for two C-sections. No trauma or other surg. Denies DM, HTN, heart disease.

**ROS:** No change in her sleep pattern. + dieting 1200 cals/day. Not a vegetarian.

**O:** LMP ending now, started 10 days ago. Menarche age 12.

**SX:** + active 3 male partners in last 6 months. Does not always practice safe sex.

**SH:** Lives alone, states well adjusted to kids being in school. Smokes 1 ppd, EtoH 2 drinks "on a date." No recreational drugs.

---

**SAMPLE PATIENT NOTE**

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** T 98.8°F, BP 130/70, HR 100, RR 20

**GA:** Looks pale, NAD

**HEENT:** Pale, pharynx clear, no JVD

**Chest:** Clear to auscultation

**CVS:** S1 S2 NL, no GRM

**Abd:** Appears NL, BS+, no masses or tenderness all 4 Q, no suprapubic pain, no CVA pain

**Ext:** Normal, no cyanosis, or edema

**Neuro:** Alert, gait NL
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

**Diagnosis #1: Dysfunctional uterine bleeding**

Differential diagnosis and diagnostic reasoning

**History Finding(s)** | **Physical Exam Finding(s)**
--- | ---
Heavy periods past 6 months | Looks pale
 | Tachycardia

**Diagnosis #2: Anemia**

Differential diagnosis and diagnostic reasoning

**History Finding(s)** | **Physical Exam Finding(s)**
--- | ---
Dyspnea on exertion | Pallor
Menorrhagia | Orthostatic dizziness

**Diagnosis #3:**

Differential diagnosis and diagnostic reasoning

**History Finding(s)** | **Physical Exam Finding(s)**
--- | ---

**Diagnostic Study/Studies**

Complete GU, rectal, and pelvic exams
Pap smear, gonorrhea, chlamydia culture
CBC
\( \beta \)-hCG, pelvic ultrasound
CASE DISCUSSION

Notes about the History-Taking
In this case, the gynecological history is of prime importance. This doctor chose to collect the information during the HPI, and even wrote most of the Gyn history in the HPI section. This is absolutely fine. Had you written the Gyn history in the PMH section as suggested by the SIQORAAA PAM HRFOSS mnemonic, this would have been correct as well.

Notes about the Physical Exam
Certainly some heart and lung exams are indicated because the patient was a little short of breath with exertion due to the anemia. Also, the chief complaint of vaginal bleeding indicates that a fairly complete abdominal exam is going to be on the checklist as well.

Be sure to comment on any makeup the SP is wearing that indicates a physical finding.

Comments about the Patient Note
The key here is getting the CBC and the pregnancy test. These are not the only correct workups; getting a pelvic ultrasound would also be acceptable.

Any diagnosis that causes vaginal bleeding will be a correct answer. So you could complete the Differential Diagnosis without ever seeing the patient! The purpose of the history and physical is to rank order the most likely diagnoses. You should have in your mind a list of causes of vaginal bleeding in young, middle-aged, and older women.
Case 11: Vaginal Bleeding in a 60-Year-Old

DOORWAY INFORMATION

Opening Scenario
Susan Walker is a 60 y/o female with vaginal bleeding.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 140/80 mm Hg
- HR: 80/min
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: You already know that you will need a complete Ob/Gyn and sexual history. You can tell from the vital signs that this patient is hemodynamically stable. Her age is of critical importance in determination of a likely cause of her vaginal bleeding.

At age 60, the patient is 9 years past the average age of menopause. So it is likely that this is a case of postmenopausal bleeding. Of course, endometrial cancer is a possible cause of postmenopausal bleeding. Some risk factors for endometrial cancer are smoking, obesity, estrogen replacement, and nulliparity. Additional causes of vaginal bleeding include: cervical cancer, uterine polyps, hormone replacement therapy, and bleeding from the perineum, vagina, or cervix. Atrophic vaginitis and endometritis may also cause bleeding. Finally, vaginal bleeding is occasionally confused with rectal or urinary bleeding.
FROM THE STANDARDIZED PATIENT

History

HPI: Ms. Walker comes to you with a chief complaint of having a period after not having any periods for the past 9 years. It started last week. At first she noticed a little bit of blood on tissue when she urinated after sex. The next day she had bleeding with some clots, like the heaviest of periods she use to have when she was a younger woman. Last week she even had to go to the drugstore to get some pads; she told the checkout clerk they were for her granddaughter. She used about one pad an hour for 6 hours, and then the bleeding slowed. After that she had some spotting for 3 days. There has been no bleeding for the past 3 days. She figured she would keep the appointment with you because she had similar bleeding about 8 weeks ago. At that time she was not sexually active just prior to the onset of bleeding. Nothing seems to make the bleeding better. Other than sex once, nothing seems to make it worse. She has had no abdominal pain, fever, discharge, or dysuria. She has no shortness of breath, hemoptysis, or chest pain. She denies blood in urine or stool.

Allergies: ASA

Medications: Coumadin (taken regularly; her dose was increased 3 months ago), Diabeta, Lisinopril, occasional Tylenol. Last blood test 1 month ago to see how thin her blood is.

PMH: Hospitalizations: Gallbladder removed 20 years ago; right knee replacement 8 months ago; blood clot in right leg 3 months ago.

High blood sugar for last 10 years; high blood pressure for past 10 years. Denies trauma or any additional surgery.

ROS: Ms. Walker has not had any problems urinating, other than seeing blood last week. She is just now begin­ning to walk regularly after her knee replacement and has been going to physical therapy regularly.

Family Hx: There is no family history of cancer, diabetes, or hypertension.

Ob/Gyn: The patient has been pregnant three times and has had two children and one miscarriage. She started having periods at age 12 and stopped at age 51. She still complains of an occasional hot flash but is most bothered by vaginal dryness, making intercourse painful. She uses a condom regularly. She has been getting regular gynecological checkups every 2 years and had a normal mammogram while in the hospital for the blood clot.

Sexual Hx: She is sexually active with one male partner. She has never been tested for a sexually transmitted disease.

Social Hx: Ms. Walker lives alone but speaks with and sees her male friend everyday. She states she has been under stress because of her leg, but things are slowly getting better. She was a smoker for 20 years, and stopped smoking 3 months ago when she got the blood clot. No alcohol. She is finally weaned off the Vicodin tablets after the knee surgery. She says she understands how easy it is to get addicted to narcotics when you have chronic pain.

Physical Exam

Ms. Walker weighs 200 lb and is 5 feet 2 inches. She walks with a slight limp and a cane, but otherwise is in no acute distress. There is no visible ecchymosis or simulated skin findings on her skin.

HEENT: Inspection reveals no abnormalities.

Lungs are clear to auscultation. Inspection reveals no abnormalities.
Heart tones are normal. Good pulses in the feet on both sides.

Her abdomen is obese, soft, and nontender without masses. There is no tenderness to percussion. Bowel sounds are normal. The old right subcostal scar is still visible. No CVA tenderness.

Extremities: Healing scar from knee replacement. No ecchymosis. Her right calf is still somewhat swollen. No redness or tenderness.

Neuro: Alert, walks with a cane.

THE CLOSING

The closing and the challenging questions in this case are to test your ability to discuss sexuality with the patient in a professional manner.

**Doctor:** “I’m finished with your physical exam and I’d like to go over the findings. You told me that you have had bleeding that was heavy for 1 day and spotting for the last 3 days. Is that correct?” *(Wait for response)*

“On your physical exam, your tummy exam is normal. By the way, it looks like your leg is healing from the blood clot.

“I think most likely the bleeding is from the combination of the Coumadin and dryness caused by menopause. I would like you to have some tests to make sure it is nothing else, then we will meet again to discuss treatment. Do you have any questions?”

**CHALLENGING QUESTIONS**

**Ms. Walker:** “Doctor, I’m really bothered by the dryness during sex. Is there anything I can do about it, like taking hormones?”

Answer: “Hormones would not be a good idea right now, with the healing blood clot and the bleeding. Have you tried a vaginal lubricant?”

There is no treatment on this test, so it would also be correct to give the standard answer about wanting to examine the patient and getting the test results before deciding on the best course of treatment.

In this particular case, your score might be higher if you recognize a contraindication to estrogen and tell the patient. You could recommend over-the-counter vaginal lubricants.
GRADING CHECKLISTS

History Checklist

☑ Symptom
☑ Intensity: Quantify amount of bleeding
☑ Onset: When did it start?
☑ Onset: Description of course of bleeding
☑ A: What makes it better?
☑ A: What makes it worse?
☑ A: Ask about bleeding elsewhere, as patient on Coumadin
☑ Ask about signs of complications of blood clot (pulmonary embolism symptoms)
☑ Ask about discharge, fever, dysuria, pelvic or abdominal pain
☑ P: Pt does have previous experience with the chief complaint
☑ A: Allergies
☑ Medications: Anyone on Coumadin is likely to have complications from the drug
☑ PMH: List hospitalizations and surgery
☑ Ob/Gyn: Gravida, Para scoring
☑ Ob/Gyn: Menstrual history—menarche and menopause
☑ Ob/Gyn: Menopausal symptoms
☑ SX: Need complete sexual history. No, you don’t need to ask about contraception in a 60-y/o, but you still need to counsel about safe sex!!
☑ SHx: Living arrangements, stress, and smoking will all be on the checklist

Physical Exam Checklist

☑ General appearance
☑ Chest: Auscultate lungs
☑ CV: Auscultate heart
☑ Abdomen: Inspection
☑ Abdomen: Auscultation
☑ Abdomen: Percussion
☑ Abdomen: Palpation
☑ Extremities: Inspection
☑ Extremities: Palpation
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** “I had a period?”

**HPI:** Vaginal bleeding started after painful sex. Noticed some blood when urinating after intercourse. One day used 6 pads. Couple days of spotting after that. Now no bleeding. Nothing seems to make it better. Worse with sex. No SOB, chest pain, or hemoptysis. Denies hematuria, dysuria, blood in stool, or easy bruising. No fever, abdominal or pelvic pain. No discharge. NKDA.

Meds—lisinopril, DiaBeta, TYLENOL, Coumadin. Coumadin dose increased 3 months ago. Good compliance, last INR 1 month ago.

**PMH:** Has had similar episode of vaginal bleeding 2 months ago.

+ cholecystectomy 20 yrs ago, R knee replacement 8 mo ago, DVT 3 months ago.

+ DM, HTN.

**Ob/Gyn:** G3P2Ab1. Menarche age 12, menopause age 51. Occasional hot flash. + vaginal dryness.

**SX:** Active, one partner, uses condoms. Never tested for STD.

**SH:** Lives alone, regular physical therapy. Is able to walk and care for herself. No rec drugs or alcohol. Stopped smoking 5 mo ago. Previously a smoker for 20 yrs.

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** 140/80 80 16 37.0

**GA:** NAD

**Chest:** Clear to Auscultation

**CV:** SI S2 NL, no S3 S4 murmur. NL peripheral pulses

**Abd:** Soft, BS+, nontender and without masses all 4 Q. Tympanic to percussion. CVA tenderness

**Ext:** R leg slightly swollen, nontender redness. L leg no swelling, tenderness or redness.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** *Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).*

<table>
<thead>
<tr>
<th>Diagnosis #1: Bleeding from Coumadin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Pt on Coumadin</td>
</tr>
<tr>
<td>Dose recently increased</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Atrophic vaginitis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Postmenopausal</td>
</tr>
<tr>
<td>Pain and dryness with sex</td>
</tr>
<tr>
<td>Bleeding occurred immediately with sex</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Complete GU, rectal, and pelvic exam
- CBC, U/A, INR
- Pelvic ultrasound
- Pap smear
- Endometrial biopsy
CASE DISCUSSION

Notes about the History-Taking
Each test day will include cases where you need to ask about personal information. USMLE is testing your communication and interpersonal skills; testing your ability to talk about personal information with the patient without appearing nervous, laughing, or losing your professional demeanor. Practice asking about the sexual history until you can ask the questions and discuss the symptoms with the same tone of voice you would ask about chest pain or any other symptom.

If the disease could be caused or exacerbated by sexual activity, it’s always important to ask about.

Notes about the Physical Exam
In this case the most important organ system that you are authorized to examine is the abdomen. Do a complete abdomen exam in this patient. Also, inspect the leg at the site of the blood clot as this was a recent illness. As a general rule, examine areas of recent surgery and illness.

After a quick heart and lung exam, look over the entire skin surface for additional signs of bruising or bleeding, since the patient is on Coumadin. Patients on Coumadin need a rectal exam as well to look for gastrointestinal bleeding; however, a rectal exam is not permitted on this test, so order the rectal exam as a diagnostic workup.

Comments about the Patient Note
The Doorway Information provided a good idea of the type of diagnoses to consider. Any of these top three diagnoses are likely. Don’t spend a lot of time evaluating which one is more likely than another. Just make an educated decision and make sure you write down all of the likely diagnoses. Remember: This test is asking what is most likely—not what is most dangerous! In this case, knowing how frequently Coumadin complications occur, and the fact that the bleeding began after painful sex, suggests a combination of atrophic vaginitis and Coumadin-related bleeding (from a high INR). You will still be ordering all of the appropriate laboratory workups that evaluate for the common as well as the life-threatening problems.

In this case there are no physical findings to support your 3 diagnoses. This not surprising, as we are not allowed to do a pelvic exam on the test. Be aware for most cases the diagnosis will be made mostly on the history. By the time you are washing your hands, you will know the diagnosis most of the time.
Case 12: Personal Problem

DOORWAY INFORMATION

Opening Scenario
Charles Taylor is a 21 y/o male who comes to you with a personal problem.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 128/70 mm Hg, right upper limb sitting
- HR: 72/min, regular
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: “Personal problems” often turn out to be psychiatric illness, addiction problems, or some problem with the genitals or rectum. Whatever it is, expect the patient to be reticent about disclosing the topic until you gain his trust by showing empathy. You may need to tell him that your conversation is confidential long before getting to the sexual history, in order to gain his trust.

FROM THE STANDARDIZED PATIENT

History
HPI: Mr. Taylor tells you, somewhat reluctantly, that he has a penile discharge. He went to Fort Lauderdale over spring break. A couple of days after returning to his prestigious eastern university, the discharge began. He has
I Case 12

burning with urination, nocturia, and frequency as well. The discharge is described as a yellow-greenish color. He states that he has never had anything like this before. He has had the discharge for several days and it is not getting better. He has no pain, other than the burning sensation in the penis. Nothing seems to make it better or worse. He denies fever, rash, joint pain, and sore throat. He has no pain in his abdomen, testes, or back.

PMH: He is allergic to PCN. He takes no prescription medications. He has had no prior hospitalizations, trauma, major illness, or surgery.

Sexual Hx: He was sexually active with multiple female partners while on spring break. He did not always use condoms. He has never been tested for HIV/AIDS or sexually transmitted diseases.

Social Hx: He lives in a college dormitory. He smokes marijuana once/month but no cigarettes. He drinks alcohol, 2 beers over the entire weekend. He states he typically has no stress, but he's now worried that he might have HIV.

Physical Exam

Upon entering the room you notice that the patient looks worried but is in no acute distress. His sclera are clear, and skin has no rash or icterus. Pharynx is clear and without exudates. There is no cervical adenopathy. Chest is clear to auscultation. Heart sounds are normal. Abdomen reveals no hepatosplenomegaly. Bowel sounds are present. There is no tenderness or masses in all four quadrants. There is no CVA tenderness. He has no erythema or tenderness to the wrists or knee joints.

THE CLOSING

As with all cases, it is important to explain your clinical impression to your patient and discuss the next steps in working up his condition. It is also important to answer any additional concerns he may have.

Doctor: “Mr. Taylor, I’d like to tell you what I am thinking but first I want to review what you told me.”

Mr. Taylor: “Okay.”

Doctor: “To summarize, you have had a yellow-green discharge for the last several days.”

Mr. Taylor: “That’s right.”

Doctor: “So far your exam is normal, but I will need to complete the exam and take a swab of the discharge. That way I can find out what type of infection you have and order medicine for you. You told me you are worried about HIV, so I will also order a blood test for you.”

Mr. Taylor: “Oh, okay, good.”

Doctor: “Until then I want you to not have sexual relations. Also, you need to contact your partners and tell them to come in and be treated. After you and your partners are treated I want you to practice safe sex. That means to use a condom every time.”

Mr. Taylor: “Uh-huh...”

Doctor: “Do you have any other questions?”

Mr. Taylor: “No.”

Doctor: “I’ll be right back with the swab, and I should have the results in 48 hours.”

It may seem more artificial not to treat the patient empirically, but there is no treatment included on Step 2 CS exam. Counseling about safe sex practices is key to this case and is essential.
CHALLENGING QUESTIONS

Be prepared to answer the following type of challenging questions for this case:

Mr. Taylor: “Can’t you just give me a shot for everything and skip the tests?!”

Answer: “I need to find out exactly what kind of infection you have. Then I will know the correct medicine to provide you.”

GRADING CHECKLISTS

**History Checklist**
- Symptoms
- Intensity/quality of discharge
- Onset of symptoms
- Onset: Course
- Onset: Duration
- Alleviating factors
- Aggravating factors
- Associated symptoms
- Previous episodes of the chief complaint
- Past medical history
- Allergies: PCN allergy
- Medicines
- Sexual Hx: Condom use
- Sexual Hx: Number of partners in last 6 months
- Sexual Hx: Hx of STD in past?

**Physical Exam Checklist**
- General appearance
- HEENT: Inspect pharynx
- Skin: Any rash or jaundice?
- Chest: Auscultate the lungs
- CV: Auscultate the heart
- Abd: Palpation
- Abd: Check for CVA tenderness
- Joints: Inspect or palpate or do ROM to check for tenderness (wrist, hands, and knees)
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: Penile discharge

HPI: Several days of greenish discharge from the penis. No prior episodes. + burning with urination. Nothing makes it better or worse. No fever, back pain, rash or joint problems.

Meds: None, allergic to PCN

PMH: No hospitalizations, major illness, trauma, surgery

SX: Sexually active with multiple female partners recently. Does not always use condom.


SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: 37.0 128/70 72 16

GA: Looks worried

HEENT: Pharynx clear, no jaundice

Chest: Clear to Auscultation

CV: NL S1 S2. No rub, murmur, or gallop.

Abd: Soft, nontender. No masses or tenderness, no organomegaly. BS+, no CVA pain.

Ext: No rash. Major joints without tenderness, redness, or swelling.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Gonorrhea

Differential diagnosis and diagnostic reasoning

History Finding(s)  
Sexually active  
Multiple partners  
No condom  
Penile discharge

Diagnosis #2: Chlamydia

Differential diagnosis and diagnostic reasoning

History Finding(s)  
Sexually active  
Multiple partners  
No condom  
Penile discharge

Diagnosis #3:

Differential diagnosis and diagnostic reasoning

History Finding(s)  

Diagnostic Study/Studies

Complete genital exam  
Culture for gonorrhea  
Culture for chlamydia
CASE DISCUSSION

Notes about the History-Taking
This patient would initially be very shy about telling you what is wrong. The interaction might go something like this:

Doctor: “How can I help you today?”
Mr. Taylor: “Well, it’s kinda personal…”
Doctor: “You can tell me. I am here to help.”
Mr. Taylor: “Are you going to tell my parents?”
Doctor: “No, everything we talk about is confidential.”
Mr. Taylor: “I see. (Pauses) Well… I have this discharge…”

Of course, this is the case in which taking a complete sexual and social history is imperative. A patient who has one sexually transmitted disease may have contracted multiple diseases at the same time! So ask about associated symptoms that may indicate additional diseases. Also, ask about complications. For gonorrhea, be concerned about skin rash and septic joints from a disseminated gonorrhea infection.

Notes about the Physical Exam
The exam of the skin is important in sexually transmitted disease (STD) cases. There may be simulated physical findings for syphilis and disseminated gonorrhea. If the Doorway Information indicates that the patient has a fever, be sure to inspect a couple of major joints—such as wrist and knee—to look for any signs of septic arthritis.

If there are no complications from the STD, the Differential Diagnosis is simply every other STD that is possible, with the corresponding tests for the Diagnostic Workup.

Comments about the Patient Note
For the STD case, the Differential Diagnosis is frequently just complications of the infection. If no complications are present, the other likely possibility is that the patient has contracted more than one STD simultaneously. All you need to do is to have prepared in your mind a list of common STDs and the appropriate diagnostic workups—before test day.

In the Diagnostic Workup section of the Note, be sure to list the additional physical exam that in this test is forbidden. It is easy to forget that a genital urinary exam still needs to be performed.
Case 13: Elevated Blood Pressure

DOORWAY INFORMATION

Opening Scenario
Hy Pascal is a 55 y/o male who presents with a note that a health-fair nurse says his BP is elevated. He is here to have the BP rechecked.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 160/100 mm Hg
- HR: 80/min
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: This patient is here for a blood pressure check. It is traditional for a doctor to retake the BP himself while in the room. Of course, you will record on your patient note only what is listed the doorway (160/100 mm Hg). When developing differential diagnoses only think about the doorway vital signs!

For this case, think of symptoms and complications relating to hypertension (HTN). HTN is known as the “silent killer.” Many experts feel that there are no symptoms, only complications that involve end-organ damage.

Heart failure, stroke, kidney failure, peripheral vascular disease, retinopathy, and angina are all more common in the hypertensive population. These complications of HTN give a good idea about what to ask regarding associated symptoms. For example, for heart failure ask about shortness of breath: “Do you ever wake up at night short of breath? Do you have any swelling in the ankles?”
FROM THE STANDARDIZED PATIENT

History

HPI: Last week, at a health fair, a nurse told Mr. Pascal that he had an elevated blood pressure reading. He recalls that it was 160/110 mm Hg. He states that he feels “fine” right now. He tells you that he has had “white coat syndrome” for at least 20 years: he just gets nervous around medical types, and knows that’s the reason for his elevated blood pressure. He has never checked his blood pressure at home to confirm that his blood pressure does drop when there are no white coats around. He figured since one of his coworkers recently had a heart attack that maybe it is time to get checked. He tells you that he feels pretty good and never has had any chest pain. He is starting to “feel his age” as a senior citizen lately. He notices that when he runs for the commuter train he is really “winded,” and it takes a good 15 minutes resting before he can catch his breath. Also, lately his shoes don’t seem to fit so well—like his feet are a little bit bigger and swollen. Mr. Pascal mentions that he has heard that swelling could be related to salty foods, and admits that he does like to use extra salt.

These symptoms have come on gradually over the past 6 months and they really do not affect his life significantly. He says the swelling and the shortness of breath on exertion are mild. He also states that he’s had a little runny nose and a cold for the past week.

He denies any palpitations, weakness on one side of the body, or change in vision.

No cough, sputum, or fever. No paroxysmal nocturnal dyspnea.

When asked about pain in the legs, he says, “Funny you should ask. I always seem to get a cramp in my left leg lately when I run to catch the train.” That goes away with rest also.

Allergies: None

Medications: None

PMH: Mr. Pascal had his gallbladder removed 5 years ago. (His blood pressure readings were elevated then, but it was assumed to be because he was in pain.) He has had no other hospitalizations or surgeries. He denies diabetes. He does not remember his last cholesterol reading. Mr. Pascal admits he has not seen a doctor since his gallbladder operation.

His weight has increased 30 lb since the gallbladder operation, since eating fatty foods no longer hurts. He states that he has no problems urinating.

Social Hx: No EtOH. Not a smoker.

Family Hx: Mr. Pascal states his father died of heart disease at age 62.

Sexual Hx: He states that he is not sexually active and he thinks he has entered “male menopause.” If questioned appropriately, he tells you that “the plumbing hasn’t worked” for at least the last year.

He lives with his wife. His three children are older now. He stopped smoking 25 years ago. He does not use recreational drugs. He may have two or three drinks at a party once a month or so. He works in an office as buyer for an electrical supply company. He does not exercise at all. He is under no unusual stress.

Physical Exam

Mr. Pascal is in no acute distress. He weighs 220 lb. Height is 5 feet 9 inches. Pupils are equal, round, reactive to light. His fundi show no papilledema; the red reflex is intact. He has some coryza from his URI. Pharynx is clear. TMs are clear. No tenderness over the maxillae. It is difficult to see if there is any AV nicking or hemorrhage. Neck
shows no thyroid megaly. There are no carotid bruits. Carotid upstrokes are normal. Chest is clear to auscultation. Heart is regular with a possible gallop rhythm. His point of maximum impulse is displaced laterally and he has no jugular venous distension. His abdomen is obese. He is nontender in all four quadrants. There is a well-healed right subcostal scar. His legs have trace edema bilaterally. Distal pulse are intact and equal 2/4 B/L. Motor strength 5/5 all four extremities. His gait is normal.

THE CLOSING

**Doctor:** “I have finished your exam. Let me review. You told me you have had an elevated blood pressure reading and have been a little short of breath lately. Also you have been taking some cold medicine. Is that correct?”

**Mr. Pascal:** “Yes.”

**Doctor:** “On your exam I found that you do have some leg swelling. This could be from elevated blood pressure. I want to do a blood test to check your heart as well as a picture of your chest. Then we’ll meet again next week to discuss the results and plan treatment. Do you have any questions?”

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### GRADING CHECKLISTS

#### History Checklist

- **Site/symptom:** Ask if patient has any complaints other than elevated BP reading
- **Site/symptom:** Get history of SOB and edema
- **Intensity:** “Mild” does not affect his life
- **O:** History longstanding “white coat syndrome”
- **Alleviating factors:** SOB better when pt rests
- **Aggravating factor:** Exertion
- **Associated symptoms:** Find out about chest pain, palpitations, signs of stroke, kidney, retina or peripheral vascular disease
- **Allergies**
- **Medication:** Get hx of pseudoed use
- **Past medical hx:** Gallbladder operation
- **Past medical hx:** No DM
- **ROS:** Diet, change in weight, and sleep all important
- **Family Hx:** + family hx of heart disease
- **Sx:** + erectile dysfunction
- **Social hx:** Exercise, drugs, alcohol, smoking

#### Physical Exam Checklist

- **General appearance**
- **HEENT:** Pupils
- **HEENT:** Funduscopy
- **HEENT:** Ears, nose, throat
- **HEENT:** Carotid artery
- **Chest:** Lung auscultation
- **CV:** Heart auscultation
- **CV:** PMI, JVD
- **CV:** Peripheral edema and peripheral pulse
- **Neuro:** Motor strength all five extremities
- **Neuro:** Gait
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Elevated BP at recent health fair

HPI: DOE x 6 mo. 15 minutes to catch his breath when runs for train. Gradual onset. Symptoms described as mild. Also with some pedal edema and pain in L leg with exertion. SOB and leg pain better with rest. No chest pain, focal deficits, change in vision. For past week has coryza. No fever, sputum, or cough. No PND.

Allergies—NKMA
Meds—None

PMH: Has history of “white coat syndrome” with elevated BP readings for 20 years. Hospital/surg—Cholecystectomy 5 yr ago. Denies DM. Unknown last cholesterol check. No regular health care.

ROS: + 30-lb weight gain in 5 years. No problems urinating.

FH: Father died, heart, age 62

SX: Erectile dysfunction for past year

SH: Lives with wife, sedentary job, no exercise, no unusual stress. No smoking, drug use. No EtOH.

PE: 220 lb, 5’9”

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: T 37.0 HR 80 RR 20 BP 160/100. pt NAD. 220 lbs, 5’9” tall

HEENT: PERRL, fundi flat. TM, nares, pharynx clear. No thyroidmegaly. Carotid without bruits 2/4, B/L.

Chest: Lungs clear to auscultation

Cor: S1 S2 NL. No murmur, possible gallop. –JVD, PMI slightly displaced laterally.

Abd: Obese, nontender

Ext: + pedal edema. DP, PT pulse 2/4 B/L.

Neuro: Alert. Motor 5/5 all 4 ext. Gait—NL.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Hypertension

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of hypertension</td>
<td>Still with elevated BP reading</td>
</tr>
</tbody>
</table>

Diagnosis #2: Heart failure

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hx of hypertension? Control</td>
<td>Obese</td>
</tr>
<tr>
<td>DOE x 6 months</td>
<td>Pedal edema</td>
</tr>
<tr>
<td>Pedal edema</td>
<td>PMI displaced laterally</td>
</tr>
</tbody>
</table>

Diagnosis #3: Peripheral vascular disease

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L leg cramp occurs with exertion, relieved by rest</td>
<td></td>
</tr>
<tr>
<td>Hx of hypertension</td>
<td></td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

- CXR, ECG, U/A
- CBC, electrolytes, BUN, Cr, glucose
- Fasting total cholesterol, HDL, LDL, TG
- Arterial Doppler ultrasound, lower extremities
CHALLENGING QUESTIONS

Mr. Pascal: "Do I have a bad heart?"

Answer: “It is possible that the blood pressure has caused the heart to be enlarged. I need to have you complete the tests to know. If you do have an enlarged heart, I have medicines available to treat you.”

CASE DISCUSSION

Notes about the History-Taking

The chief complaint is an elevated blood pressure reading, so you will first need to find out the details and the onset of the elevated blood pressure. In this case you learn that the patient has not had a normal BP reading in possibly decades. It is good to ask the patient if he has any other symptoms he is concerned about. This case was designed for him to say “No.” Your role as physician is to ask direct questions about the complications of hypertension. And as always, as the history unfolds there are many possible diagnoses that you can consider from the history. The sexual history is also relevant in this case—erectile dysfunction is a symptom of his peripheral vascular disease.

Notes about the Physical Exam

Patients who are coming in for a checkup, as in this case, also need their height and weight documented. Simply ask the patient the height and weight. You will not be asked to calculate a Body Mass Index (BMI). However, by recording the weight you are showing you are concerned about the association between HTN and obesity.

In this type of situation in real life you have the patient sit quietly in a chair for 5 minutes before checking the blood pressure. Obviously, for the Step 2 CS test you are not going to do this—it would consume your entire time for doing a physical! The physical should be directed at looking for signs of end-organ damage. Therefore, the cardiovascular exam is most important.

Hint: Remember to write on your note the BP that was on the doorway. Disregard the SP’s actual real-life blood pressure!

Comments about the Patient Note

In this case the patient came just for a blood pressure check, but there were plenty of other symptoms to uncover and discuss in the HPI. This case is also complex in that there is not time enough to do all of SIQORAA on each of his symptoms. You simply need to get the list of symptoms and a few key features of each.

Most of the tests are to look for end organ damage. Certainly the CXR and BNP are to look for heart failure. Renal function tests will always be correct in this situation. Checking the lipid panel is standard on all adults coming for a periodic checkup. Checking for diabetes mellitus is also reasonable in this overweight, hypertensive patient.

The patient gives you past information about multiple elevated BP readings, making the diagnosis of HTN justified.
DOORWAY INFORMATION

Opening Scenario
Paul Thomas is a 49 y/o male who telephones to ask for a refill of his medication.

Vital Signs
No vital signs are given in this case since the patient is on the phone.

Examinee Tasks
1. Obtain a focused history.
2. Discuss your initial diagnostic impression and your workup plan with the patient.
3. After ending the call, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Read the Doorway Information carefully. Notice that this Doorway Information is a little bit different than most of the cases. There are no vital signs, as the patient is at home. Also, the tasks are a bit different. There is no physical exam listed in the “Examinee Tasks” section. You may not always be told in the Doorway Information that it is a phone case as you are in this example. Always be sure to knock on the door before you enter the patient’s room. If it is a phone case, your score will not be lowered.

A drug refill case could be done on the phone, or the patient may present in person asking for a drug refill. A physical exam may or may not be required if the patient presents in person for a drug refill. If the patient is on the phone, no physical exam is possible for you to write on your note—at the closing, when you counsel the patient, you would simply ask the patient to come in for a physical exam. Be sure to order a “physical exam” as part of your Diagnostic Workup. Even without a physical exam, it is likely that in most cases you will tell these patients in your closing that you will refill their medications even before they come to see you. This is reasonable because we do not want our patients running out of their maintenance medications.

The occasions when you will not agree to refill medication are limited. One possibility is if the patient is telling you about a dangerous medical condition that cannot be managed on the phone and requires a physical exam. If this occurs it is important to tell the patient you need to see him for an exam to determine the best way to manage his condition. The advantage of the CS exam is that you may say you are always available. Tell the
patient to come in immediately and you can see him. If he is too sick to travel on his own, simply tell him to call the ambulance ("Call 9-1-1") and you will meet him at the hospital.

It's possible that you may experience a patient scenario where you suspect the patient is seeking narcotics due to a prescription drug addiction. The key to this type of scenario is to maintain the same warm, professional composure as you would for any other case. Just like in a real-life setting, there is no reason to become defensive, and no reason to be nervous or become judgmental about the patient. If it's a phone case, tell the patient you need a physical exam and may be able to treat his pain more effectively if he sees you immediately. If the patient is in the room, use the same technique for any medication requests on Step 2 CS. For example, you may tell the patient that as soon as it's safe to do so, you will bring the pain medicine. Finally, some phone requests for narcotics are appropriate and should be filled without hesitation. For example, a known bone cancer patient is out of his or her pain medications.

**Approach to the HPI on a Drug Refill Case:** Do the same introduction as always. If the patient's chief complaint is that he needs more medication, find out if there are any other health concerns you can help with today.

**Doctor:** "How can I help you today?"

**Mr. Thomas:** "I need a refill of my blood pressure medicine."

**Doctor:** "Sure. Are you having any other concerns I can help with?"

If the patient has no other complaints, use the SIQORAA to find out the history of his hypertension. If he denies any complaints, ask symptom-based questions related to the disease for which he needs the medication.

For example, in a patient with hypertension:

- **S:** (Note: Many authorities believe that hypertension has no symptoms, only complications)
- **I:** How is hypertension affecting your life?
- **Quantity:** How high was your blood pressure?
- **Onset:** When did your hypertension start?
- **A:** What makes your blood pressure better?
- **A:** What makes your blood pressure worse?

Associated symptoms are the complications of the disease

When you get to associated symptoms, just ask about the complications of the disease. So for HTN, ask a few questions to see if the patient has any sign of heart disease or stroke.

If the patient has any additional symptoms, divide your History time between the most important additional symptoms and the history of hypertension that prompted the need for medications.

The medication history is a little more detailed in the drug refill case. For the medicine the patient wants refilled, get the name, dose, route, and number of times a day. For example, Lisinopril 20 mg PO q A.M. For other medications, obtaining just the drug name is sufficient. Remember: The test does not focus on your ability to prescribe treatment, and you will not be required to write a prescription on this test. Think about any drug interactions, and ask about any common side effects of medications. Also ask about compliance:

**Mr. Thomas:** "I need a refill of my nitroglycerin."

**Doctor:** "When did you last take it?"

**Mr. Thomas:** "Three months ago."

**Doctor:** "Why do you need it refilled now?"
Mr. Thomas: “Well, I haven’t had any chest pain until this morning, but it’s lasting for hours.”

Doctor: “I want you to call 9-1-1 and go to the hospital; I will meet you there and I can examine you after we finish our phone call.”

If you get a case like this, finish your full 15 minutes with the patient to get as much history as possible. It is somewhat artificial and unlike real life, where calling the paramedics immediately would be the right answer.

FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Thomas called to get a refill of his Lisinopril 10 mg PO q d. When asked directly at the beginning of the interview, he denies any other health problems or current concerns. He has had hypertension for the past 10 years and it is not affecting his life in any way. He states that he checks the blood pressure now and then and the top number is usually 120 to 130 mm Hg. The bottom number goes from 70 to 84 mm Hg. Nothing seems to make his blood pressure better or worse. He has noticed some swelling in his legs for the past 2 months. He gets slightly short of breath when going up two flights of stairs at once. No chest pain or syncope. He has had a nonproductive dry cough lately. No sputum or fever.

Allergies: None. Lisinopril is his only medication.

PMH: He has never been hospitalized and has never had any bad accidents or surgery. Mr. Thomas has no history of diabetes, cancer, or heart disease.

Social Hx: Patient has noticed a 15-lb weight gain in the last year. He attributes this to his bad diet, as he frequently eats fast food for lunch. Now is 220 lb, 5 ft 10 in. He has no difficulty with urination. His sleep pattern has not changed. There is no family history of heart disease. He lives at home with his wife of 25 years. He works as an accountant and states that he is under stress only at tax time. He does not use alcohol, smoke, or use recreational drugs.

Physical Exam

There is no physical exam, as the patient is on the phone.

THE CLOSING

In this case the patient has a host of new symptoms that may necessitate a change in his medicines, and a physical exam is indicated.

Doctor: “Let me make sure I understand correctly. You told me you need a refill of your lisinopril, you have had hypertension for 10 years, and you have had some shortness of breath, swelling, and cough recently. Is that correct?”

Mr. Thomas: “Yes, that’s right.”

Doctor: “I’m concerned that you may have some fluid in your lungs. I’d like you to come into the office today so I can examine you and talk more with you.

“I’d also like to do pictures of your chest and heart, as well as a blood test to check your cholesterol. At the same time, I’d like to speak to you in person about your diet and exercise. Do you have any questions?”
In this sample exchange, the doctor wants to see Mr. Thomas in person before refilling his medicine. Had the scenario been slightly different and the patient really had no acute health problems, it would have been appropriate for you to refill the medicine prior to the physical exam. In that case you would explain to the patient that you’ll refill the medication even prior to the patient making the appointment. For example:

**Doctor:** “Let me make sure I understand correctly. You told me you need a refill of your lisinopril, and you have had hypertension for 10 years. Is this that correct? I will go ahead and refill your medicine today. Please also make an appointment for a physical exam. I would like to speak with you in person also about improving your diet and starting to walk for exercise. I’d also like to do picture of your chest and heart, as well as blood test to check your cholesterol and sugar. Do you have any questions?”

**CHALLENGING QUESTIONS**

**Mr. Thomas:** “I really can’t come in to see you. I have no health insurance—can’t you just refill my pills? It’s only $4 for a month’s supply at Wal-Mart. If I do everything you say it will be a hundred times or a thousand times more!!!”

Answer: “I need to see you because you may need different or more medicine. I’ll keep your concerns about cost in mind, however I’m going to recommend what is best for your health. I can have you speak with our counselor [social worker], who might be able to help get you health insurance.”

Be sure not to promise that the counselor will be able to get the patient health insurance. Explain in lay terms why a visit and test are necessary. Have the patient talk to the social worker, if only to see if s/he can help.

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**GRADING CHECKLISTS**

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Symptom: Ask open-ended question to see if patient has any other problems besides needing refill</td>
<td>None in this case—can’t do physical exam over the phone.</td>
</tr>
<tr>
<td>✓ Intensity: How is HTN affecting his life?</td>
<td></td>
</tr>
<tr>
<td>✓ Quantity: Does he check his blood pressure? What readings does he get?</td>
<td></td>
</tr>
<tr>
<td>✓ Onset: How long does he have HTN?</td>
<td></td>
</tr>
<tr>
<td>✓ Alleviating factors</td>
<td></td>
</tr>
<tr>
<td>✓ Aggravating factors</td>
<td></td>
</tr>
<tr>
<td>✓ Associated symptoms: Ask about symptoms of heart disease and stroke</td>
<td></td>
</tr>
<tr>
<td>✓ Allergies</td>
<td></td>
</tr>
<tr>
<td>✓ Medication: Get name, dose, route, number of times a day of medicine to refill</td>
<td></td>
</tr>
<tr>
<td>✓ Medication: Get names of all other meds patient takes</td>
<td></td>
</tr>
<tr>
<td>✓ PMH: Hospitalization, illness, trauma</td>
<td></td>
</tr>
<tr>
<td>✓ ROS: Weight</td>
<td></td>
</tr>
<tr>
<td>✓ SH: Diet, smoking, alcohol, sleep</td>
<td></td>
</tr>
<tr>
<td>✓ Sexual Hx</td>
<td></td>
</tr>
</tbody>
</table>

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**MEDICAL**
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

HPI: Patient called on phone for refill of lisinopril 10 mg PO q.d. Patient initially denied any complaints.
HTN has not affected his life at all
HTN began 10 years ago
BP at home 120–130/70–84
States nothing makes HTN better or worse
No chest pain, extremity pain, weakness
Does have some swelling in legs and SOB on exertion for past 2 months. Patient also notices is coughing. No sputum or fever.
Allergies—None
Meds—Lisinopril 10 mg PO q.d; is taking regularly

PMH: No hospitalizations, major trauma, or surgery. No Hx of DM, cancer, or heart disease. Weight has increased 15 lb in last year; 220 lb, 5’10”. No change in sleep pattern. No problems urinating.

FH: Negative

SX: Pt is sexually active, one partner

SH: Married, lives with wife, works as an accountant. Under stress only at tax time. No exercise program. Pt states is on no special diet, eats fast food several times a week. No smoking, no alcohol or drug use.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

---

**Diagnosis #1: Hypertension**

Differential diagnosis and diagnostic reasoning

**History Finding(s)**

*Hx of hypertension*

**Physical Exam Finding(s)**

---

**Diagnosis #2: Cough due to lisinopril**

Differential diagnosis and diagnostic reasoning

**History Finding(s)**

*Dry cough began after starting drug*

*No fever, no sputum*

**Physical Exam Finding(s)**

---

**Diagnosis #3: Heart failure**

Differential diagnosis and diagnostic reasoning

**History Finding(s)**

*Dyspnea on exertion*

*Pedal edema*

**Physical Exam Finding(s)**

---

**Diagnostic Study/Studies**

*Physical exam*

*CBC, glucose, BU, Cr, electrolytes*

*ECG, CXR, U/A*

*Fasting cholesterol, HDL, LDL, triglycerides*

*BNP, ECG*
CASE DISCUSSION

Notes about the History-Taking
Phone cases present unique challenges. Be sure during the introduction that you know with whom you are speaking. In a phone case you’ll be able to take more notes, since there will be no eye contact to maintain with the patient—but that also means no nonverbal communication is possible. Speak slowly and clearly. You have more time for the history and counseling, as no physical exam is requested.

Notes about the Physical Exam
Leave this section blank on this particular case. USMLE knows you can’t physically examine a patient who is fully clothed in regular street clothes (not in a patient gown when you enter) or who is only a voice on a telephone.

Comments about the Patient Note
Asking a patient’s height and weight on the phone is acceptable and could even be important in some phone cases. Notice how on this note it was just included in the history.

The Differential Diagnosis includes diseases that are known complications of hypertension for which the patient has suggestive symptoms. Don’t forget that medication can sometimes be the source of a new problem. So it is acceptable to list “cough” as a possible side effect from the Lisinopril.

The Diagnostic Workup, of course, includes a physical exam. Renal function is always a correct test to order with HTN, as the kidney is a target organ. The U/A is indicated on most people with systemic disease. Because HTN, obesity, and DM often occur in the same patient, it is reasonable to check the glucose despite no specific questioning about diabetes in the history. It is also appropriate to order tests to look for signs of congestive heart failure. For example, B-type natriuretic peptide (BNP), echocardiogram, and a chest x-ray are all useful in looking for signs of congestive heart failure.
Case 15: Menopause Drug Refill

DOORWAY INFORMATION

Opening Scenario
Ruth Evans is a 53 y/o female who calls you on the phone for a refill of her estrogen tablets (Premarin™).

Vital Signs
There are no vital signs, as this is a phone case.

Examinee Tasks
1. Obtain a focused history.
2. Discuss your initial diagnostic impression and your workup plan with the patient.
3. After completing the call, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: In this case, you are told that this is going to be a phone case. You will need to use the phone to speak with the patient. You will need a detailed medication history, and you need to find out the dose, route, and frequency of the medication. Checking compliance is critically important. Also, find out the names of any other medicines the patient is taking. As in all cases where the patient doesn’t seem to have any pain or symptoms, you need to ask early on if the patient has any other health concerns you can help with.

For an asymptomatic patient, certainly focus the history around menopausal symptoms, the side effects of hormone replacement therapy (HRT), and contraindications to the medication. Most frequent indications are for hot flashes, night sweats, and atrophic vaginitis. It is unlikely you will be asked to comment on the more controversial aspects of HRT.

Contraindications to using HRT include cancer of the uterus or breast; cardiovascular disease, including coronary artery disease, stroke, and blood clots; liver dysfunction; pregnancy; and, of course, allergy to the product.

Side effects include vaginal bleeding, headache, and vaginitis.
FROM THE STANDARDIZED PATIENT

History

HPI: Ms. Evans calls you because she ran out of her Premarin tablets 6 weeks ago. Unfortunately, the vaginal dryness and pain with intercourse has returned. Even worse, she hardly ever gets a good night’s sleep because of hot flashes and night sweats. She feels a little more irritable during the day and it is beginning to affect her work and family life. She asks for a medication refill. She has no other complaints and otherwise feels fine. Nothing makes the symptoms better, including trying herbal cures (black cohosh). Nothing makes it worse. Ms. Evans has had no vaginal bleeding or discharge. She had no headaches or side effects from the Premarin.

Ms. Evans has no allergies. She was taking Premarin 0.3 mg by mouth every day for the past 6 years. She also takes calcium supplements and a multivitamin.

PMH: She was hospitalized at age 49 for a total abdominal hysterectomy and bilateral salpingo-oophorectomy for dysfunctional uterine bleeding. There was no cancer. She had a nondisplaced fracture of the wrist last winter. She has never had any blood clots, heart attack, stroke, or liver disease. Her last mammogram was 2 years ago and normal.

ROS: She is not sleeping well now due to the night sweats. Her weight is unchanged. She has noticed some frequency of urination lately. There is no dysuria, hematuria, or incontinence.

Family Hx: Her mother and sisters never had breast or uterine cancer.

Ob/Gyn: She has been pregnant twice and had two live births. Menarche was at age 12.

Sexual Hx: Ms. Evans is sexually active with her husband of 25 years.

Social Hx: Ms. Evans works as executive director of a social service agency. She does not feel generally stressed. She stopped smoking decades ago. No recreational drugs. Drinks one or two glasses of wine each week.

Physical Exam

There is no physical exam, as this is a phone case.

THE CLOSING

In this case, the diagnosis of menopausal symptoms seems rather obvious to both you and the patient, and is not mentioned in the closing listed below. A better alternative would have been to tell the patient the diagnosis in lay terms, just like every other case. Don’t worry if you don’t get everything absolutely perfect. Few patient encounters—in real life or on test day—are perfect.

This doctor did do an excellent job of answering the patient’s chief complaint. She explained that she would refill the medication. This appears to be an exception to the no-treatment rule on Step 2 CS. It would have been a correct response as well if the doctor said she wanted to see what the test results showed prior to selecting the appropriate medicine. Remember: The Step 2 CS is testing your ability to speak and communicate comfortably with the patient.

Hormone Replacement Therapy still seems to be a very controversial topic. Don’t worry about picking the “wrong answer.” In areas of controversy either choice will be acceptable.
Doctor: “Thank you, Ms. Evans. Let me review what we talked about today. You told me you have stopped the Premarin for the past 6 weeks. Since then you have had night sweats, hot flashes, and dryness that causes pain with sex. Is that correct?”

Ms. Evans: “Yes.”

Doctor: “I can go ahead and call in a prescription for you. In addition, I would like you to make an appointment for a physical exam.”

Ms. Evans: “Okay.”

Doctor: “It sounds like you are due for your yearly mammogram as well.”

Ms. Evans: “Yes.”

Doctor: “I would also like you to do an x-ray to look for weak bones. When we meet, we will go over the test results and plan treatment. Do you have any other questions?”

---

**GRADING CHECKLISTS**

**History Checklist**

- ✔ Symptoms: Elicit menopausal symptoms
- ✔ Intensity: How is it affecting her life?
- ✔ Onset
- ✔ Aggravating factors
- ✔ Alleviating factors
- ✔ Associated symptoms: Can ask contraindications and side effects of estrogen

- ✔ Allergies
- ✔ Medications: Dose, route, frequency of drug requested
- ✔ Medications: Get names of all other medicines
- ✔ Medications: Ask about side effects
- ✔ Medications: Compliance
- ✔ PMH: Hospitalizations
- ✔ PMH: Surgery
- ✔ PMH: Major illness(es) that contraindicate pt receiving estrogen
- ✔ ROS: Urinary
- ✔ FH
- ✔ Ob/Gyn: Any bleeding, discharge, dyspareunia
- ✔ Social Hx
- ✔ Sexual Hx

**Physical Exam Checklist**

No physical exam checklist possible in phone cases

---
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Brown comes to you and tells you he has been sick for most of the past 6 months. It started at that time with fever, headache, malaise, and swollen glands. That lasted about 3 months. He went to a different clinic and a mono test was done, but that turned out negative. Then he started to get high fevers, cough, and shortness of breath with exertion. Three months ago, the SOB was only with exercise. He has stopped exercising completely and now gets dyspnea on exertion (DOE) going up one flight of stairs.

The cough is nonproductive. There is occasionally some mild chest discomfort with coughing. Nothing seems to make it better or worse. The chest discomfort changed about 2 weeks ago. He also complains that for the last 2 weeks he has had extreme pain with swallowing both solids and liquids. He has noticed some white, cheesy rash on his tongue and oral mucosa. Prior to this past 6 months, he was perfectly healthy.

Allergies: None

Meds: Tylenol and Motrin for fever without relief

PMH: Mr. Brown has never been hospitalized. He has had no surgery or trauma. He denies diabetes, hypertension, and heart disease. He denies any exposure to tuberculosis.

SH: He has been sleeping more than usual lately, has lost approximately 20 lb, and has a decreased appetite. He has no problem urinating. He is sexually active, with four different sexual partners in the last year—all male. He has not practiced safe sex.

Mr. Brown lives alone. He is a social worker for the state child protective agency. He is upset that he has been missing so much work due to illness recently. He does not smoke, drink, or use any recreational drugs.

Physical Exam

Mr. Brown looks unhappy. He is 135 lb and is 5 feet 9 inches. He is holding a little cup, into which he spits occasionally because it hurts to swallow. Occasionally during the interview he has a dry, hacking cough.

His neck is supple. Lungs are clear to auscultation. Tactile fremitus, percussion, and auscultation are normal. His heart tones are fast without any murmur or gallop. When you check for cervical and supraclavicular adenopathy, he tells you that his glands are still swollen. His abdomen is soft and nontender. Bowel sounds are normal. Gait is normal. He is alert and does not seem confused.

THE CLOSING

Doctor: “I have finished your physical exam, Mr. Brown. Would you like to know what I’m thinking?”

Mr. Brown: “Yes, Doctor.”

Doctor: “You told me you have not felt well in six months—first with fever, swollen glands, and weakness, then with shortness of breath and cough, and now with a lot of pain when you swallow.”

Mr. Brown: “That’s correct.”

Doctor: “On your physical exam I find that you have a high fever and some fever blisters on your lip.”

Mr. Brown: “Oh, so that’s what those are.”
**Doctor:** “Yes. This could be a problem with your immune system.”

**Mr. Brown:** “You mean I have AIDS, don’t you?”

**Doctor:** “Yes, it could be. But you need to have a blood test to be sure. I would also like to take a picture of your chest to look for pneumonia as well. I will also ask for a general blood test to make sure you are not dehydrated.”

**Mr. Brown:** “Am I dying?”

**Doctor:** “What you have might be serious, but whatever we find, I’ll be able to provide you with good treatment. I am very glad you came to see me today. I can help.”

### GRADING CHECKLISTS

#### History Checklist
- Symptoms: Fever, weight loss, swollen glands
- Symptoms: SOB, cough (nonproductive), dysphagia
- Intensity: How it is affecting his life—not able to work
- Onset: When did it start?
- Onset: Course
- Aggravating factors
- Alleviating factors
- Associated symptoms: If you realize this pt has HIV, ask about SX of AIDS
- Allergies
- Medications
- PMH: Hospitalizations
- PMH: Major illness, TB contacts
- ROS: Quantify weight loss
- ROS: GI—diarrhea
- SX: Sexually active
- SX: Multiple male partners
- SX: Unprotected sex
- SH: Works as social worker with children for state. Concerned that he has missed too much work.

#### Physical Exam Checklist
- GA: Height and weight
- HEENT: Observe lesions on lips
- HEENT: Inspect pharynx
- HEENT: Check for meningitis (supple neck)
- HEENT: Check for adenopathy
- Chest: Inspect chest
- Chest: Tactile fremitus
- Chest: Percussion
- Chest: Auscultation
- CV: Auscultation of heart
- Abd: Palpation
- Neuro: Mental status alert
- Neuro: Gait
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Cough, fever, wt loss

**HPI:** 20-lb weight loss in 6 months. Illness began with fever, fatigue, and diffuse adenopathy. Three mo ago, started with nonproductive cough, SOB, DOE. Now with 2 weeks of “cheesy” rash in mouth and severe dysphagia. Pt spitting into cup to avoid swallowing. Pt has been missing a lot of work. Nothing seems to make it better or worse. Also has sores on lips. No syncope or confusion.

Allergies: None

Meds: Tylenol and Motrin for fever

**PMH:** Never hospitalized. No trauma or surgery. No TB, DM.

**ROS:** No trouble urinating

**SX:** Sexually active, multiple male partners. Doesn’t always practice safe sex.

**SH:** Lives alone, works as social worker. No smoking, alcohol, IV, or rec drugs.

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** Temp: 102.2°F, HR: 110, RR: 24, BP: 110/80

**GA:** Looks chronically ill

**HEENT:** Pharynx clear. Neck supple. No cervical, supraclavicular adenopathy.

**Chest:** Clear to A + P. Normal fremitus.

**CV:** Tachycardic. No obvious murmur, rub, or gallop.

**Abd:** Soft, nontender

**Neuro:** Pt alert, gait normal
**SAMPLE PATIENT NOTE**

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: HIV/AIDS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
<td></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
<td><strong>Physical Exam Finding(s)</strong></td>
</tr>
<tr>
<td>Multiple male partners, does not practice safe sex</td>
<td>Looks chronically ill</td>
</tr>
<tr>
<td>+ weight loss</td>
<td></td>
</tr>
<tr>
<td>Diffuse adenopathy</td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td></td>
</tr>
<tr>
<td>Symptoms suggestive of opportunistic infection</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Pneumocystis pneumonia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
<td></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
<td><strong>Physical Exam Finding(s)</strong></td>
</tr>
<tr>
<td>Above symptoms</td>
<td>Cough</td>
</tr>
<tr>
<td>Cough</td>
<td>Shortness of breath</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3: Esophageal candidiasis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
<td></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
<td><strong>Physical Exam Finding(s)</strong></td>
</tr>
<tr>
<td>#1 symptoms</td>
<td></td>
</tr>
<tr>
<td>Dysphagia</td>
<td></td>
</tr>
<tr>
<td>Cheesy rash in mouth</td>
<td></td>
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</tbody>
</table>

**Diagnostic Study/Studies**

- CXR, pulse Ox, sputum culture
- Lytes, BUN, Cr, glucose, blood culture, U/A
- HIV-antibody (ELISA)
- CD4, PPD
- Upper endoscopy
CHALLENGING QUESTIONS

Mr. Brown: “Are you going to tell my employer? I work with children, you know.”

Doctor: “What we discuss is confidential. I do want you to tell your sexual partners to come in and be tested. Will you be able to do that?”

Mr. Brown: “Yes.”

Doctor: “Great. I’ll have my nurse come in and take the blood sample now. Do you have time to do the picture of your chest now? The sooner we have the test results, the sooner we can start treatment.”

Mr. Brown: “I guess so.”

Doctor: “Fine. Do you have any other questions?”

Mr. Brown: “No.”

Doctor: “So then I’ll see you after the picture of your chest.”

CASE DISCUSSION

Notes about the History-Taking

Pay close attention to any testing the patient states he previously had. In this case, Mr. Brown had a prior mono test that was negative. This is the USMLE’s way of telling you that mononucleosis is a much less likely diagnosis and is not the cause of the patient’s symptoms.

Notes about the Physical Exam

The sicker the case the SP is portraying, the harder it is to visualize. This patient is giving you historical symptoms strongly suggestive of pneumonia. However, the actor is not going to be able to simulate abnormal breath sounds. He probably will cough a couple of times during the exam to remind you he really has pneumonia-like signs and symptoms. Write on your note what you actually hear, feel, and percuss on the SP’s chest. But don’t be dissuaded from listing pneumonia on your diagnosis.

Comments about the Patient Note

Certainly, many types of HIV testing can be performed. These are not the only tests that would be accepted as correct answers. Always think in terms of the best initial tests that the patient needs. Do not worry about tests the patient may need later in his illness.
# Case 17: Broken Nose

<table>
<thead>
<tr>
<th>DOORWAY INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opening Scenario</strong></td>
</tr>
</tbody>
</table>
| **Vital Signs**      | - Temp: 37.0°C (98.6°F)  
- BP: 130/82 mm Hg, right upper limb sitting  
- HR: 74/min, regular  
- RR: 16/min |
| **Examinee Tasks**   | 1. Obtain a focused history.  
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.  
3. Discuss your initial diagnostic impression and your workup plan with the patient.  
4. After leaving the room, complete your patient note on the given form. |

## BEFORE ENTERING THE ROOM

**Clinical Reasoning:** Write your mnemonics on your blue sheet (SIQORAAA and PAMHRFOSS). These mnemonics will remind you of other questions to ask, and will ensure that you don’t skip pertinent aspects of the history.

Fracture of the nares is from trauma. You will have to find out the details of how this happened without being judgmental. Remember: If there is trauma to one part of the body, there may be trauma elsewhere. Trauma exams focus on inspection and palpation to uncover additional injuries. Finding out how the trauma occurred may be important to uncovering additional medical or social problems the SP may have.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Clark comes in complaining of a black-and-blue nose. He thinks he was punched in the nose at a party last night but was really too drunk to remember. He thinks he got knocked out because he woke up in the morning on a couch with the bloody nose. He has a bit of a hangover and is complaining of a headache.

The patient's pain is about a 4 out of 10 on the pain scale. The pain is sharp and it does not move anywhere. Nothing else seems to hurt. It feels better if he applies ice on the face and worse if he tries to push on the nose, as when he wipes off the dried blood. He had a nosebleed earlier this morning when he blew his nose, but it stopped in a minute. There has been no change in vision and no weakness in arms or legs.

Patient does not feel confused. There has been no vomiting, nor has there been any chest, abdominal, back, or extremity pain. He does feel a little unsteady as he walks this morning. He was not incontinent of urine or stool last night and did not bite his tongue.

PMH: Mr. Clark has no allergies and takes no medication. No history of trauma. No surgery. Mr. Clark has no history of diabetes or hypertension.

SH: Mr. Clark is on no special diet and does not take vitamins. There has been no change in his sleep pattern and he has no problems with urination. There was no blood in his urine this morning when he voided. Mr. Clark has smoked a pack of cigarettes a day since age 14. On the weekends, he drinks 6 to 12 cans a beer each Friday and Saturday night. On weekdays, he has just a couple of beers after work to unwind.

He tells you he is "no drug addict" and does not use recreational drugs. He lives alone. His parents live upstairs in a two-bedroom flat. Over the past 6 months, he has spoken with them infrequently. Mr. Clark finished high school and now works as an apprentice electrician. He denies being sad, hopeless, or depressed. He states he is full of energy and ready for a good time.

Physical Exam

Patient has not washed up since the party and smells of stale beer and cigarettes. He is dirty and his shirt is torn. His nose is very tender and most likely broken. There is some dried blood on the philtrum, and because of the dried blood, there is limited air entry on the left. The rest of his face is nontender. There is no tenderness to the calvarium. His pupils are equal round and reactive to light. The fundi are flat. There is no hemotympanum. His teeth are intact. His neck is nontender.

Mr. Clark's chest has a normal appearance and normal respiratory excursion without pain to palpation. There is no pain to palpation of the spine and no costovertebral tenderness. There are no marks on his abdomen and it is nontender. There is full range of motion of his extremities. No bony tenderness. He is alert and oriented to person, place, and time. He has no facial asymmetry and his motor strength is equal, normal, and strong in all four extremities. His gait is ataxic.

THE CLOSING

Mr. Clark is somewhat confrontational from the start. He is testing you. If you keep a calm, professional demeanor while projecting your concern for his well-being, the patient will accept your direct diagnosis of alcoholism. If you appear angry, unsure of yourself, or judgmental, this conversation will escalate in a negative direction.

The counseling in this case can focus on the alcohol problem as well as the seizures.
Doctor: "Mr. Clark, I have finished your exam and I'd like to tell you what I'm thinking."

Mr. Clark: "Yeah, you're thinking I'm a failure!"

Doctor: "No, I think you have a broken nose and an alcohol problem."

Mr. Clark: "I knew that, and I haven't even gone to medical school!"

Doctor: "I want you to have a picture of your nose to see how bad it is. I also want to check a picture of your head, as it sounds like you passed out or were knocked out last night."

Mr. Clark: "To see if I have any brains?"

Doctor: "To make sure there was no brain injury. We also need to find out why you are so unsteady on your feet today. I'd like to do the tests now so we can begin any treatment immediately.

"Drinking alcohol and working with electricity is a dangerous combination. I would like for you to see our alcohol counselor."

---

**GRADING CHECKLISTS**

**History Checklist**
- Site: Trauma to nose
- Intensity: 4/10 pain
- Q: Sharp
- Onset: Last night
- R: No radiation
- A: Worse to the touch
- A: Better with ice
- Associated: +LOC
- PMH: No surgery
- ROS: Always a good idea to ask about hematuria in a possible trauma case
- Allergies
- Medications
- SH: Alcohol history, lives alone

---

**Physical Exam Checklist**
- General appearance

**Inspection/Palpation:**
- HEENT: Inspect and palpate
- Eyes: Fundus and pupils
- Ears: Inspect TMs
- Pharynx: Inspect tongue
- Neck: Check for c-spine fracture
- Chest: Inspect and palpate
- Abd: Inspect and palpate
- Back: Inspect and palpate
- Ext: Inspect and palpate

**Neurological:**
- Mental status
- CN VII
- Motor: All four extremities
- Gait
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Nose pain

HPI: Intoxicated last night + LOC. Possibly punched in nose, had epistaxis and sore, tender nose with no air entry L nostril. Pain is sharp, 4/10 intensity, and does not radiate. Denies any other pain in body or other injury. Pain worse with palpation, relieved with ice. Negative vomiting, confusion, incontinence, tongue biting. Positive ataxia, epistaxis.

PMH: NKMA, meds—None
Hospitalized for seizure in past. Has seizure about q 6 mo. No trauma other than when has seizure and hits head. Denies DM, HTN. No hx of surgery.

ROS: No change in sleep pattern, no special diet, denies hematuria

SH: Smokes 1 ppd, no recreational drugs. EtOH 6-12 beers each weekend night. Drinks in A.M. to “get the day started.” Lives alone in apt with parents living upstairs—little contact. No sadness, hopelessness (but does feel guilty about drinking). Works as electrician, denies stress.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: 98.6 132/80 74 16, dirty clothes, nose ecchymotic with dried epistaxis

HEENT: Only nose is tender. Nontender to jaw, maxilla, and calvarium. PERRL. No hemotympanum. Pharynx and teeth intact, no tongue biting. Nose, decreased air entry on L.

Neck: Nontender, good ROM

Chest: No bruises, NL respiratory excursion, nontender to palpation

Back: No marks or tenderness to spine or CVA

Abd: Soft, nontender all 4 Q

Ext: Scattered bruises, nontender, full ROM

Neuro: A + 0 x 3, no facial asymmetry. Motor 5/5 all 4 ext, gait ataxic.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Blunt head trauma with LOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Hit in head</td>
</tr>
<tr>
<td>+ loss of consciousness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Fracture nose</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Blunt trauma to nose</td>
</tr>
<tr>
<td>c/o pain to nose</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3: Alcohol abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Binge drinker: 6–12 beers an evening</td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

| Head CT, plain brain                     |
| X-ray nasal bones                        |
| CBC, INR                                 |
| T. bili, ALT, AST, EtOH                  |
CHALLENGING QUESTIONS

In the above conversation, the challenge is to not respond to the patient's sarcastic remarks or appear judgmental.

CASE DISCUSSION

Notes about the History-Taking

Eighteen years is the age of legal adulthood in most states. The SP probably will be a little older pretending to be a 19-year-old. Again, assume you have permission to do a history and physical on every SP you are given. The issues of adolescent history may be part of a case. In this particular case, however, there are plenty of other historical and physical findings to consider. If the patient said he remembered everything from last night and stated only that his nose was broken, you could focus your attention on the facial structures. In this particular case, he really doesn’t know what happened. This is your clue to check over the entire body in general.

Notes about the Physical Exam

The physical exam of any possible trauma patient is centered about inspection and palpation of all the major areas of the body to find possible other injuries. If you find one area of tenderness, like the nose in this case, then slow down and palpate all the surrounding areas to determine the extent of injuries. With any head trauma, HEENT and neurological exams will be prominent. Do not forget to check the c-spine for tenderness to palpation. CAGE questions are not needed as patient is a binge drinker. Go directly to counseling.

Comments about the Patient Note

The first sentence from the patient gives you a clear indication of what this case is about. As with all cases, the pertinent negatives are very important in determining the cause. Mr. Clark may have had a seizure, an alcoholic blackout, and/or suffered trauma last night. To screen for seizure activity, ask about tongue biting and incontinence. Inspect the tongue as well.

Workup for anyone with loss of consciousness (LOC) and head trauma always includes neuroimaging. For acute trauma, CT is better than MRI because acute hemorrhage shows up better initially on CT.
Case 18: Adolescent Weight Loss

DOORWAY INFORMATION

Opening Scenario
Mr. Wright comes to the clinic to discuss his 16 y/o granddaughter, Amy, who is losing weight.

Vital Signs
N/A

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Assume that you have permission to treat all patients that are presented to you on Step 2 CS, and that you have permission to talk to family members. In this case, there are no vital signs because the patient is not present. Only a family member is available to describe what is happening with the patient. You will need a pediatric and adolescent history in place of the physical exam. The patient will have to be scheduled for a physical exam.

Causes of weight loss can include the following:

- Depression
- Anorexia nervosa
- Hyperthyroidism
- Drug use
- Cancer
- Diabetes

All of the above would be common possibilities. Having an idea of what causes common chief complaints makes it easier to ask relevant history and appropriate questions, especially during the associated symptoms. Getting some description of how much weight has been lost over what period of time will be important.
FROM THE GUARDIAN

History

HPI: Mr. Wright says he is Amy's grandfather and primary caretaker. Amy lives with him because her mother died last year after being hit by a drunk driver. Mr. Wright says Amy is a gymnast in high school and has a goal of being on the Olympic team. Mr. Wright says Amy seems to have recovered from the death of her mother, but she is not eating very much. She always says her coach wants her to keep her weight down. Mr. Wright estimates Amy has lost about 20 lb in the last 6 months. She is 5 feet 3 inches, and 105 lb. Sometimes she does go to the bathroom during dinner and comes back to the dinner table with red, blurry eyes. She denies vomiting. Amy complains of frequently feeling hot, as well as being sweaty a lot of the time. She drinks a lot of ice water to "cleanse her system."

Amy takes no medicine other than a multivitamin, and she has no allergies.

PMH: Amy has never been hospitalized and has had no surgery or trauma. She has never had any major illnesses.

ROS: Amy does seem to urinate frequently, however she has no burning or pain with urination. She is sleeping less than usual, now about 6 hours a night. She claims to be up doing homework. She has no constipation or diarrhea. She has two bowel movements a day. Mr. Wright does not know what happened to her father, who left 14 years ago. Amy's mother was healthy before the accident.

Ob/Gyn: Mr. Wright is not sure when her last period was. He doesn't think she is sexually active, as no boys call the house. Mr. Wright states Amy is a health enthusiast and would not smoke or use alcohol or drugs.

Amy is very concerned about her weight and looks, and feels she is still too fat to make the Olympic team. She realizes she must be strong also. Amy doesn't seem to enjoy the gymnastics team as much as she did a year ago. She still has periods of sadness over her mother's death 18 months ago. She has not been in contact with her friends outside of gymnastics. Her grades are slipping a little. Amy says classes are boring and she can't concentrate. Mr. Wright does not think that she ever has wanted to kill herself.

Physical Exam

There is no physical exam in this case, as the patient is not present.

THE CLOSING

Doctor: "Okay, Mr. Wright, I think I have the information I need. Is there anything else you would like to talk about?"

Mr. Wright: "No, I just want to see Amy doing better."

Doctor: "Yes. You told me she has lost 20 lb. Amy is still very concerned that she is too heavy to be a top gymnast?"

Mr. Wright: "That's correct."

Doctor: "Amy might have an eating disorder, or she might be depressed."

Mr. Wright: "That's what I thought when I researched her symptoms on the Internet."

Doctor: "There are other possibilities as well. We need to take a blood test to look at the minerals in her blood, and at her sugar and hormone levels. When can she come in for a physical exam?"

Mr. Wright: "Well, she's at school every day until 7 P.M. And I don't drive after dark."
Doctor: “How about this Saturday?”

Mr. Wright: “Sure.”

Doctor: “Do you have any questions?”

### CHALLENGING QUESTIONS

Mr. Wright: “Do you think Amy will need to be hospitalized?”

Answer: “I need to see Amy first and see the test results to know for sure what is best. Nothing you told me makes me think she needs to be in the hospital today, but I do need to examine her as soon as possible.”

#### GRADING CHECKLISTS

**History Checklist**

- ✔️ Symptom: How much weight has been lost?
- ✔️ Intensity: How is it affecting her life?
- ✔️ Onset: When did the weight loss start?
- ✔️ Alleviating factors
- ✔️ Aggravating factors
- ✔️ Associated symptoms: Ask about symptoms of diabetes, hyperthyroidism, and anorexia
- ✔️ Previous episodes of the chief complaint
- ✔️ Allergies
- ✔️ Medication
- ✔️ PMH: Hospitalizations, trauma, surgery
- ✔️ FH: Death of mother
- ✔️ Ob/Gyn: LMP, regularity
- ✔️ Sexual Hx
- ✔️ Social Hx: Lives with grandparents. No alcohol, smoking, or recreational drugs.

**Adolescent Hx**

- ✔️ Body image is poor
- ✔️ Doing less well in school
- ✔️ Few friends, few activities outside of gymnastics
- ✔️ Frequently sad, not enjoying gymnastics.
- ✔️ No suicidal ideations.
- ✔️ Coping strategies/Adjustment to death of mother
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: Weight loss

HPI: 20-lb weight loss in the last 6 mo. Now 5'3", 105 lb. Poor appetite. States wants to keep weight down for gymnastics team. Sometimes goes to bathroom during mealtime. Comes back to the table with red, watery eyes. She denies vomiting. Amy frequently feels hot; is frequently thirsty and drinks a lot of ice water.

NKMA; Meds: Multivitamin

PMH: No hospitalizations, trauma, major illness, or surgery

ROS: Pt sleeping less than usual, about 6 hrs/night. No dysuria, hematuria. No constipation or diarrhea. Has 2 bowel movements/day.

FH: Amy's mother was healthy prior to her fatal car accident. No known hx for father.

O: LMP: Not sure, per grandfather

SX: Grandfather does not think pt is sexually active

SH: Lives with grandparents after death of mother 18 mo ago. No alcohol, cigarettes, or recreational drugs. Poor body image, thinks she is still too heavy to make Olympic team. Does not seem to be enjoying gymnastics anymore, frequently sad. Has few friends, grades are dropping, and cannot concentrate. No known suicidal ideation.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
## DATA INTERPRETATION

Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Anorexia nervosa

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor body image—pt thinks she is too fat</td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #2: Depression

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death of parent</td>
<td></td>
</tr>
<tr>
<td>Reported as sad, can’t concentrate, decreasing grades</td>
<td></td>
</tr>
<tr>
<td>Loss of enjoyment of activity (gymnastics)</td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #3: Hyperthyroidism

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexplained 20 lb weight loss</td>
<td></td>
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</tbody>
</table>

**Diagnostic Study/Studies**

- Physical exam
- TSH
- CBC, lytes, BUN, Cr, Glu
- U/A, UCG
CASE DISCUSSION

Most of the Differential Diagnosis reflects possible organic causes of weight loss. Certainly diabetes, cancer, and hyperthyroidism are likely causes. Be sure to ask if the weight loss is intentional. Perhaps the patient is just dieting. Even if the cause of symptoms seem to be psychological, it is always correct to broaden your search for medical illnesses that might be causing psychiatric symptoms.

Notes about the History-Taking

Thinking about the common issues discussed in the adolescent history will also bring up possible diagnoses. Ask about self-esteem, depression, and eating disorders, as well as the social history. Finding out about what happened to Amy’s parents is also important. In the closing you could mention sending Amy to a counselor, but it is essential to mention that you personally need to speak to and exam the patient.

Notes about the Physical Exam

There is no physical exam in this case.

Comments about the Patient Note

On the first line of the Diagnostic Workup, be sure to list that a physical exam is needed.
Case 19: Adolescent Depression

DOORWAY INFORMATION

Opening Scenario
Mrs. Lewis comes to the clinic to discuss her 15 y/o daughter, Carol, who has seemed very unhappy recently.

Vital Signs
N/A

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: This is another surrogate case. That means the parent or guardian is coming to speak to you about the patient. If you are given the patient's name but not the name of the surrogate, find out the name of the SP during the introduction so you know what to call her.

An adolescent history and social history will be required. You may already have a clue that this is a case about depression, based on the Doorway Information. You will need to ask about the following signs of depression.

The mnemonic for depression is SIGE CAPS:

S  Sleep/Sexuality

  Doctor: “Has there been any change in how much you sleep?”

In any patient, too much sleep can be the result of depression, hypothyroidism, or drugs. Too little sleep can result from depression, bipolar disorder, hyperthyroidism, or drugs. Awaking early in the morning can be a sign of major depression.
Doctor: “Has there been any change in your interest in sex?” (This question is only for adult patients, age greater than 18.)

You will need to discuss confidentiality early in a suspected depression case. This way you will be able to gain the patient’s confidence and then ask about sex. Patients with depression often lose interest in sex. Patients who have mania may be hypersexual compared to their baseline.

I Interest/Hope

Doctor: “Have you lost interest in activities you enjoy? Do you feel hopeless?”

Patients with depression often lose interest in activities they used to find enjoyable.

G Guilt

Doctor: “Do you feel guilty?”

E Energy

Doctor: “How is your energy level?”

Patients with depression often exhibit psychomotor retardation. This is something you can observe and write in the Physical Exam notes under general appearance (GA). These people are often monotone, speak slowly, look sad, and take a little longer than usual to respond to verbal questions.

C Concentration

Doctor: “Have you had any difficulties with concentration?”

Patients with depression have a hard time staying on task. You will test this with the Mini Mental Status exam (asking the patient to remember three words and to spell the word world backward). This diminished concentration is why depressed patients often fail in school and on the job.

A Appetite and Weight

Doctor: “Has there been any change in your weight?”

Depression can cause weight loss or obesity. Eating disorders and obesity are common with depression.

P Psychosis/Psychomotor

Doctor: “Sometimes when people are under a lot of stress, they hear things or see things that other people do not. Has this ever happened to you?”

Psychosis means hallucinations. This can be from depression, drugs, medical causes, or schizophrenia.

S Suicide

Doctor: “Have you had any thoughts of harming or killing yourself?”

All depression checklists will make sure you ask this. Asking about suicidal intent does not cause suicide. If the patient answers “No” while making eye contact, you can take him at face value. If the patient becomes evasive, looks down or away, or won’t answer at all, that is a positive response. Try responding with, “Tell me about it. I’m here to help.”
FROM THE GUARDIAN

History

HPI: Mrs. Lewis has come to speak with you about her 15 y/o daughter Carol. She states that Carol is moody, cries frequently, and seems sad. She often says, “What’s the use?” and storms off to her bedroom. She doesn’t seem to enjoy anything or want to do anything. She has started sleeping 12 hours a day, compared to her usual 8 hours.

Mrs. Lewis asked Carol if she was thinking of suicide because she seemed so sad. Carol denied it but then wouldn’t talk to her mother for 2 days. This has been going on for at least the past 3 months. It started rather suddenly, but the mother can’t think of any precipitating factor. Nothing seems to make Carol better. Every time her mother tries to talk to her, it seems worse. Mrs. Lewis doesn’t think her daughter is hearing any voices.

PMH: Carol has no allergies and takes no medication. Four months ago she went through a phase where she drank a lot of coffee to stay awake. She has had no medical or psychiatric hospitalizations, and no surgery, trauma, or major illness. She has never been depressed before. She has been eating more than usual at the dinner table and Mrs. Lewis says, “I think she may have gained some weight.” Carol does not leave the table during dinner. Her body image is poor; she thinks she is ugly.

FH: There is a strong family history of depression. Mrs. Lewis states that she and all of her sisters have been depressed at some time in their lives. No history of bipolar disorder.

Ob/Gyn: Mrs. Lewis states that Carol does get her period but it is still somewhat irregular. She does not believe that Carol smokes, uses drugs, or is sexually active.

In fact, Carol has seemed to drift away from her friends and rarely leaves the house. Carol’s grades are starting to slip, and she seems to have more absences for minor illness than usual. Carol lives with both of her parents and a younger brother.

Physical Exam

There is no physical exam in this case.

THE CLOSING

Doctor: “Mrs. Lewis, let me see if I can summarize what is going on with Carol.”

Mrs. Lewis: “She’s depressed?”

Doctor: “Right, she is often sad and tearful, sleeping more, missing some school, and feeling hopeless. She is just not enjoying life right now.”

Mrs. Lewis: “That’s right.”

Doctor: “Of course, I’ll need to do a physical exam as soon as possible, but I agree the most likely diagnosis is depression. I would like to check a blood test as well as look for other causes of depression.”

CHALLENGING QUESTIONS

Mrs. Lewis: “What should I tell Carol about coming to the doctor? Should I say it’s for a school physical?”

Answer: Honesty is the best policy. Whatever the cause, physical or emotional, explain that you can help.

Doctor: “I think you should tell her you are concerned and want the doctor to find out if anything is wrong.”
## GRADING CHECKLISTS

### History Checklist

- S: Sleep/Sex
- I: Interest in activities
- G: Guilt
- E: Energy
- C: Concentration
- A: Appetite
- P: Psychomotor retardation/Psychosis
- S: Suicide
- Onset
- A: Nothing makes it better
- A: Nothing makes it worse
- Associated symptoms: SIGE CAPS and adolescent issues
- Associated: Recent stressor
- Allergies
- Medication
- PMH: Hospitalization, trauma, surgery
- Ob/Gyn: LMP
- SX: Sexually active?
- SH: Alcohol, drugs

## CASE DISCUSSION

### Notes about the History-Taking

To organize your thoughts on this case you can collect the data you need in any order. It is correct to stick with the SAIQORAAA PAMHRFFSOSS format. You can ask about the signs of depression (SIGE CAPS) as the associated symptoms, or you may discuss them at the beginning or the history as symptoms. It would be equally correct to ask about SIGE CAPS if you did a formal adolescent history. If you have a plan on how you will approach this case as outlined above, you will not miss any of the important data.

### Notes about the Physical Exam

There was no physical exam in this case.

### Comments about the Patient Note

The Sample Note integrates most of the adolescent history into the standard History format. It would be equally correct to list the adolescent history as a separate heading.

Remember: Always consider pregnancy in a female of child-bearing age. That the patient also complained of mild nausea might also be a clue for pregnancy, though it is a rather subtle one.
**SAMPLE PATIENT NOTE**

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

<table>
<thead>
<tr>
<th>CC:</th>
<th>15 y/o daughter with possible depression</th>
</tr>
</thead>
</table>
| HPI: | Pt has 3 months of depressive symptoms and is frequently sad, tearful, with loss of interest in enjoyable activities. No precipitating factors identified. Has not been going out with friends and is starting to have more absences at school. No treatment so far. Nothing makes it better or worse.  
No suicidal ideations or hallucinations. + Feelings of hopelessness.  
No meds, no allergies |
| PMH: | No past history of similar symptoms. No hospitalizations, trauma, or surgery. |
| ROS: | Increase in sleep from 8 to 12 hours. Possible weight gain, + more appetite. Pt does not excuse herself from dinner table. Sometimes says she is nauseous. |
| FH: | + Depression. No bipolar disorder. |
| SX: | Mother believes child is not sexually active. LMP irregular. Not sure when last period was. |
| SH: | No smoking, drugs. Lives with both parents and younger brother. |

**SAMPLE PATIENT NOTE**

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Depression

Differential diagnosis and diagnostic reasoning

History Finding(s) | Physical Exam Finding(s)
--- | ---
Sad, tearful |  
Loss of interest in activities |  
Feeling hopeless |  
Change in weight and sleep habits |  

Diagnosis #2: Hypothyroid

Differential diagnosis and diagnostic reasoning

History Finding(s) | Physical Exam Finding(s)
--- | ---
Weight gain |  
Increase in sleep |  

Diagnosis #3: Pregnancy

Differential diagnosis and diagnostic reasoning

History Finding(s) | Physical Exam Finding(s)
--- | ---
Not clear when last period was |  

Diagnostic Study/Studies

Physical exam
CBC, glucose, TSH
β-hCG
Case 20: Bed-Wetting in 7-Year-Old Child

DOORWAY INFORMATION

Opening Scenario
Mrs. Susan Jackson comes to speak with you about her son, Jason, who is 7 years old and still wets the bed.

Vital Signs
N/A

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: From the Opening Scenario you cannot tell if this is a phone case or the mother came to speak to you in person. Knock on the door and enter as always. If it is a phone case you will not be graded lower for knocking.

You know that with pediatrics cases there will be no actual child SPs to examine.

Enuresis is a very common complaint in children. It is often not due to any medical or psychiatric illness, and most cases resolve spontaneously. As with any symptom, it is important to obtain the intensity, onset, and quantity, as well as any factors that make it better or worse. Ask about any recent stressors. When discussing associated symptoms, ask about dysuria, constipation, polyuria, polydipsia, and polyphagia.

While taking the past medical history, specifically ask about how the bed-wetting is affecting the child’s self-esteem. Determine the parents’ reaction to the bed-wetting, since emotional trauma inflicted by the parent(s) may be a larger problem than the dirty laundry. In place of the physical exam, a pediatric history will need to be completed. Counseling and teaching parents about enuresis during the closing will be a prominent component of this case. This is a great case to test your interpersonal and interviewing skills.
FROM THE GUARDIAN

History

HPI: Mrs. Jackson states that her son, Jason, has always been a bed-wetter. It has occurred since early childhood, and he's never been able to reliably stay dry through the night. Bed-wetting happens about once a week. It seems to happen more frequently when he stays with his grandparents. It is a bigger problem when he wets the bed at the grandparents’ home because they criticize Jason about it. Mrs. Jackson has come to accept it and just knows she will frequently need to wash the sheets. The mattress is protected with a plastic cover that can be wiped down. Unfortunately, Mrs. Jackson has to travel on business frequently and the bed-wetting has become more of a source of conflict lately between the grandparents and grandchild. Not drinking fluids before bed sometimes prevents bed-wetting—but having a lot of liquids prior to bed doesn't always lead to bed-wetting. The Jacksons have tried having Jason urinate right before bed, and even setting the alarm clock for 2 A.M. so he can go to the bathroom. He has no dysuria, weight loss, or polydipsia. He has never fainted. Sometimes he needs to strain to have a bowel movement every 3 or 4 days.

PMH: Jason takes no prescription medications and has no allergies. He has never been hospitalized or had any surgery or trauma. His sleep pattern is normal and he does not snore. He sometimes complains of constipation or abdominal pain.

SH: Jason's father, who is currently deployed in Afghanistan, has a history of bed-wetting until he was 11 years old. There is increased stress at home worrying about Mr. Jackson. The grandparents never hit or scream at or act neglectful toward Jason, but Mrs. Jackson is aware of how their remarks about bed-wetting affect him.

Ped Hx: Mrs. Jackson tells you she received regular prenatal care during her pregnancy. She did not smoke or use drugs or alcohol. Jason was a full-term baby and delivered normally, no C-section. Jason weighed 7 lb 6 oz and was 21 inches at birth. He had no problems with jaundice, breathing, or eating, and she recalls they went home within 24 hours after his birth.

Jason was breast-fed, and weaned at age 8 months to milk and solid food. He now takes a pediatric vitamin every day and Mrs. Jackson states she tries to put nutritious food on the table. He eats a lot of cheese and frequently needs to strain when defecating. Jason started walking at age 1 year, and was toilet-trained by age 2.5 years (except for this bed-wetting problem). His immunizations are up to date. He gets regular pediatric checkups.

Physical Exam

There is no physical exam in this case.

THE CLOSING

Doctor: “Mrs. Jackson, let me tell you what I am thinking, but first, let me make sure I have the facts correct.”

Mrs. Jackson: “Okay.”

Doctor: “Jason has been wetting the bed about once a week for his entire life. You are concerned that his grandparents—who take care of him sometimes—might hurt his self-esteem by criticizing him for bed-wetting.”

Mrs. Jackson: “That’s right. They have been asking me repeatedly to come talk to you because they think something must be wrong with Jason.”

Doctor: “Well, as it sounds like you know, most cases of bed-wetting are just normal and the child eventually outgrows them.”
Mrs. Jackson: “Yes, that’s what my husband says and what I read online.”

Doctor: “I would be happy to call your parents and speak with them if you think it will help.”

Mrs. Jackson: “Oh, thank you, Doctor!”

Doctor: “I also want to see Jason for a physical exam, and I will check his urine. Right now, the other thing is to suggest that Jason eat more vegetables and fruit and a little less cheese. Sometimes constipation can make this problem worse. Do you have any questions for me?”

**CHALLENGING QUESTIONS**

Mrs. Jackson: “I’ve read there are some medicines that prevent bed-wetting. Can you give me a prescription?”

Answer: “I need to examine Jason and collect a urine sample to find out if any medicine is needed. Usually, bed-wetting is just a normal developmental stage and medicine is not needed, but I need to examine him to be sure. Can you bring him in tomorrow?”

**GRADING CHECKLISTS**

### History Checklist
- ✑ Symptom
- ✑ Intensity: How is this problem affecting you and your child?
- ✑ Q: Any burning, blood in urine? How frequently does Jason go during the day?
- ✑ Q: When did it start? How often does it happen?
- ✑ Percipitating factor: What was going on in his life when it started?
- ✑ A: Does anything make it better?
- ✑ A: Does anything make it worse?
- ✑ A: Has Jason had any burning with urination? Fainting?
- ✑ ROS: Ask about sleep, bowel habits, weight change, fever
- ✑ PMH
- ✑ FH: Family history must be asked, since enuresis can be genetic
- ✑ SH: Who does the child live with?
- ✑ SH: What is parents’ reaction to bed-wetting (stress at home)?

### Pediatric/Adolescent History:
- ✑ Prenatal
- ✑ Birth
- ✑ Feeding
- ✑ Growth and development
- ✑ Routine care: Immunizations
- ✑ School performance
- ✑ Self-esteem/depression screen
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: 7 y/o son with enuresis

HPI: Since toilet-trained at age 2.5 yrs, wets bed about once a week. Mother states grandparents sometimes “belittle” the child regarding enuresis. Mother has no other concerns regarding grandparents’ care of child. Nothing reliably makes it better or worse. No dysuria, fainting, polyuria, or polydipsia. No fever. Has bowel movement every 3–4 days. Sometimes constipated.

Allergies: None

Meds: Pediatric vitamins

PMH: No hospitalizations, trauma, or surgery

ROS: Sleeps 9 hours a night, no snoring. No weight loss. Eats a lot of cheese. Has bowel movement q 3–4 d.

FH: Father wet bed until age 11

SH: Jason lives with mother. Father is a soldier in Afghanistan. Some increased stress. Mother does not punish child for bed-wetting.

Ped Hx: Full-term vaginal delivery. + Prenatal care. No drugs or alcohol. No complications in neonatal period. Toilet-trained at 2.5 yrs and walked at 12 months. Immunizations are up to date.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

**Diagnosis #1: Primary nocturnal enuresis**

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient with bed-wetting since toilet trained</td>
<td></td>
</tr>
<tr>
<td>Father with enuresis until age 11</td>
<td></td>
</tr>
</tbody>
</table>

**Diagnosis #2: Enuresis from constipation**

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td></td>
</tr>
</tbody>
</table>

**Diagnosis #3:**

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
</table>

**Diagnostic Study/Studies**

Schedule child for physical exam
CASE DISCUSSION

Notes about the History-Taking
All enuresis cases require a family history because primary nocturnal enuresis is genetic. Always ask about dietary history, since constipation is another cause of enuresis. Cystitis is also a common cause of enuresis, so be sure to ask about symptoms of a urinary tract infection. In this case, enuresis has been persistent rather than secondary or new-onset, making cystitis much less likely.

Other, less common subjects you may ask about include snoring, since sleep-disordered breathing is another cause of enuresis; and gait, which will help you identify a possible neurogenic bladder (for example, meningomyelocele can cause gait disturbance with a neurogenic bladder).

You’ll want to ask about fainting because seizure from a neuro or cardiac cause can lead to incontinence. Thyroid disease and diabetes are two endocrine causes of enuresis.

Psychological stress may also be a cause in this case, and is more likely if the child’s bed-wetting began only after his father went to war. It is important to take the social history, and also to understand the parents’ response to bed-wetting.

Notes about the Physical Exam
There is no physical exam in this case. It is acceptable to write the pediatric history in the Physical Exam section if you find that you are out of space in the History section. The doctors grading your note will be able to figure this out.

Comments about the Patient Note
A physical exam and U/A are required on all cases of enuresis. Other tests may be ordered.

Besides the physical exam and bladder ultrasound, a voiding cystourethrogram may also be done. If the enuresis patient has difficulty walking, that may be a clue for neurogenic bladder. In this case do urodynamic studies of the bladder and MRI of the spine.

In this particular case, the bed-wetting is probably genetic and the patient has no problem with gait. Therefore, no MRI or urodynamic studies are indicated.
Case 21: Shortness of Breath in 9-Year-Old Child

DOORWAY INFORMATION

Opening Scenario
Mark Thompson is a 9 y/o male whose grandmother comes to the clinic because the child is coughing and short of breath.

Vital Signs
N/A

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Use the blue sheet to write down any information you want to remember. The patient’s name can be jotted down if you have a hard time remembering it. For a 9-year-old child, the pediatric history will need to be taken in the time usually allotted for the physical exam. Find out the name of the grandmother during the introduction so you know what to call her. After you introduce yourself ask “What is your name please?” if the SP does not spontaneously volunteer her name.

Shortness of breath can be from an airway, pulmonary, or cardiac cause. Less common causes would be anemia or ASA poisoning. In fact, anything that gives a metabolic acidosis can make the patient short of breath. The history of cough suggests that a pharynx, airway, and pulmonary diagnosis is more likely. Remember, the USMLE is most likely to test common problems that patients present with, so pharyngitis, pneumonia, and asthma all go to the top of the list.
FROM THE GUARDIAN

History

HPI: This is a surrogate case, and Mrs. Thompson is in the exam room without the patient. She tells you that her grandson, Mark, has a cough that is dry, with no sputum. He seems to have had it most of the winter. In fact, every time he gets a cold he seems to be coughing and occasionally short-winded for months afterward. This has been going on for several years.

Mark only rarely complains of being short of breath, although he tries to get out of gym class whenever he can. He has stopped playing soccer. He frequently refuses to go outside and play with his friends. He has never turned blue, but sometimes feels like everything is tight in his chest. It gets better when he rests. He feels worse in the cold air in winter (they live in Chicago). Also, sometimes when he visits his aunt, who has multiple cats, he feels worse, has trouble breathing, and gets watery eyes. There is no fever. Mark has occasional sore throats. No sharp pain in the chest. No rash. It seems as if he has had these symptoms off and on for years.

Allergies: Aspirin

Medications: None

PMH: Mark has never been hospitalized. He had to go to the clinic and emergency department for bronchiolitis a couple of times when he was an infant. He has never had any trauma or surgery. No history of diabetes.

FH: The only family member who has lung problems is Mrs. Thompson, who has a touch of “emphysema.” That is because she smokes. She tries not to smoke around Mark, as it makes his cough and breathing worse.

SH: Mark’s weight has not changed lately. He has no special diet. Lately, he has been waking up tired and with a headache. Mrs. Thompson has noticed he snores a lot lately.

Mark lives with his grandmother. He has never known his father, and his mother died 4 months ago after a drug overdose. Mrs. Thompson states that they both miss Mark’s mother.

Mark’s mother smoked and drank alcohol during pregnancy. Mark was 4 weeks premature and was in the hospital for 1 week at birth. He had jaundice at birth that responded to being “under lights.” He had no trouble breathing. Mark was bottle-fed, and showed normal growth and development. Immunizations are up to date. He started doing poorly in school after his mother’s death.

The counselor at school wants him to get a tutor to help with his reading. Mark feels sad frequently. He never talks about harming himself but sometimes makes drawings depicting violent scenes.

Physical Exam

There is no physical exam in this case.

THE CLOSING

Doctor: “Mrs. Thompson, thank you for coming to see me today. It seems we have two problems we need to help Mark with. First, we need to find out why he is always coughing and somewhat short of breath. Second, it sounds like Mark is still very sad over his mother’s death and needs help coping. Do I have it right?”

Mrs. Thompson: “Yes, Doctor.”
Doctor: "I think the breathing problem could be from infection but is more likely from asthma, based on what I know so far. Also, I'm concerned that Mark may be depressed. I would like to see Mark for a physical exam as soon as possible. I will take a picture of his chest and a breathing test. Also, I agree that a counselor is a good idea for Mark. I have a list of several excellent counselors that work with grieving children. Do you have any questions?"

In this closing, the caretaker says she is going to get spiritual help to handle the boy's depression. To deal with this challenge, you do not need to evaluate her beliefs. Remember: A good physician is nonjudgmental. Just stick to your conviction that a mental health counselor can help. Simply tell the patient that in addition to what she is already doing, you would like the child to see a counselor.

CHALLENGING QUESTIONS

Mrs. Thompson: "I have no health insurance and cannot pay for counseling. I take him to church every Sunday and get some help there."

Doctor: "In addition to church, I believe mental health counselors can help. I can have you speak with our social worker, who can help arrange for financial aid."

Mrs. Thompson: "Do you mean like welfare?"

Doctor: "Well, yes. I think we should do everything we can to help Mark."

Mrs. Thompson: "Okay. When you put it that way, I guess I'll have to swallow my pride and accept it."

GRADING CHECKLISTS

**History Checklist**

- [x] Symptom: Cough and shortness of breath
- [x] Intensity: Not playing
- [x] Onset: When did it start?
- [x] Onset: Frequency (lasts for months after a URI)
- [x] A: Better with rest
- [x] A: Worse with exposure to cold, cats, smoke, exercise
- [x] A: No fever, no sputum
- [x] Allergies
- [x] Medications
- [x] Hospitalizations
- [x] Trauma
- [x] Surgery
- [x] ROS: Sleep
- [x] ROS: Diet
- [x] FH: Family hx of asthma or lung problems
- [x] SH: Lives with grandma, parents deceased

**Pediatric/Adolescent History:**

- [x] Prenatal
- [x] Birth
- [x] Feeding
- [x] Growth and development
- [x] Routine care: Immunizations
- [x] School performance
- [x] Self-esteem/depression screen
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: 9 y/o male with chronic cough and dyspnea

HPI: Dry, nonproductive cough and dyspnea for several years. Lasts for months at a time, occurring after a URI.
- Prevents him from playing sports
- Exertion, cold air, smoke, and cats make it worse
- Rest makes it better
- No fever, rash, or sore throat
- + Chest “tight” feeling at times. Occasional sore throats.

Allergies: Cats, aspirin

Meds: None

PMH: Bronchiolitis as infant. No trauma or surgery.

ROS: Pt on no special diet. Sleep disturbed from “snoring.”

FH: No family hx of asthma; grandma with emphysema


Ped Hx: Mother used alcohol and smoked during pregnancy. Pt was 4 weeks premature. No respiratory distress at birth. Did have jaundice. Normal growth and development. Immunizations are up to date.

Pt has been depressed since death of mother. Has been doing poorly in school. Has not yet received counseling. Has not talked about harming himself but does occasionally draw violent pictures.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

**Diagnosis #1: Asthma**

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortness of breath, cough</td>
<td></td>
</tr>
<tr>
<td>Worse with exertion, cold air, smoke, cats</td>
<td></td>
</tr>
<tr>
<td>Chest feels tight</td>
<td></td>
</tr>
</tbody>
</table>

**Diagnosis #2: Grief reaction**

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent death of mother</td>
<td></td>
</tr>
<tr>
<td>Patient states feels depressed</td>
<td></td>
</tr>
<tr>
<td>Difficulty concentrating at school</td>
<td></td>
</tr>
</tbody>
</table>

**Diagnosis #3:**

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
</table>

**Diagnostic Study/Studies**

Physical exam  
Peak flow spirometry  
CXR
CASE DISCUSSION

Notes about the History-Taking
During the introduction, find out how the adult is related to the child. For the Step 2 CS, you are asked to assume that you have permission to talk about and treat all patients. A handshake would be appropriate, as Mrs. Thompson is in no distress.

A fairly complete HPI and PMH are needed. During the Family History you could ask directly about and history of asthma or lung disease.

The pediatric history is also important. Some typical adolescent issues surface in this case, such as school performance and depression. Feel free to combine some of the pediatric and adolescent histories as they seem relevant in cases that involve children.

Notes about the Physical Exam
There was no physical exam in this case.

Comments about the Patient Note
As much as possible, speak in lay terminology and write your notes in medical terminology. However, if you do not know the medical term for something, it is also correct to use lay terminology in your note. The physician grading the note knows both terms. As long as you are communicating in written form, you will get credit on the note and increase your ICE score.

In the Differential Diagnosis, list common possibilities. For Step 2 CS, get used to writing differentials and diagnostic workups on patients you have not even examined. In cases where there is no physical exam, the Differential Diagnosis must be construed completely from the history. Even in cases where you do a physical exam, the Differential Diagnosis is based mostly on the history, and the physical exam just confirms your suspicions.

In this case the pulmonary symptoms precede the death of his mother. It can happen that a patient does have 2 unrelated diagnoses.
Case 22: Cancer Checkup

DOORWAY INFORMATION

Opening Scenario
Nancy Young is a 50 y/o female who comes to the clinic for a checkup.

Vital Signs
- Temp: 36.9°C (98.3°F)
- BP: 122/80 mm Hg
- HR: 80/min
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Upon first reading the Doorway Information, you will see that this is someone coming for a health maintenance visit. For this sort of case, history and physical and tests need to be directed toward finding preventable causes of death. The most common causes of death relate to the cardiovascular system and cancers. For this reason, most of your effort will be spent reviewing cardiovascular risk factors and cancer screening. You will also need to ask about other specific symptoms and address any specific concerns the patient may have.

To prevent cancer and cardiovascular disease, you must ask about tobacco use and recreational drugs. You will likely need to instruct the patient to limit alcohol intake, and to control hypertension, diabetes, and obesity. You will have to ask the patient’s height and weight. For cardiovascular diseases, a few screening questions about dyspnea and pain should suffice. The physical will have to be directed toward the cardiovascular exam. Lab tests will need to include possibly a baseline ECG, certainly a lipid panel. Check renal function, and screen for diabetes. Have low threshold to send the patient for stress testing.
For cancer screening cases, the history may also include the general symptoms of fever, fatigue, pain, and weight loss. More specific signs that the lay public knows because of the efforts of the American Cancer Society are listed here (adapted from “Signs and Symptoms of Cancer,” www.cancer.org/cancer/cancerbasics/signs-and-symptoms-of-cancer, American Cancer Society, Inc., accessed February 11, 2013).

- Change in bowel habits or bladder function
- Sores that do not heal
- White patches inside the mouth or white spots on the tongue
- Unusual bleeding or discharge
- Thickening or lump in breast or other parts of the body
- Indigestion or trouble swallowing
- Recent change in a wart or mole or any new skin changes
- Nagging cough or hoarseness

The physical exam will be directed toward looking at the skin, oral pharynx, thyroid, and checking for swollen lymph glands.

FROM THE STANDARDIZED PATIENT

History

**HPI:** Mrs. Young has made an appointment for a checkup. She recently had her 50th birthday and realizes she needs to start taking care of herself. She has avoided going to the doctor for many years. She feels fine but is concerned about her health since so many of her family and friends have had heart disease and cancer. Upon questioning, there is no specific symptom troubling her now.

**Doctor:** “Thank you for coming in for a checkup. It is so much easier to treat problems if you find them early. Is there anything that’s troubling you?”

**Mrs. Young:** “No, I just want to do any screening tests I need, and the peace of mind from being examined.”

**Doctor:** “Certainly.”

Mrs. Young has had no cough, hoarseness, shortness of breath, or chest pain. She has no leg swelling. She has had no change in her weight and no fatigue or fevers. She has no problems urinating and has not had any blood in her stool or change in her bowel habits. She has no trouble swallowing. She has not noticed any change in her skin or any new lumps or bumps. She does not do self breast exams.

**Allergies:** Ragweed and pollen

**Meds:** Multivitamin, vitamin C, fish oil, garlic, and glucosamine. She takes all this just because she thinks it will help her live to an old age.

She has been hospitalized only twice briefly, for childbirth. She has had no trauma other than a broken wrist as a child when she fell off the monkey bars. No surgery. No history of diabetes or hypertension. She has never had her cholesterol checked.

There has been no change in her sleep pattern (8 hours). She tries to eat fresh fruits and vegetables, and has given up fast food. She still has an extra-large double-espresso coffee every morning.

Her father died at age 65 of colon cancer and her mother died at age 64 of heart disease. The mother smoked heavily and had diabetes for 25 years.

**LMP:** One week ago, normal. No hot flashes or moodiness. G2P2.
Sexual Hx: Sexually active with her husband of 30 years. She uses a diaphragm for contraception.

SH: Stopped smoking 20 years ago, 10-pack-year total. 1 glass of wine on special occasions. She works as the manager of a health club and still exercises three times a week. She is married, has two children in college, and thinks she is dealing with being an empty-nester pretty well.

Physical Exam
Mrs. Young is 5 feet 2 inches and weighs 130 lb. She is smiling and is in no acute distress. There are no suspicious lesions on her skin. Her pupils are equal round and reactive to light. Her mouth, tongue, and pharynx are normal. Palpation of the thyroid reveals no abnormalities. There is normal anterior and posterior cervical chain as well as normal supraclavicular and axillary lymph nodes. No jugular venous distension. Carotid upstrokes are normal and without bruits. The lungs are clear to auscultation.

Heart sounds are normal. The point of maximum impulse is not displaced. The abdomen is soft and nontender, without masses. The extremities appear normal. Distal radial and tibial pulses are normal. Good range of motion at knees, shoulder, and wrists, without any redness or deformity. Her gait is normal.

THE CLOSING

Doctor: “Mrs. Young, I have finished your physical exam. Why don’t I help you to sit up so that you are comfortable.”

Mrs. Young: “All right.” [assist patient into sitting position]

Doctor: “Let me review what you have told me. You are here for a checkup. You feel fine and take no prescription medicine.”

Mrs. Young: “That’s right.”

Doctor: “Your weight, blood pressure, and heart rate are normal. In fact, I find no problems on your physical exam. Your exam is normal.

Mrs. Young: (Smiling) “I feel better already!”

Doctor: “I would like you to have the standard health screening tests.”

Mrs. Young: “Like what?”

Doctor: “We should check your blood for cholesterol. I also recommend a Pap smear, a mammogram, and a colonoscopy. Do you have any questions?”

CHALLENGING QUESTIONS

Mrs. Young: “Now I’m a little nervous.”

Doctor: “How so?”

Mrs. Young: “Colonoscopy is how they found my father’s colon cancer.”

Doctor: “Colonoscopy is good because it can find easily treatable polyps long before they turn cancerous.”

Mrs. Young: (Sighs) “Okay, let’s do it as soon as possible.”

Doctor: “Great. I will call you with the results immediately so you won’t be worried.”

Mrs. Young: “Thank you, Doctor.”
GRADING CHECKLISTS

History Checklist

☑ HPI: Ask if the patient has any symptoms at all
☑ Associated symptoms: Screening questions for cardiovascular disease
☑ Associated symptoms: Screening questions for cancer
☑ Allergies
☑ Medications
☑ PMH: Hospitalizations
☑ PMH: Major illness
☑ PMH: Trauma and surgery
☑ ROS: Sleep
☑ ROS: GI
☑ ROS: Urinary
☑ FH: Find out if hx of heart disease or cancer
☑ Ob/Gyn: LMP; Gravida, Para
☑ Ob/Gyn: Any unusual bleeding. Menopausal symptoms.
☑ SX: ask general questions about sexual activity.
☑ SH: Drugs, alcohol, and tobacco products
   (think oral cancer from chewing tobacco)
☑ SH: Diet and exercise
☑ SH: Home life/work life/stress

Physical Exam Checklist

☑ GA: Height, weight, vital signs
☑ Skin: Can make separate heading or talk about inspection of each part of the body
☑ HEENT: Pharynx
☑ HEENT: Thyroid
☑ HEENT: Adenopathy
☑ CV: Auscultate heart
☑ CV: JVD
☑ CV: PMI
☑ CV: Carotid, radial, DP, PT pulse
☑ Chest: Auscultate
☑ Abd: Inspect and palpate
☑ Ext: ROM few major joints
☑ Neuro: Gait
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Checkup
HPI: Mrs. Young (age 50) has no complaints. States has not seen a doctor in years and needs a checkup. She has no chest pains or SOB. Neg dysphagia, cough, hoarseness, weight loss, bowel or urine problems. No masses or skin changes.

Allergies: Ragweed and pollen
Meds: OTC garlic, vitamins, glucosamine, fish oil, Vit C

PMH: Hospitalized only for childbirth. Fractured arm as child. No surgeries.
DM: HTN or heart disease. Has not had cholesterol checked.

ROS: No change in sleep pattern. Diet: Has recently stopped eating fast food. Tries to eat five fruits and vegetables/day.


SX: Active, uses diaphragm, one partner

SH: Lives with husband, works as health club manager. Exercises regularly. Not feeling stressed. No rec drugs or tobacco. No significant use of EtOH.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: Reports 5'2", 130 lb. 98.3 132/80 80 16
GA: NAD

Skin: No abnormal moles or skin changes


Thyroid: WNL. Carotid upstroke NL without bruit.

Chest: Clear to Auscultation

CV: S1, S2 NL, no S3, S4, or murmur. No JVD, PMI not displaced. Radial, DP, PT pulse 2/4 B/L.

Abd: Soft, nontender, no masses

Ext: NL, no edema. Full ROM shoulder, wrists, and knees without redness or deformity.

Gait: Normal
# SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Periodic health exam</th>
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<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
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<tr>
<td>History Finding(s)</td>
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<th>Diagnosis #2: Hx of environmental allergies</th>
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<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
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<td>History Finding(s)</td>
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<td>Ragweed and pollen allergy</td>
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<tr>
<th>Diagnosis #3:</th>
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<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
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<tr>
<td>History Finding(s)</td>
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</tbody>
</table>

**Diagnostic Study/Studies**

- Breast and pelvic exam, stool for occult blood
- Pap smear
- Mammography
- Colonoscopy
- CBC, BUN, Cr, glucose tolerance, chol, HDL, LDL, TG
CASE DISCUSSION

Notes about the History-Taking
This is one of the healthiest SPs you’ll ever meet. The key is to write in the HPI that the patient has no chief complaint; she is here only for a periodic health exam. There is nothing on which to do SIQORAA. The associated symptoms are simply the screening questions for cancer and asking about a few cardiovascular symptoms. This patient probably takes more vitamins and supplements than she needs. Generally, you should tell her to stop only if you see a contraindication.

Notes about the Physical Exam
As in many Step 2 CS cases, this physical exam highlights the skin. This physician chooses to list skin as a separate organ system to highlight the fact he is looking for skin cancers. Be sure to document the presence or absence of any abdominal masses as well.

Comments about the Patient Note
There really isn’t much to diagnose in this patient. It is fine to leave the remainder of the diagnosis lines blank if nothing is appropriate.

Mrs. Young’s workup first includes the physical exam that are forbidden on the test: specifically, you are not allowed to perform female breast exam, pelvic exam or rectal exam. She also needs a fecal occult blood test (FOBT).

Screening exams are for people who are completely asymptomatic. Yearly mammography can start at age 40. Annual Pap smears should begin no later than age 21, or sooner if the woman is sexually active. Regular colonoscopy screening should start at age 50 unless patient is in a high-risk group.

Had this 50 y/o patient been male, a prostate exam and possibly a prostate-specific antigen (PSA) test would have been indicated.
Case 23: Health Fair Referral

DOORWAY INFORMATION

Opening Scenario
Larry Mitchell is a 52 y/o male who comes from a health fair with a note from the nurse.

Vital Signs
Health fair note has documented the following:
- BP: 150/90 mm Hg
- Cholesterol: 120 mg/dL
- Glucose: 90 mg/dl

Vital signs at your office:
- Temp: 37.0°C (98.6°F)
- BP: 120/80 mm Hg
- HR: 90/min
- RR 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: This patient had his blood pressure checked, and gave a drop of blood each to check his total cholesterol and blood sugar. Health fairs are usually done at work, at churches, or even at shopping malls. There is no doctor on site at these fairs, so all patients are asked to follow up with a physician.

You will have noticed prior to meeting the patient that he has an elevated blood pressure documented at the health fair. You will have to ask this patient if he has any acute or chronic health complaints you can help him
with. If he has any additional symptoms besides what was listed on the health fair note, focus on the symptoms he tells you about. If he has no symptoms or additional chief complaints, focus solely on asking about complications of hypertension.

FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Mitchell went to the health fair because he felt he should “get checked out.” He occasionally gets pain in his upper abdomen and at times underneath the right rib cage. The pain can be from 1/10 to 4/10 and lasts anywhere from a few minutes to a few hours. It feels like a “hot” pain, and it started about 3 months ago. Now the pain occurs a few times a week and seems to be getting worse in intensity and duration. It sometimes moves to his back just at the right shoulder blade. He notices it more after eating fatty foods. It seems better when he takes some Tylenol or ibuprofen. He has no chest pain, SOB, vomiting, diarrhea, dysuria, or rash.

The pain does not get worse when he walks, and bending over exacerbates the pain. There has been no black or red bowel movement and no other change in his bowel movement pattern.

He takes no medicine regularly and has no allergies.

PMH: Patient has never experienced this before. He was hospitalized once for appendicitis 35 years ago. He has had no trauma or other surgery. He denies any history of DM, HTN, or heart disease.

Family Hx: Patient’s parents both smoked heavily and died in their early 70s from heart disease and cancer.

SHx: He has not had any change in his sleep pattern, his weight has been slowly increasing each year, and he has no problem urinating. He is sexually active when he has a girlfriend. He is single at the moment.

Social Hx: He is divorced and sells cars for a living. He stopped smoking 20 years ago. Never used recreational drugs. Has two beers occasionally. He does not get annoyed at those who criticize his drinking and does not feel guilty. He doesn’t drink in the morning and has not tried to cut back.

Physical Exam

Mr. Mitchell is 6 feet 2 inches and 240 lb. He is in no distress. He last had the upper abdominal pain for most of the night after a pepperoni pizza for dinner 2 nights ago, but now the pain is now gone. His skin has normal color and there is no makeup on him to indicate that he is jaundiced. His pharynx is clear. Carotid upstrokes are normal without bruits. His lungs are clear. There is no jugular venous distention. Heart tones are normal. Abdomen is obese. He had mild epigastric tenderness. There is no rebound. Murphy’s sign is negative.

The patient is alert. There is no pain when the RUQ is palpated and the patient inhales. His bowel sounds are normal and there is normal tympany to all four quadrants with percussion. There is no back tenderness. Extremities reveal no edema, nor does he feel weakness in any of them. His gait is normal.
THE CLOSING

Doctor: "Mr. Mitchell, I'd like to tell you what I am thinking. First, let me make sure I understand. You have a stomachache that has been getting worse over the past 3 months. Is that correct?"

Mr. Mitchell: "Yes."

Doctor: "On your physical exam, I find that your blood pressure reading is normal today. You also are tender in your belly. I think this pain in your belly might be from infection or from acid in the stomach. I'd like you to have blood tests today to find out the cause. We will meet again to discuss the results and plan treatment. Do you have any questions?"

Mr. Mitchell: "Do I have high blood pressure?"

Doctor: "Your blood pressure is normal today. But I would like to take one more reading on your next visit before we make any diagnosis. Certainly, losing 10 to 20 pounds will help. I do encourage you to avoid fatty foods and high sugar foods as this will lower your weight and your blood pressure."

GRADING CHECKLISTS

History Checklist
- Site of pain
- Intensity: Pain scale 1–10
- Quality: What does it feel like?
- Onset: When did it start?
- Onset (course): Is it getting better or worse?
- Onset (duration): How long does it last?
- Radiation
- Aggravating factors
- Alleviating factors
- Associated symptoms (CV): Chest pain, SOB
- Associated symptoms (neuro): Change in vision, weakness, headaches?
- Associated symptoms (general): Vomiting, diarrhea, blood in stool?
- Allergies: None
- Medications: Occasional Tylenol or ibuprofen
- PMH: Hospitalizations and surgeries
- ROS: Sleep, weight change, urinary pattern
- FH: Parents deceased from cancer and heart disease
- SH: Lives alone, salesman
- SH: Drinks alcohol
- Sexual Hx: Sexually active

Physical Exam Checklist
- GA: NAD
- HEENT: Sclera clear, pupil reflexes
- HEENT: Check for JVD
- Chest: Auscultate at least four locations on chest
- CV: Auscultate in four cardiac areas
- CV: Peripheral pulses (radial and tibial) and carotid artery pulses
- CV: No peripheral edema
- Abd: Inspect
- Abd: Auscultate
- Abd: Palpate
- Abd: Percuss
- Abd: Murphy's sign
Although the doctor in this exchange failed to counsel the patient initially about the diet, she would have received full credit for counseling because she responded nicely to the patient’s question and did provide counseling before the encounter ended.

CHALLENGING QUESTIONS

Following is an example of how you should counsel patients about weight loss.

Mr. Mitchell: “I find it difficult to lose weight and have tried different diets over the years. Is there something else I can do?”

Answer: “Yes, I know that it can be difficult to lose weight. Increasing fruits and vegetables in your diet and being more active is an important first step. Also, be careful to avoid high-fat and high-sugar foods. I’ll have you speak with our nutrition expert, who can help to plan out a diet and exercise program with you.”

CASE DISCUSSION

Notes about the History-Taking

At the doorway we found that Mr. Mitchell wanted to follow up on some lab reports he received at a health fair. You should still ask whether the patient has had any other chief complaints, to ensure that you do not miss any initial complaints that he may have experienced.

Mr. Mitchell: “Doctor, here’s the test results from the health fair.” (The SP hands you a slip of paper with the values)

Doctor: “Thank you, I’d be happy to review these with you. Also, I would like to know if you have any other health problems.”

Mr. Mitchell: “Why, yes, I have been having pain in my stomach.”

Doctor: “Tell me about that.”

Because Mr. Mitchell has pain in the stomach, run through your SIQORAAAA mnemonic.

If Mr. Mitchell had explained that he was completely asymptomatic and that he just got the tests done and wants to know what to do about them, you can skip SIQORAAA and go directly to the associated symptoms and review of symptoms. The associated symptoms for HTN and hypercholesterolemia are the complications of the disease. In other words, ask about symptoms relating to the cardiovascular system and nervous system (risk of stroke). Mr. Mitchell may have gallbladder disease, which is more common with those that are overweight and have high cholesterol.
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Abdominal pain

**HPI:** Epigastric and RUQ pain, 1/10 increasing to 4/10 pain described as hot. Started 3 mo ago, getting more frequent, and lasting longer. No pain now. Pain all night after pizza. Made worse by fatty foods and sometimes when bends over. Better with Tylenol and ibuprofen. No SOB, chest pain, nausea, vomiting, diarrhea, dysuria, or rash. No blood in stool. No changes in vision. No headaches. Recently had BP 150/90, chol 120, glu 90 at a health fair.

Allergies: None

Medications: No regular medications

**PMH:** Appendectomy 35 yrs ago. No trauma, no h/o DM, HTN, heart disease.

**ROS:** Slowly gaining weight over years. No change in sleep pattern, no problem urinating.

**FH:** Parents died from heart disease and cancer

**SH:** Divorced, lives alone, works as car salesman. Stopped smoking 20 years ago. No drugs. 2 alcoholic beverages/day

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** 148/88 98.6 120/80 90 16

**GA:** NAD. 6'2", 240 lb.

**HEENT:** Sclera NL, pharynx clear. NL carotid upstrokes. No JVD.

**CV:** S1, S2 NL. No S3, S4. No RMG.

**Chest:** Clear to Auscultation

**Abd:** Appears NL; BS+, + mild epigastric tenderness to palpation. NL percussion. Neg Murphy's.

**Ext:** NL, no edema, no cyanosis

**Neuro:** Alert oriented x 3, gait-NL
## SAMPLE PATIENT NOTE

### Data Interpretation

Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Gastroesophageal reflux disease

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
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<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Weight gain</td>
</tr>
<tr>
<td>Epigastric pain after eating</td>
</tr>
<tr>
<td>Worse with bending over</td>
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### Diagnosis #2: Biliary colic/gallstone

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<th>Differential diagnosis and diagnostic reasoning</th>
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<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>RUQ pain after fatty foods</td>
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</table>

### Diagnosis #3: Pancreatitis

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<th>Differential diagnosis and diagnostic reasoning</th>
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<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Epigastric pain</td>
</tr>
</tbody>
</table>

### Diagnostic Study/Studies

- Rectal with FOBT
- T. bili, AST, ALT, alk phos
- Ultrasound of gallbladder
- Upper endoscopy
- Amylase, lipase
Notes about the Physical Exam

This man has a series of various symptoms that may have a series of different causes when you first elicit the history. You should think to yourself, are these symptoms related to the cardiovascular system (heart)? Are they related to the gastrointestinal system (gallbladder, esophagitis, gastrointestinal ulcer)? These are all possibilities. Don't worry if the diagnosis does not jump out at you. This is a common way that patients present on the Step 2 CS exam, and your primary role is not to identify the correct diagnosis. Instead, you are being assessed on your ability to complete a relevant history and physical to elucidate a relevant and likely differential diagnosis.

Your workup plan will help to determine the likely diagnosis based on the information you have found. Remember to include the most common and most likely differential diagnoses and avoid including obscure or unusual conditions. In this type of complex case, you are being tested on your ability to remain calm and professional when the diagnosis is not “textbook.”

Comments about the Patient Note

In this note, the carotid artery exam and the neck vein exam were noted under HEENT instead of the cardiovascular exam. This is also acceptable, and you will not be penalized for this.

There are many possibilities for correct tests to order on this patient. Certainly, upper endoscopy would also be considered correct. The Sample Patient Note listed here concentrated on writing down the initial tests for this patient.
Case 24: Crying Baby

DOORWAY INFORMATION

Opening Scenario
Elizabeth Moore is a 4-week-old female. Her mother calls you at 5 A.M. The baby has been up all night, crying.

Vital Signs
There are no vital signs in this case.

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Based on the Doorway Information, you will know that this is a telephone encounter. Enter the room as always, and remember the ground rules for phone cases as reproduced from the USMLE:

- Do not dial any numbers.
- Push the speaker button by the yellow dot on the phone to be connected to the patient caregiver or patient.
- You will be permitted to make only one phone call.
- Do not touch any buttons on the phone until you are ready to end the call—touching any buttons may disconnect you.
- You will not be allowed to call back after the call is disconnected.

A pediatric history will be required in this encounter. Babies cry when they are too hot, too cold, hungry, bored, or overstimulated. Colic is another common cause. However, if the baby is in pain, the only form of communication available to the infant is to cry. It is important to remember that not all infants with infection will have fever at this age.
FROM THE MOTHER

History

**HPI:** Mrs. Moore calls at 6 A.M. and says the baby has been up crying for the past hour. She has changed Elizabeth, burped her, and swaddled her—all without success. Elizabeth stops crying only when Mrs. Moore holds the child to her chest, rocking her gently and singing. The child has been sleeping 4 hours straight during the day but is up every 2 hours at night. This began when Elizabeth was just 2 weeks old. She has a crying spell almost every day. She raises her legs and cries most days. She stops crying after being rocked gently, and sometimes she cries for an hour when left alone before falling asleep. Between crying spells, she seems fine. She never cries for more than 2 hours at a time. She is breastfeeding every 2–4 hours normally. She has never been given formula. She has a strong suck. Mrs. Moore checked a rectal temperature and it was normal. The child has no rash. There is no vomiting or diarrhea. Elizabeth seems to be gaining weight. Nothing in particular makes the crying worse.

Elizabeth has no allergies and takes no medications.

**PMH:** Mom had prenatal care and did not smoke or use alcohol or drugs. Full-term pregnancy; uncomplicated vaginal delivery. No respiratory problems, no jaundice, no fever in neonatal period. No hospitalizations (other than being born), no trauma, illness, or surgery.

**ROS:** Diapers are regularly wet. Elizabeth has a yellow-green, seedy stool after almost every feeding.

**FHx:** Both Mrs. Moore and her husband were reportedly “colicky” babies as infants.

**SHx:** Elizabeth lives with both of her parents. Mr. Moore is away on business, and Mrs. Moore has not had any help in the past week. She does feel stressed but is not worried about harming the baby. She has read and understands that she should never “shake” the baby.

Physical Exam

There is no physical exam in this case.

THE CLOSING

As with all cases, it is important to explain your clinical impression to your patient, and to discuss the next steps in working up her condition.

**Doctor:** “Mrs. Moore, I think I understand what is happening with Elizabeth, but I want to double-check. You told me Elizabeth has had crying episodes for the past 2 weeks. Sometimes she seems to cry even when she is fed, warm, and dry. She has no fever and seems fine in between crying.”

**Mrs. Moore:** “That’s right.”

**Doctor:** “Some babies cry more than others; sometimes it is called colic. It is just a stage that babies usually grow out of in a couple of months. To make sure, I would like to see you and Elizabeth today. I will need to do a physical exam on Elizabeth. What time would you like to come to the office today?”

**Mrs. Moore:** “I’m up already—how about 7 A.M.?”

**Doctor:** “Umm, sure, that’s fine. Do you have any other questions we should talk about before then?”
GRADING CHECKLISTS

History Checklist
- Symptom of crying
- Intensity/quantity of crying
- Onset of symptoms
- Alleviating factors
- Aggravating factors
- Associated symptoms: Fever, feeding, any problems breathing, rash, diarrhea, vomiting (and anything else that might indicate this is not colic)
- Past medical history
- Allergies
- Medicines
- SHx: Who lives in family, any additional stressors in the home
- SHx: How are parents coping with stress.
  Ask about harm to baby.

Pediatric History Checklist
There is no physical exam checklist in this case.
- Prenatal Hx
- Birth Hx
- Neonatal Hx
- Feeding Hx
- Growth and development
- Routine care—immunizations and checkups

CHALLENGING QUESTIONS

Mrs. Moore: “Can you give Elizabeth medicine to make her stop crying? How about Benadryl? I can get that without a prescription.”

Answer: “Please don’t give her any medicine right now. I need to examine Elizabeth to see if she needs any medicine.”
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Baby is crying

**HPI:** Mother of 4-week-old female calls clinic because of crying spells that occur almost every day for the past 2 weeks. Cries for up to 1 hour sometimes. Sometimes inconsolable. Has been nursing every 2–4 hours normally. Wets the diaper normally. Sometimes crying stops with rocking or swaddling the baby. Nothing in particular makes it worse. No fever, rash, vomiting, diarrhea, trouble breathing.

*Allergies:* NKMA

*Medications:* None

**PMH:** No hospitalizations other than at birth. Mother received prenatal care and did not use alcohol or smoke. Vaginal full-term delivery. No cyanosis or jaundice. Normal weight gain.

**SH:** Mr. Moore left for a trip 1 week ago. Mom states not at risk to harm child.

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Colic

Differential diagnosis and diagnostic reasoning

History Finding(s) Physical Exam Finding(s)

Crying spells up to 1 hr
Feeding well
Wet diapers

Diagnosis #2:

Differential diagnosis and diagnostic reasoning

History Finding(s) Physical Exam Finding(s)

Diagnosis #3:

Differential diagnosis and diagnostic reasoning

History Finding(s) Physical Exam Finding(s)

Diagnostic Study/Studies

Physical exam
No other tests now
CASE DISCUSSION

Notes about the History-Taking

Since this is a phone case and there is no physical exam, you have the advantage of using the entire 15 minutes to obtain the history. The disadvantage is that you do not have the chance to experience all the nonverbal communication that normally transpires between patient and doctor.

Do your standard introduction and be on your best phone behavior. Be sure to find out who you are talking to. If you are not talking to the patient but rather to a surrogate, make sure to get the patient's name.

Try to refer to the baby by name instead of saying “the baby” or “your baby.” Never refer to the infant as “it.” For example, you should never say, “Does it sleep through the night?”

The neonate case need not be nerve-wracking. The associated symptoms for infants follow the few activities that babies do at this age (feed, sleep, make stools, and urinate). In addition to fever and rash, ask about breathing problems, feeding, urinating, defecating, and alertness/crying.

The social history is important here: Find out who lives in the home, who helps to care for the child, and how the family handles the stress of caring for a newborn. If you find a parent who is having difficulty and has been tempted to shake the baby, it's very important to provide initial guidance. Let the parent know that you would like to put her in touch with a counselor (social worker) immediately. You can also provide some advice on obtaining help with the baby so the primary caretaker can get some sleep and some rest.

In this case, the patient's mother indicates that she has a significant stressor in her life: Her husband is away on business. It is important that you use a transition statement and reinforce confidentiality so that you can discuss some sensitive topics relating to this stressor, such as the effect of the stress on the family. Be sure to convey a sense of trust and a nonjudgmental attitude.

**Doctor:** "I'm going to ask you some personal questions. Everything we talk about is confidential."

**Mrs. Moore:** "Okay."

**Doctor:** "Who lives in your household?"

**Mrs. Moore:** "Now, just Elizabeth and me. My husband is working out of town."

* * * *

**Doctor:** "Sometimes mothers under stress can be worried they might harm the baby. Does this ever happen to you?"

**Mrs. Moore:** "No, Doctor."

**Doctor:** "Do you ever shake Elizabeth?"

**Mrs. Moore:** "Oh, no! Do you think I'm going to hurt Elizabeth?"

**Doctor:** "Not at all. I ask these questions of all parents. Occasionally, when there is a problem, I can be of help. If you ever feel that you may need this help, please contact me."

Notes about the Physical Exam

There was no physical exam in this case, so leave the physical exam section of the note blank.
Comments about the Patient Note

This case highlighted a child that is crying for approx 1 hour who has had this problem almost every day for 2 weeks. Had this case been slightly different (with, perhaps, an infant crying inconsolably for hours), then myriad additional diagnoses and tests would have been needed. Infection most commonly, but otitis, pneumonia, and UTI would also need to be considered. Infants with an acute abdomen from any cause can have prolonged consolable crying greater than 2 hours. Sometimes an inconsolable infant turns out to be something more simple, such as a corneal abrasion, a hair stuck in the eye, or even a hair tourniquet. In this particular case the doctor listed only one diagnosis. Any of these additional diagnoses could have been listed as well. It can happen that the USMLE designs a case where only one diagnosis is likely, but this will be uncommon.

The pediatric history in this case was easily combined with the past medical history. If you wish to make a separate heading of Ped Hx to list this information, that would be fine also.
Case 25: Mental Status Changes

DOORWAY INFORMATION

Opening Scenario
David Miller Jr. wants to speak with you about David Miller Sr., a 90 y/o male who is not acting like himself.

Vital Signs
There are no vital signs taken in this case.

Examinee Tasks
1. Obtain a focused history.
2. Discuss your initial diagnostic impression and your workup plan with the patient.
3. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: It is not clear from the Doorway Information exactly who is in the exam room. This could be a phone case; it could be a surrogate case in which the son has come to the clinic today to talk to you about his father; or there might be two different SPs in the room when you enter: the son and the patient. Always knock on the door, then enter as usual. If it is a phone case, you will not be scored lower. Do your standard introduction. Also, find out who you are talking to and what everyone's relationship is to the patient.

No physical is possible in this case since the patient is not here. Many fathers and sons have the same name. Junior (David Jr.) is the son; Senior (David Sr.) is the father.

Based on the Doorway Information, you can anticipate that this case involves an elderly patient who requires mental status evaluation. Never assume that the problem is just “old age.” Alzheimer's disease, depression, stroke, and thyroid disease, as well as cardiovascular and metabolic problems, may be the cause of this patient's symptoms. In addition, side effects of medications are a huge problem in the elderly, so it will be important to ensure that a detailed medication history is taken (dosages not required).
FROM THE STANDARDIZED PATIENT

History

HPI: David Jr. is the son of the patient. He tells you that David Sr. moved in with him last year after having lived alone for 20 years. David Sr. had always been fiercely independent, but 2 to 3 years ago he became increasingly forgetful. On one occasion, he left the stove on. Twice, he got lost taking a walk around the neighborhood he had known for 20 years. Bank officials had started to call David Jr. to tell him that David Sr. was bouncing checks even though he had enough money in other accounts.

A year ago David Sr. had a stroke, but the weakness in the left side of his body resolved completely. After that, he agreed to move in with his son. The son states that his father seems “slowed down” in recent months. David Sr. frequently has crying spells, and sometimes says he would be better off dead. He has lost his interest in reading. He is starting to need help bathing, and even eating. He hasn’t been able to pour his own coffee for several months. He cannot get dressed and has been in pajamas for the last 2 weeks. Nothing seems to make any of his symptoms better. He talks a lot lately about his platoon when he was in France in 1944.

Allergies: PCN

Medications: Lisinopril, ASA

PMH: Hospitalized—for stroke 1 year ago. Illness—HTN for 10 years controlled with Lisinopril; osteoarthritis. No trauma. Surgery—appendicitis at age 23, transurethral resection of the prostate (TURP) at age 68. No recent surgery.

Review of Symptoms: No trouble urinating. Sleeps about 4 hours during the day. Has trouble sleeping at night.

Diet: States nothing tastes good; complains of constipation.

SHx: Has not smoked in last 30 years. Drinks 1 oz whiskey every evening to sleep. Worked as a journalist for 30 years. In retirement, taught underprivileged children to read. David Jr. tells you that he is using up all his vacation and sick time at work to stay home and care for his father.

Physical Exam

There is no physical exam in this case.

THE CLOSING

As with all cases, it is important to explain your clinical impression to your patient and discuss the next steps in working up the condition. It is perfectly acceptable to tell the son what you are thinking. The exam asks you to assume for Step 2 CS that you have permission to talk to families.

Doctor: "Mr. Miller, let me summarize what we you've told me and make sure I understand. Your father has been declining in his mental abilities for over a year now. In particular his memory and mood. He came to live with you after having a stroke which resolved. More recently his memory and mood is even worse, and now he cannot wash and eat by himself."
David Jr.: "That’s a good summary. Does Dad have Alzheimer’s?”

Doctor: “It could be. But there are many other possibilities as well that we need to check. Could you bring him in tomorrow?”

David Jr.: “Yes.”

Doctor: “I will need to take a blood sample and have an x-ray taken. I’ll make arrangements now so we can do the tests he needs tomorrow. Do you have any questions?”

CHALLENGING QUESTIONS

David Jr.: “Will my dad need a nursing home?”

Answer: “Thank you for bringing that up. I’d like to fully evaluate your dad tomorrow to determine what help he needs.”

David Jr.: “I’d like my father to stay home but I work outside the house and I don’t want to leave him alone.”

Answer: “I will have our social worker call you. She may be able to arrange for some in-home help for your father. Are you able to take care of him tonight, or should we make other arrangements today?”

The topic of how the caretaker is dealing with the stress of caring for the elderly parent ideally should be brought up by the doctor. Many cases have these built in “second chances” for the doctor if you do not discuss a topic you should.

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**GRADING CHECKLISTS**

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ Site/symptoms</td>
<td>There is no physical exam in this case.</td>
</tr>
<tr>
<td>✅ Intensity of symptoms</td>
<td></td>
</tr>
<tr>
<td>✅ Onset of symptoms</td>
<td></td>
</tr>
<tr>
<td>✅ Alleviating factors</td>
<td></td>
</tr>
<tr>
<td>✅ Aggravating factors</td>
<td></td>
</tr>
<tr>
<td>✅ Associated symptoms: DEATH questions (see page 28 in section 1)</td>
<td></td>
</tr>
<tr>
<td>✅ Past medical history: Hospitalizations</td>
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</tr>
<tr>
<td>✅ Past medical history: Major illnesses</td>
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<tr>
<td>✅ Past medical history: Trauma</td>
<td></td>
</tr>
<tr>
<td>✅ Past medical history: Surgery</td>
<td></td>
</tr>
<tr>
<td>✅ Allergies: PCN</td>
<td></td>
</tr>
<tr>
<td>✅ Medicine: Vicodin, Lisinopril, ASA</td>
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</tr>
<tr>
<td>✅ ROS: Sleep, GI, diet is needed</td>
<td></td>
</tr>
<tr>
<td>✅ SHx: Alcohol, smoking</td>
<td></td>
</tr>
<tr>
<td>✅ SHx: Living situation</td>
<td></td>
</tr>
<tr>
<td>✅ SHx: Stress—how is Jr. coping?</td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Patient is unable to care for himself.

**HPI:** History is from the son, David Miller Jr. Pt, David Miller Sr., 90 years old has been increasingly forgetful and unable to self-care. Started 2–3 years ago with forgetfulness and unable to do his own banking. For last year has lived with his son but is increasingly “slowed down.” Episodes of crying. Has lost interest in reading, despite being a former journalist. In past months has increasing difficulty in preparing meals, eating, and hygiene.

**Allergies:** NKDA

**Medications:** Lisinopril, ASA

**ROS:** No change in urination. + constipation. Food no longer tastes good. Sleeps 4 hr/day. Reversal of day/night sleep cycle.

**PMH:** Hospitalizations for stroke 1 year ago, major illness, HTN. No trauma. Previous appendectomy at age 23. TURP at age 68.

**SH:** Lives with son, denies tobacco for past 30 years. Pt has 1 oz whiskey every evening. Stress: Son states will need help with his father next week.

---

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
### SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Dementia from Alzheimer’s</th>
<th>Diagnosis #2: Dementia from strokes</th>
<th>Diagnosis #3: Pseudodementia from depression</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
<td><strong>Physical Exam Finding(s)</strong></td>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Progressive inability to self-care</td>
<td></td>
<td>Episodes of crying</td>
</tr>
<tr>
<td>Decline in mental abilities over 2–3 years</td>
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<td>Loss of interest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alteration in sleep habits</td>
</tr>
<tr>
<td><strong>Diagnostic Study/Studies</strong></td>
<td><strong>Diagnostic Study/Studies</strong></td>
<td><strong>Diagnostic Study/Studies</strong></td>
</tr>
<tr>
<td>Physical exam</td>
<td>CBC, lytes, BUN, Cr, glucose</td>
<td>Physical exam</td>
</tr>
<tr>
<td>CT scan of brain: MRI of brain</td>
<td>TSH</td>
<td>B12, folate level</td>
</tr>
<tr>
<td>TSH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CASE DISCUSSION

Notes about the History-Taking

This is a surrogate case. That means the patient is not present and a concerned family member wants to talk to the doctor. On Step 2 CS, these types of cases often involve pediatrics and geriatrics. Certainly, go ahead and shake hands with the surrogate. As there is no physical exam to perform, sit down and have a nice conversation with the surrogate. In fact, with no physical exam you will have more time to talk and get a detailed history. This is fortunate in the case of dementia, as there is a vast differential and not much can be skipped in the history. Get a detailed history about the onset. Find out the course and duration of symptoms. For the intensity, ask the DEATH questions (Dressing, Eating, Ambulating, Toileting, Hygiene).

Notes about the Physical Exam

There is no physical exam in this case.

Comments about the Patient Note

As there is no physical exam, you have time to write a detailed chronology of events and ensure that all of the details from the history are documented. The workup for dementia that's listed here is fairly standard and you can use it for any older person with confusion or mental status changes.

This is a very difficult case with a broad differential. Try to write down the diagnoses most likely based on the son's history. USMLE will not be able to employ many 90 y/o subjects who want to work for them as SPs. So, like the pediatric case, this type will also most likely be a surrogate case.
Case 26: **Diabetic Checkup**

**DOORWAY INFORMATION**

**Opening Scenario**
Daniel Sugar is a 50 y/o diabetic male here for his regular 6-month checkup.

**Vital Signs**
- Temp: 37.0°C (98.6°F)
- BP: 130/80 mm Hg
- HR: 80/min
- RR: 24/min

**Examinee Tasks**
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

**BEFORE ENTERING THE ROOM**

**Clinical Reasoning:** In this case, you’re told that the patient has diabetes. Consider asking the symptoms of the disease (in this case polyuria, polydipsia, polyphagia) when you ask about the patient’s symptoms. Most likely the patient will have poorly controlled DM or have complications from the disease.

The patient is here for a periodic health exam or checkup. Early in the interview, find out if he is having any concerns that need to be addressed in this visit. If there are any other health concerns, focus on them also. If there are no other chief complaints, use your SIQORAAA mnemonic to find out all about his DM in general. When you get to associated symptoms ask about the complications of diabetes. The physical exam will concentrate on any problems you uncover in the history. You can expect that long-time diabetics will have difficulties with their eyes, kidneys, and cardiovascular systems, as well as peripheral neuropathy.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Sugar states that he is here for his semiannual checkup. He also states that he needs more insulin syringes. He feels fine and really has no complaints to talk about. He states he has no polyuria, polydipsia, or polyphagia. He tests his bloodwork twice a day; his blood has been running between 70 and 120 mg/dl. Other than the hassle of watching what he eats, he claims that the diabetes is not affecting his life. Once last month he was on a hike and got a little sweaty. He had no chest pain, shortness of breath, or syncope. He sat down for a while and ate a granola bar. Mr. Sugar does mention that he was really tired for a week after that hike. This happened 2 weeks ago and it had never happened before.

The patient has been diabetic for the past 20 years. His sugars have been easier to control in the past decade since he lost a lot of weight: from 220 lb, he got down to 170 lb. He denies any change in his vision. He reports no change in sensation in his extremities. He feels he needs to further improve his physical conditioning, and would like a medically supervised physical fitness program.

PMH: Mr. Sugar has no allergies. He uses Humulin 70/30 and Lovastatin. History of high cholesterol. His medication doses have not changed in the last 6 months. Was hospitalized for gallbladder removal 5 years ago. Also had a cellulitis of the lower leg for which he was hospitalized for 2 days this last year. No history of trauma.

ROS: Mr. Sugar has no difficulties urinating, and his sleep pattern and weight are unchanged from his last visit 6 months ago.

PMH: Does not know his family's medical history, as he was adopted at an early age. Has no information about his biological parents.

SHx: Is not currently sexually active. He was divorced 2 years ago and lives alone, but calls his brother every day. He does not smoke or use recreational drugs. He drinks one or two alcoholic beverages on most weekends. He works as a librarian. He states he is under no unusual stress.

Physical Exam

Mr. Sugar's visual acuity is 20/30 OU. His pupils are equally round and reactive to light. His fundi are flat without hemorrhage. Pharynx is clear without exudates. Neck shows no jugular venous distension. Has no carotid bruit. Carotid upstrokes are normal and equal bilaterally. His lungs are clear to auscultation. Heart tones are normal and the point of maximum impulse is not displaced. Abdomen is soft and reveals a well-healed surgical scar in the right upper quadrant. He has normal radial pulses.

The dorsalis pedis and posterior tibial pulse seem decreased symmetrically compared to the upper extremities. There is no pedal edema, and the site of his former skin infection appears well-healed with chronic scarring of the skin over the leg. He is alert. His gait is normal. His muscle strength is equal and strong in all 4 extremities. He has decreased sensation below the knee to light touch as well as sharp sensation, and has decreased vibration sense below the knees bilaterally. Feet have intact skin and are without redness or tenderness.

THE CLOSING

Doctor: "Mr. Sugar, I have finished your physical exam. Let me make sure I understand you correctly. You had one episode where you got sweaty walking and felt tired for an entire week afterward. Is that correct?"

Mr. Sugar: "Yes."
Doctor: “On your exam I see that your leg has healed nicely. You still have some numbness in the feet, however I think the numbness may be from the diabetes. I would like you to have a test to check how well the nerves are working in your legs. In addition, I’d like to check your blood for cholesterol and check the kidneys. I’ll call you when I get the test results back. Do you have any questions?”

CHALLENGING QUESTIONS

Mr. Sugar: “I'd like to get in better shape so I can go mountain-climbing. Can I start running up little hills now to start training?”

Answer: “I'm glad you want to be in top shape. Before you begin a new exercise program, let me do a heart test to be sure it's safe to begin strenuous activity.”

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GRADING CHECKLISTS

History Checklist

☑ Symptom: Ask about 3 Ps (polyuria, polydipsia, polyphagia)
☑ Symptom: Ask how often patient checks sugar and how readings have been
☑ Symptom: Ask if patient has had any problems since the last checkup
☑ Intensity: Find out how the chronic disease is affecting his life
☑ Onset: How long has he had diabetes?
☑ Associated symptoms (CVS): Chest pain, SOB, headache, claudication
☑ Associated symptoms (nervous): Vision changes, peripheral sensory changes (tingling, numbness), weakness, foot hygiene
☑ Associated symptoms (kidney): Changes in urinary frequency, appearance of urine
☑ Allergies: NKMA
☑ Medication: Has there been any recent change in medicine dose? Check compliance.
☑ Past medical history: Hospitalizations, surgery
☑ Review of symptoms: Sleep, urinary if not previously asked in HPI, weight change
☑ SX: Not sexually active, sexual dysfunction?
☑ SH: Alcohol, smoking, living arrangements

Physical Exam Checklist

☑ General appearance
☑ HEENT: Visual acuity
☑ HEENT: Pupils
☑ HEENT: Fundi
☑ CV: Carotid artery
☑ CV: Radial, dorsalis pedis, posterior tibial pulses
☑ CV: Auscultate the heart, PMI
☑ CV: JVD
☑ Chest: Auscultation of lungs
☑ Neuro: Motor strength all four extremities
☑ Neuro: Sensory exam of feet
☑ Neuro: Gait
☑ Joints: Inspection and palpation of feet
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Patient is here for 6-month diabetes checkup

**HPI:** 50-year-old diabetic male with no specific complaints. Did have episode with diaphoresis when hiking and felt tired for next week. Pt checks sugars twice a day. 70-120 readings. Weight stable at 170 lb. No polyuria, polydipsia, polyphagia. Denies chest pain, SOB, palpitations, or headache. No peripheral sensory changes. No episodes of change in vision or focal weakness. Allergies NKDA. Meds Humulin 70/30. No recent change in dose. Lovastatin.

**PMH:** DM x 20 yrs. S/P cholecystectomy. Last year hospitalized with cellulitis of leg. No change in diet, weight, sleep, or urinary patterns.

**SX:** Not currently sexually active

**SH:** Lives alone (brother does expect call every A.M.). No drugs or smoking. Drinks 2/wk.

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** T: 98.6 BP: 130/80 HR: 80 RR: 24

**GA:** NAD

**HEENT:** PERRL. Fundi flat without hemorrhage. V/A 20/30 OU. Pharynx clear.

**CV:** JVD. PMI not displaced. S1 S2 WNL, no murmur or gallop. Pulses: carotid, radial = 2/4 B/L; dorsalis pedis & posterior tibia = 1/4 B/L

**Chest:** Clear to auscultation

**Abd:** Soft and nontender; + old scar RUQ

**Ext:** Site of old cellulitis well healed. No redness or tenderness to feet.

**Neuro:** Alert. Motor 5/5 all 4 ext., gait WNL. Decreased light touch, sharp, and vibration sensations below knee B/L.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial **diagnostic** studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Diabetes mellitus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Hx of diabetes</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Ischemic heart disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Unusual episode of feeling tired for 1 wk after exertion</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3: Peripheral neuropathy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
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<td></td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- CBC, lytes, BUN, Cr, glucose
- HbA1c; U/A for microalbuminuria
- Fasting cholesterol, HDL, LDL, triglycerides
- ECG, cardiac stress test
CASE DISCUSSION

Notes about the History-Taking

The initial history may begin as follows:

Doctor: “How can I help you today?”

Mr. Sugar: “I’m here for my 6-month checkup, and I need more syringes.”

Doctor: “Sure, I can get you more syringes. Are you having any other problems I can help with?”

Mr. Sugar: “No.”

The doctor in this exchange does a good job of answering the patient’s concerns about more syringes. She also determines that there is no other medical complaint. Had the patient said “I had chest pain last week,” the entire case would have been different and you would focus on doing SIQORAAA on the chest pain.

This man, however, has no complaints, so ask about his diabetes in more detail: How often does he test his blood sugar? How high have his sugars been? Are there any other diabetic complications? The intensity could be measured by the DEATH (see Section 1) questions for the more severely disabled, or simply find out how the chronic disease is affecting his life. The onset and duration of this patient’s diabetes are also very important.

Ischemic heart disease is very common in long standing diabetics. So when a patient like this notices any sort of change, even as nonspecific as weakness or nausea, it is worthwhile to obtain an ECG. The associated symptoms for this case can simply be all the complications that diabetics experience including the myocardial infarct questions.

Doctor: “Mr. Sugar, have you had any shortness of breath?”

Mr. Sugar: “No.”

Doctor: “How about any chest pain, especially when you were hiking?”

Mr. Sugar: “No.”

Doctor: “Any palpitations in the chest?”

Mr. Sugar: “No.”

Doctor: “Have you had any sudden or brief loss of vision?”

Mr. Sugar: “No.”

Doctor: “How about weakness on just one side of the body?”

The past history is important to find out the medications used and to check compliance. Review of symptoms will sometimes reveal hidden health problems in cases where there is no specific chief complaint. If you have been a diabetic for 20 years, you have a very high risk for a vascular catastrophe. Sexual history would be important because erectile dysfunction is a common complication of the neuropathy and vascular disease associated with diabetes.

Notes about the Physical Exam

The physical for a diabetic who comes in for a checkup must include the eyes and the feet. Had this diabetic patient presented with shortness of breath, chest pain, or unstable vital signs, you could skip the funduscopy and concentrate the physical on the cardiovascular system. In this case, you have a stable patient who at this moment feels fine. Be sure to examine the eyes and feet. Placing makeup on the bottom of the SP’s foot to
simulate a diabetic foot ulcer would be an outstanding way to mimic real life. Only if you remove the patient's socks (after getting permission) would you find the problem and make the diagnosis.

In this case you found abnormality in the light touch of the lower extremities. Once you find one abnormality it is likely that there are other problems in the same location. Mr. Sugar also has decreased sharp sensation and decreased vibration sense from his diabetic neuropathy. Peripheral neuropathy is often unnoticed by patients, especially when it is in the early stages, so his simply denying any changes in sensation during the history doesn't mean that there aren't any sensory changes.

Comments about the Patient Note

If you collect a historical fact from the SP during the HPI (in this case, the history of 20 years of diabetes) you are not obligated to write it in the HPI section of the note. You may document your findings in any section of the note that is relevant. The weight is important. In this case it was documented as part of the history, but it would have been equally correct at the beginning of the Physical Exam section.

The diagnosis of peripheral vascular disease is supported from the physical finding of decreased pulses. The neuropathy is suggested because of the sensory findings.

Renal function and U/A are always correct answers in diabetics as they are target organs. The lipid panel as ordered is standard for most adult patients getting a checkup.

Patients with long-standing DM may not feel the typical heaviness associated with angina. Dyspnea or generalized weakness after exertion may be the only clue of coronary artery disease.
DOORWAY INFORMATION

Opening Scenario
Kim Turner is a 29 y/o female with 2 months of abdominal pain, fatigue, and just not feeling well. This is her third visit in 2 months.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 120/80 mm Hg
- HR: 80/min
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: There could be several reasons why a patient makes multiple return visits. This patient presents with an acute problem each visit. The multiple visits could be just following up at the doctor’s request after test results are back or treatment is reevaluated. The underlying condition may be something unusual that has so far eluded diagnosis. Or there may be a social problem that has yet to be elucidated. The history will require you to ask some direct and possibly sensitive questions.

Fatigue is a common symptom and there are many conditions to consider. Any chronic illness can make a patient fatigued. Doing a thyroid exam, ordering a TSH and using hypothyroidism as a diagnosis will always be correct in this situation. Also consider anemia, diabetes, and depression as additional common problems.

You may not yet know the cause of this patient’s abdominal pain but one of the first things you should recognize before entering the room is that her vital signs are stable. With 2 months of pain and currently normal vital signs, it is not likely that this is going to be an acute abdomen or a surgical problem. However, it is important
to keep an open mind about possible differentials when asking SIQORAAA on the abdominal pain. You should be deducing a differential diagnosis that helps to explain all (or almost all) of the patient’s symptoms.

FROM THE STANDARDIZED PATIENT

History

**HPI:** Ms. Turner states that she has had abdominal pain off and on for the past 6 months. It started slowly, and can last anywhere from minutes to days. It can occur in any or multiple quadrants of her abdomen. It feels crampy. It is 10/10 when it happens. Other times, the pain is milder. It never radiates to the back or groin. She sometimes takes an Ativan tablet (benzodiazepine), which seems to help.

The pain is significantly aggravated when she is not getting along with her son’s father, especially after they argue. No fever, chills, anorexia, vomiting, diarrhea, jaundice, or dysuria. Prior to the last 6 months, she has not had any problems with abdominal pain.

When asked about allergies, she jokes that she is allergic to “men.”

Ms. Turner takes Ativan now and then when she feels really fatigued and not well. She takes benzodiazepines now just about every day.

**PMH:** She was hospitalized in the past for a blowout fracture of the orbit a couple of years ago when she tripped off a curb. Last year she was hospitalized for a rare condition. She carries the hospital discharge papers with her. She pulls them out of her purse when asked.

- **Ms. Turner:** “Oh, I was hospitalized last year with a rare condition.”
- **Doctor:** “What was it?”
- **Ms. Turner:** “I had some type of bleeding problem. Here—I have the papers with me.”

She hands you a paper that says “Idiopathic retroperitoneal hemorrhage.” No surgery other than to reconstruct her face. If you ask about trauma, she will tell you “No” at this point.

**FH:** No one in her family has the same constellation of symptoms that she does. There is no family history of hemophilia or bleeding disorder.

**Ob/Gyn:** Her last menstrual period was 2 weeks ago and was normal. She is G2P2. Her youngest child is 7 years old.

**SHx:** Is not sleeping well and wakes up frequently. Her weight and diet have not changed. She is sexually active with her son’s father when he stays with them. She does use the Pill. She has never had a sexually transmitted disease. Her son’s father lives about half the year with them and spends a lot of time somewhere else. She is chronically stressed about the relationship. She smokes 1 pack per day. Denies alcohol or recreational drugs.

**Physical Exam**

Patient appears to be in no acute distress, although she is not smiling. Her head is normocephalic. She does still have some chronic pain in the cheek where her facial bones were broken, but says that it’s a lot better and healing well. Her pharynx is normal. Her neck is supple.
**Chest:** There are ecchymoses on her anterior chest wall. Her respiratory excursion is normal. There is tenderness to the left posterior ribs with additional ecchymosis. Percussion, tactile fremitus, and auscultation of the lungs are normal. If asked, she says it does hurt when she takes a deep breath. Her heart tones are normal.

**Abdomen:** Free of any rash or ecchymosis. Bowel sounds are normal. Her abdomen is a little tender all along the left side. No rebound. There is no CVA tenderness. Her extremities appear normal. She is alert. Her gait is normal. Motor strength is equal in all four extremities. She denies feeling sad, helpless, or hopeless.

**THE CLOSING**

**Doctor:** “Ms. Turner, I have finished your physical exam. I’d like to review our meeting with you. You told me you have this abdominal pain. On your exam I found you are tender in the tummy and have large bruises on your chest. I am concerned that when you were injured you may have hurt your chest or belly.”

**Ms. Turner:** “Yes, that’s really why I’m here.”

**Doctor:** “Ms. Turner, many women are victims of domestic violence. If anyone is hurting you, I can help keep you safe.” *(Patient looks down at the floor, gets tearful, and will not speak)*

**Doctor:** “I know it’s difficult to talk about. Remember, I am here to help.”

**Ms. Turner:** “He is really a good man. But sometimes he loses his temper.”

**Doctor:** “No one has the right to hurt you.” *(Patient nods in agreement)*

**Doctor:** “I’d like you to see our counselor to help. Also I want to be sure you have a safe place to go when you feel you are in danger.”

**Ms. Turner:** “He has a key—it’s his house.”

**Doctor:** “I’ll bring you a list of shelters that you can use. And thank you for telling me. Of course, the most important thing is to be safe in the future. I also want to take an x-ray of your chest and belly to look for any bleeding inside the body. Then we will meet again to discuss the results and to see how you are doing with the counselor.”

**Ms. Turner:** “Yes, Doctor, thank you.”

**Doctor:** “Do you have any questions for me?” *(Patient shakes her head)* “Okay, I’ll call you tomorrow with the test results.”

**CHALLENGING QUESTIONS**

**Ms. Turner:** “Please call me on my cell phone so he won’t know I was here.”

Answer: “Sure.”
### CASE DISCUSSION

#### Notes about the History-Taking

The patient will not tell you about domestic violence unless you express empathy and understanding and talk about confidentiality and safety.

1. **Empathy:** If the patient feels that you are not caring, the SP will not admit to the domestic violence.
2. **Statement of confidentiality:** If, somewhere in the interview (usually right before the Ob/Gyn Hx), you do not inform the patient that the interview is confidential, the patient will not admit to domestic violence.
3. **Safety statement:** You must speak to the patient's unmentioned concerned about her safety. You must tell the patient that you can help keep her safe.
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: Fatigue, weakness, abdominal pain for 2 months
HPI: 29 y/o female states has intermittent abdominal pain for 2 months. It can last hours to days and is migratory to all 4 Q. Described as crampy, mild to severe in nature. Better when she takes Ativan, worse with arguing with her son’s father. No diarrhea, vomiting, anorexia, fever, dysuria, or jaundice.
Denies SOB or chest pain. She denies feeling sad, feeling hopeless or guilty.
Allergies: None
Meds: Oral contraceptives, Ativan
PMH: No prior episodes. Hosp/surg = fracture orbit from fall 2 years ago. Hx of “idiopathic retroperitoneal hemorrhage” last year.
ROS: Has not been sleeping well, no recent change in weight
Family Hx: No hx of bleeding disorder
SX: Active, one partner. No hx of STD. LMP 2 wks ago NL. G2P2.
SH: Lives with son. Son’s father in household about ½ time. Stressed over relationship + Smokes. – Drugs/alcohol.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: 37.0 120/80 80 16
GA: NAD. Pt not smiling.
HEENT: PEERL, pharynx clear. Some tenderness remains on face from old fracture. Thyroid: Not enlarged, without tenderness.
CV: S1 S2 NL. No rub, murmur, or gallop.
Abd: No ecchymosis. BS+, mild LUQ, LLQ tenderness. No mass or rebound. No CVA pain.
Extremities: Appear NL
Neuro: Alert. Motor 5/5 all ext. Gait NL.
## SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Domestic violence</th>
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<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
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<tr>
<td>Patient admits to being abused</td>
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<table>
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<tr>
<th>Diagnosis #2: Hemopneumothorax</th>
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<td><strong>History Finding(s)</strong></td>
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<tr>
<th>Diagnosis #3: Traumatic injury of spleen</th>
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<tr>
<td><strong>History Finding(s)</strong></td>
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<tr>
<td>Blunt trauma</td>
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**Diagnostic Study/Studies**
- Pelvic and rectal exam
- CBC, INR
- CXR, U/A
- CT Abd
Notes about the Physical Exam
Once you find the bruise on the anterior chest, you should realize it is necessary to check the entire body for additional simulated physical findings. Also, a bruise over the chest would indicate that you should do as complete a chest exam as time will allow.

It is necessary to ask additional history during the physical exam when you find the rather dramatic bruising. Ask about chest pain and shortness of breath. You will also want to ask how the fresh bruises got there.

Doctor: “I see a lot of bruises here on your side.”

Ms. Turner: “Oh, I must have bumped myself.”

Doctor: “It must have been a hard bump!”

Ms. Turner: “Or maybe I fell down the stairs.”

Be sure to consider physical injuries on a domestic violence case.

Patients with normal vital signs can still have an injury of the spleen.

Comments about the Patient Note
The SP will put on purple-blue makeup to simulate a bruise or ecchymosis. This physical finding may have been caused by trauma or bleeding disorder. All patients with any bruising need a CBC. A CBC will give you the patient’s hemoglobin level as well as the platelet count. Checking the PT/PTT or INR as a screen for a bleeding disorder is also indicated. Looking at a peripheral blood smear is also correct.

If the patient will not admit to the diagnosis of domestic violence, you can still use it as a differential diagnosis. Write “Suspect domestic violence.”

Certainly, the focus on a domestic violence case is not only to arrange for counseling but also to diagnose and work up any injuries.

Many patients refer to oral contraceptives as “the Pill.” The patient’s history of idiopathic retroperitoneal hemorrhage was from undiagnosed trauma from domestic violence in the past.
Case 28: Child with Vomiting and Diarrhea

DOORWAY INFORMATION

Opening Scenario
Donna Martin is an 18-month-old female child whose mother wishes to talk to you about the child’s vomiting and diarrhea.

Vital Signs
There are no vital signs taken in this case.

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: There will be no child SPs present on test day. Pediatric cases will be represented via a surrogate (mother or caretaker who will speak with you in person or by phone). Since you will not be required to complete a physical exam during the encounter, you may spend the extra time completing the pediatric history.

Diarrhea may have several different causes: bacterial infection, parasitic infections, medications, or viral diarrhea. Rotavirus, the most common cause of diarrhea in pediatrics, has an incubation period of 2 days, and can cause vomiting and watery diarrhea for 3 to 8 days associated with fever and abdominal pain.

This case is intended to test your ability to obtain a history that helps elucidate the cause of the diarrhea. In addition, since you do not know the patient’s vital signs, you will need to ask questions that may help you determine the severity of the child’s condition and provide guidance to the mother/caregiver.
FROM THE MOTHER

History

HPI: Mrs. Martin calls you to tell you that her child is sick. It started about 48 hours ago with vomiting and fussiness. Donna has thrown up a total of 3 times a day for the past 2 days. The vomiting began with food. Now just water and mucus is coming up, as the baby will not eat or drink much. For the past day, Donna has had four episodes of diarrhea. The diarrhea is brown and watery. Donna seems to be hot, but Mrs. Martin does not have a thermometer and has not taken her temperature. At times, especially when she is having a bowel movement, the baby appears to be in pain. Donna won’t smile or play, seems to be more tired than usual, and has not had a wet diaper from urine in 8 hours. Mrs. Martin isn’t sure if any diapers contained both urine and stool due to the large amount of diarrhea. (Donna needed a quick bath after each episode of diarrhea, and her bottom is looking red already.)

This all began 3 days after returning from a play-date with a group of other toddlers. Tylenol seems to make Donna feel a little better, but the vomiting and diarrhea have not stopped. Drinking cow’s milk seems to make the diarrhea worse, when the child is less active and playful. She prefers to sit quietly and watch TV. Constantly, she wants to be held and rocked gently. There is no rash or yellowing of the skin. No cough or runny nose, no shortness of breath.

PMH: Donna has never had this before. She has no known allergies to medication or food. Aside from pediatric vitamins, she takes no meds. She has had no hospitalizations, other than at birth for 24 hours. No surgery, major illnesses, or trauma. Donna finished a course of amoxicillin for otitis media just as the fever and vomiting began. Donna has a greatly decreased appetite, and has not been sleeping well.

FH: No one else in the family has a similar illness. Donna lives with her mother, father, and a golden retriever dog. Mrs. Martin is getting worried that Donna does not look so good, and worries that the child is dehydrated. There is no travel history.

Ped Hx: Mrs. Martin received prenatal care while pregnant with Donna and did not smoke or use drugs or alcohol. She carried Donna to full term but had a C-section after a 28-hour labor. Donna had no problems in the first days and weeks of life. She was breastfed for the first 8 months. Now Donna eats regular table food and cow’s milk. Donna growth and development is normal. She started walking at 1 year, and was just starting to urinate in the potty during the daytime when she got sick. She gets regular checkups. Her immunizations are complete except that she has not had the new rotavirus vaccine.

Physical Exam

There is no physical exam in this case.

THE CLOSING

Doctor: “Mrs. Martin, thank you for calling me today about Donna. Let me make sure I understand. On the last day of the amoxicillin that she was taking for an ear infection, she started with fever and vomiting. That was 2 days ago.”

Mrs. Martin: “Yes, Doctor.”

Doctor: “Then yesterday she started with diarrhea. It is likely that she has a new infection, probably a virus, making her sick. Her symptoms may also be from the antibiotics but this is less likely from what you have described to me.”
"I'd like you to stop milk for now and instead give her fluids such as Pedialyte, which will help. I will also need to see her as soon as possible for an exam. Can you bring her in to see me now?"

The key here is that you're always available and you want to see the patient. Naturally, if someone has called in only for a school physical, you would tell them just to make an appointment. If it sounds like a medical emergency, have her call 9-1-1 and tell her you will meet her at the hospital. In pediatrics, you generally want to see the child for any illness today. For the test, it is best to discuss with the caregiver the need to call an ambulance if the child sounds sick. You may also then say that you will meet her at the hospital.

There are two important counseling opportunities in this case. One is to counsel the mother to stop feeding Donna the cow's milk, as it is making the diarrhea worse. Instead, assure her that Donna is receiving adequate fluid and electrolyte replenishment. Second is to explain that infants can be dehydrated very rapidly and that Donna will need to be evaluated as soon as possible for any serious concerns with her condition.

---

**GRADING CHECKLISTS**

**History Checklist**
- ☑ Symptom: Diarrhea and vomiting
- ☑ Intensity: Number of vomits, number of diarrheal stools, for how many days (frequency)
- ☑ Q: What color is the vomit and diarrhea?
- ☑ Onset: When did vomit and diarrhea begin?
- ☑ Onset (progression): Is it getting better or worse?
- ☑ A: What makes it better?
- ☑ A: What makes it worse?
- ☑ Associated symptoms: Any other signs of infection? Dysuria, cough, coryza
- ☑ Associated symptoms: Lethargy, arousability
- ☑ P: Prior illnesses of vomiting and diarrhea
- ☑ A: Allergies
- ☑ M: Medications
- ☑ H: Hospitalizations, major illness, trauma, surgery
- ☑ ROS: Diet currently
- ☑ ROS: Sleep pattern currently
- ☑ FH: Anyone else at home with the same symptoms?
- ☑ SH: Who lives in the family, and what is the stress level over the illness?

**Prenatal History**
- ☑ Prenatal Hx
- ☑ Birth history
- ☑ Neonatal history
- ☑ Feeding history
- ☑ Growth and development
- ☑ Routine care—immunizations and checkups
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

**CC:** 18-month-old with vomiting and diarrhea

**HPI:** 2 days of vomiting and being fussy and febrile. Vomited 6 times total, first just food, now clear. No blood. 1 day of diarrhea, 4 episodes, brown and watery. Seems to have cramps with BM. Fever better with Tylenol. Diarrhea worse when drinks milk. No cough, coryza, dysuria, or rash. Decreased play, more lethargic than usual. No difficulty with arousal.

Allergies: NKMA

Medications: Pediatric vitamins. Tylenol for fever. Recent course of amoxicillin for otitis media.

**PMH:** No prior episodes of vomiting and diarrhea. No hospitalization, surgery, trauma, or major illness. Just had recent ear infection and finished amoxicillin.

**ROS:** Child has decreased appetite and not sleeping well

**FH:** No one else in family has similar illness

**SH:** Donna lives with parents and dog. Mother worried about possible dehydration.

**Ped Hx:** Full-term child, mom received prenatal care, no drugs, no smoking or alcohol during pregnancy. C-section. No problems in neonatal period. Breast-fed until 8 mo, now on regular food and cow’s milk. Mom states growth and development are normal. Immunizations are up-to-date except child has not received rotavirus vaccine.

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**SAMPLE PATIENT NOTE**

**Physical Examination:** Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Dehydration</th>
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<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Vomiting and diarrhea</td>
</tr>
<tr>
<td>Decreased play, seems lethargic</td>
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</table>

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<tr>
<th>Diagnosis #2: Gastroenteritis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Vomiting and diarrhea</td>
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</tbody>
</table>

<table>
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<tr>
<th>Diagnosis #3: Diarrhea from amoxicillin</th>
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</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Diarrhea began right after course of amoxicillin</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Physical exam
- U/A
- Lytes, glucose, BUN
- Stool for rotavirus
- Stool for C-diff
CHALLENGING QUESTIONS

Mrs. Martin: “Oh, I have no transportation and can’t come today.”

Answer: “Hmmm. It sounds like I need to see Donna today. I need to get a stool sample to check for infection and a blood test to check her for dehydration. Can you take a taxi or ask someone to drive you? If you cannot come in right away, please call the ambulance and have them bring you into the emergency room. I will meet you there.”

CASE DISCUSSION

Notes about the History-Taking

Emphasis here is given on getting the number of times—and the color—of the vomiting and diarrhea. Since you cannot “see” your patient, it’s helpful to get a description of the child’s activity level. Is the baby floppy or listless? Is she interactive with her environment? A complete pediatric history will be expected on children younger than 2 years of age.

Notes about the Physical Exam

There was no physical exam in this case.

Comments about the Patient Note

In this case, the pediatric history is listed separately rather than integrated into the HPI and PMH. This is fine.

A diagnosis of gastroenteritis may also be made. You would also be correct in listing bacterial, viral, and parasitic causes of diarrhea in your differential.

Testing in this case includes checking for dehydration and checking the sugar. Children can easily become hypoglycemic if they are not eating. Certainly, checking the stool for the most common cause, rotavirus, is indicated. Stool for C-diff is to check for an overgrowth of *Clostridium difficile* from the amoxicillin.
Case 29: Life Insurance Exam

DOORWAY INFORMATION

Opening Scenario
John Brown is a 55 y/o male who comes to the office wanting a physical exam so he can buy life insurance.

Vital Signs
- Temp: 37.0°C (98.6°F)
- BP: 130/70 mm Hg, right upper limb sitting
- HR: 90/min, regular
- RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete the standard patient form that is waiting for you at your desk.
5. Turn in the form that Mr. Brown gives you, but do not write on it.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Write your mnemonics on your blue sheet. These will remind you of other questions to ask, and will ensure that you don’t skip pertinent aspects of the history. Write down abnormal vital signs and keep them in mind during your encounter. Your diagnoses should explain these abnormal vitals. Read the doorway information. In this case you are told what to do with the form the SP gives you!

Life insurance policy means the insured person gives money to the insurance company each year. If the insured person does not die in that year the insurance company keeps the money. If the insured person dies during the year a family member designated by the policy holder gets a large sum of money. So life insurance companies will not give a policy if they think the patient is at risk of an early death.

The approach to this case is very similar to a periodic health exam in that you should ask yourself, What is likely to cause death in Mr. Brown in the next few years?
FROM THE STANDARDIZED PATIENT

History

**HPI:** Mr. Brown says he feels fine and needs a physical exam so he can buy life insurance. He denies having any shortness of breath, chest pain, weight loss, or blood in the stool. No chronic cough, no sores that won’t heal, no fevers, hoarseness, or trouble swallowing.

**PMH:** No allergies. He is taking saw palmetto to help with a problem of frequent urination. He had his gallbladder removed 5 years ago. That was the last time he had his blood pressure or any blood tests taken. He denies diabetes, hypertension, or heart disease.

**ROS:** His diet consists of high-carbohydrate, high-fat meals, as he admits to eating a lot of fast food. He has gained about 50 lb in the last 5 years. He has been urinating a lot at night as well as during the daytime. He does drink a lot of bottled water because he is frequently thirsty. No burning with urination; no blood in the urine. No disturbance in flow of urine or hesitancy.

**FHx:** Dad and older brother died at age 58 of heart attack.

**SX:** Has not been sexually active recently. Has had problems maintaining an erection.

**SHx:** Lives with his wife. No unusual stress, he says. No recreational drug use. Has smoked 1 pack per day for the past 20 years. EtOH: has one or two drinks three times a week. Works as an air traffic controller.

Physical Exam

Mr. Brown states his weight is 100kg. He is 5 feet, 6 inches tall. He is in no distress. His vision is 20/30 in both eyes. His pupils are normal, and reactive to light. The fundoscopic exam reveals a normal red reflex. His pharynx is normal. His neck exam reveals no carotid bruits or thyroidmegaly. He has no jugular venous distention. His nail beds appear pink. His lungs are clear to auscultation on both sides. His heart sounds are normal. There are no rubs or murmurs heard. You cannot feel the point of maximum impulse, perhaps due to his obesity. His belly is soft, obese, nontender, and without masses. An old scar from the gall bladder surgery is located in the right subcostal abdomen. He has some edema of both lower extremities. Distal pulses are equal and strong in the hands and feet. Mr. Brown is alert. He is able to walk normally. His strength is equal and strong in all 4 extremities. There is no redness or tenderness or open sores on the feet. He has decreased sensation below the knee to light touch in both legs.

THE CLOSING

As with all cases, it is important to explain your clinical impression to your patient and discuss the next steps in working up his condition. Your main task is to identify and treat all of the patient’s risk factors for vascular disease and cancer.

**Doctor:** “All right Mr. Brown. Let me just summarize what you have described to me. You have had weight gain over the last few years, a thirsty feeling, and the need to urinate frequently. Do I have this right?”

**Mr. Brown:** “You make it sound bad. I’m just getting old!”

**Doctor:** “Well, I’d like to help you get a lot older. I’d like to see if you have high blood sugar, and also to run some basic tests for your heart, kidney, and cholesterol level.”

**Mr. Brown:** “Is there anything else?”
Doctor: “We can talk about the results of these tests and determine if there are any medicines that would be beneficial. Can you come back this Friday at the same time and we can discuss the results?”

Mr. Brown: “Yeah, sure.”

Doctor: “In the meantime, I’d like you to eat five servings of vegetables a day and minimize the amount of fatty foods and high sugar foods in your diet. Sometimes it’s difficult to know how much fat is in takeout and fast foods, so it’s best to avoid these in your diet. Also, for your ongoing health, I would recommend that you stop smoking. Here is the phone number for a Stop Smoking Class that many people find helpful in quitting. Quitting cigarettes is the single most important thing you can do for your health, as it prevents a large number of health conditions. I know that we’ve discussed a lot today, but I want to make sure that you understand all of these things. Do you have questions for me?”

CHALLENGING QUESTIONS

Mr. Brown: “Doc, could you just put down on the form that everything is normal? I really need this insurance.”

Answer: “I’m afraid I can’t do that. How about working together to make your health better?”

---

**GRADING CHECKLISTS**

**History Checklist**
- Site/symptoms: Ask if he has any other problems you can help with
- Associated symptoms (CVS): Chest pain, exercise intolerance, shortness of breath, PND, claudication
- Associated symptoms (neuro): Headache, dizziness, weakness, sensory changes
- Past medical history: Hospitalization
- Past medical history: Major illness/ask about HTN specifically
- Past medical history: Surgery
- Allergies
- Medicines
- ROS: Recent changes in weight
- ROS: Ask about diet
- ROS: Ask about urination (frequency, changes), bowel movements, blood in stool
- Sexual history: Sexual function history
- Social Hx: Smoking history, recreational drug use, alcohol
- Social Hx: Stress level
- Social Hx: Exercise

**Physical Exam Checklist**
- General appearance
- HEENT: Pupils, visual acuity, funduscopy
- HEENT: Thyroid palpation
- HEENT: Check for JVD
- Chest: Inspect (front and back)
- Chest: Auscultate
- CV: Carotid pulse, auscultation and palpation
- CV: Radial, DP, PT pulse
- CV: Heart auscultation
- CV: Heart PMI
- Abd: Palpation
- Neuro: Motor strength four extremities
- Neuro: Gait
- Neuro: Sensation four extremities
- Neuro: Brachial DTR
- Joints: Inspect knees
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: 55 y/o male presenting for an insurance physical

HPI: Mr. Brown denies any complaints but has noticed increased frequency of urination. He also is frequently thirsty and has 50-lb weight gain in 5 years. Pt nocturia. No dysuria or hematuria. No SOB, chest pain, cough, hoarseness, change in bowel habits, or blood in stool. No change in skin lesions. No headache, weakness, sensory changes or weakness.

Allergies: None

Meds: None

PMH: Hospitalized for cholecystectomy 5 yrs ago. No hx DM, no reported hx HTN. Never had sugar checked.

ROS: Diet—fast food, high fat. Sleep—snores, increased daytime sleepiness.

Fam Hx: Father and brother died age 58 MI

SX: + Erectile dysfunction

SH: Lives with wife. Smokes 1 ppd, EtOH 1-2 drinks 3x/wk. No drug use. States no unusual stresses.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: 90 20 98.6 BP = 130/70. Ht 5 ft 6 in, wt 220 lb.

GA: No distress

HEENT: PERRL, V/A 20/30 OU. Fundi: NL red reflex. No thyroidmegaly, - JVD.

Chest: Lungs clear to A B/L


Neuro: Gait NL, motor 5/5 all 4 ext, decreased light touch below knees B/L.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Obesity

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight 220 lbs; height 5 feet, 6 inches</td>
<td></td>
</tr>
<tr>
<td>50-lb weight gain in 5 years</td>
<td></td>
</tr>
</tbody>
</table>

Diagnosis #2: Diabetes

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyuria</td>
<td></td>
</tr>
<tr>
<td>Polydipsia</td>
<td></td>
</tr>
</tbody>
</table>

Diagnosis #3: Peripheral neuropathy

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased sensation below knees B/L to light touch</td>
<td></td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

- Rectal and prostate exam
- CBC, U/A
- Electrolytes, BUN, Cr
- HgA1c
- Fasting glucose
Mr. Brown has just requested that you lie. Apart from not committing insurance fraud, the key to this challenge is to stay calm, nondefensive, and nonjudgmental. If the patient is insistent about what he believes you should include in the form, simply give him back the blank form. You will not be asked to fill out any additional papers other than the usual Patient Note.

**CASE DISCUSSION**

**Notes about the History-Taking**

Do not get into the habit of skipping the bottom half of the Doorway Information. While it is usually the same in each case, it is different in some. Make sure to read the Examinee Tasks on every case.

Here, you receive directions on what to do if Mr. Brown hands you an insurance form he'd like you to send to his insurance company. You are asked not to write on any paper the SP hands you. You are instructed to write the standard Patient Note. To summarize: Read the Doorway Information and any paper the SP gives you, and do what it says.

The patient will open the encounter in a manner similar to the following:

- **Mr. Brown:** “Here is the insurance physical form I need you to fill out.” *(He hands you a paper)*
- **Doctor:** *(Takes paper, reads it, and places it on his clipboard)* “Thank you. I’ll fill it out and send it in after our visit.”
- **Mr. Brown:** “Okay.”

Mr. Brown’s primary concern may be getting his insurance arranged, and he may not be as concerned about his overall health and well-being. You will need to concentrate on what to do to keep this patient alive and healthy, and relay to him any concerns about his risk factors.

At the beginning of this type of case there are no symptoms on which to do SIQORAA, so after your usual introduction, Mr. Brown will tell you about his insurance form. Be sure also to ask if there is anything else you can help with.

- **Doctor:** “Aside from the insurance form, do you have any other health concerns I can help with?”
- **Mr. Brown:** “No.”

Since the answer is no, you can go directly to associated symptoms; had the answer been yes, you would do SIQORAA on whatever the complaint was.

What are the associated symptoms of someone with no medical complaints? This turns the case into a periodic health exam. Cardiovascular disease and cancer are the two things most likely to end this patient’s life. The average adult may need treatment/counseling for hypertension, smoking, obesity, and diet, just to name a few. So the associated symptoms in this case will include asking some common symptoms of cardiovascular disease and cancer. If you receive any positive responses to the questions you ask, you may then go back and obtain more details with your SIQORAA mnemonic.

In this case, one clue is that Mr. Brown talks about his weight gain and increased urination. It is also appropriate to begin thinking about diabetes as a condition that he may have. After this, you’ll need to complete the PAMHRFSS history. You may find that the patient has sleep apnea as well as erectile dysfunction. Erectile dysfunction may be a clue that he has vascular disease or neuropathy as well.
Comments about the Physical Exam

This is where height and weight are important. In general, ask height and weight for pre-employment physicals, pediatric cases, and other cases in which patients will want help with managing their diabetes, hypertension, or obesity.

The physical exam should be focused on the patient's urinary complaints as well as the target organs of diabetes mellitus. For the urinary complaints, pay close attention to the genitourinary exam and palpation of abdomen (although do note that much of the genitourinary exam is forbidden on the Step 2 CS exam). For diabetes and hypertension, pay attention to the eyes, feet, and cardiovascular exam.

Comments about the Note

Even though you may not find out about Mr. Brown's problem with urination and weight gain until the ROS questions, it is fine to include this information in the HPI of the Patient Note. This will demonstrate that you are able to organize information from the patient history into a logical patient note, and shows the graders the important features that support your primary diagnosis, which, in this case, is diabetes.

Either way, though, you would get credit if you listed the urinary problem and the weight gain under the ROS section of the history. The most important thing is to document your findings on paper and not to worry so much about the absolute best heading under which to list it.

The primary cause of all these problems was most likely the weight gain and obesity. The diabetes and numbness followed.
Case 30: Obesity

DOORWAY INFORMATION

Opening Scenario
Shirley Adams is a 15 y/o female whose mother has come to the clinic concerned about Shirley's weight gain.

Vital Signs
No vital signs are taken in this case, since the patient is not present.

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient's mother.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: The opening scenario gives you information that can begin your thinking about the case. However, in this case it is very brief, and you must keep an open mind as to what this entire case is about. Based on the introduction, this is a surrogate case that involves your speaking with the mother. As with other surrogate cases, you will need to order a physical exam on the patient note and you will need to take a pediatric/adolescent history. Also keep in mind that obesity is associated with depression and eating disorders, so you should ask about symptoms of depression.

There is an obesity epidemic in the United States. It is mainly attributed to large portions of high-calorie foods (high-fat and high-sugar meals) and a sedentary lifestyle. Secondary causes of obesity may also be considered, such as hypothyroidism, insulinoma, Cushing syndrome, and polycystic ovarian disease; however, these account for a small fraction of the total number of cases.
FROM THE MOTHER

History

HPI: Ms. Adams tells you that her daughter, Shirley, appears to have given up on her weight loss and feels defeated by the number of diets she has attempted. Shirley is 5 feet 2 inches and 220 lb. Her mother would like you to recommend a diet. Since the age of 8 months, Shirley has always been above the 95% for weight on the growth charts. By second grade she was the heaviest child in her class, and has remained so throughout her life. She has tried various popular commercial diets, but at best, they helped her to maintain the same weight for a few months. When she stopped a certain diet, her weight would typically increase.

According to Ms. Adams, Shirley carries most of her weight around her belly. Shirley is too large to play with other children outdoors, and it is affecting her self-esteem. Shirley seems sad and hopeless about her condition. She has never talked of harming herself but she frequently stands in front of the refrigerator and eats for hours into the night. Shirley recognizes that she often eats when bored, dissatisfied, or depressed. She has less energy than usual lately. She has a very poor body image. She never tries to make herself vomit.

She is allergic to PCN. She takes no medications.

PMH: Shirley has never been hospitalized. No surgery or trauma. Never diagnosed with diabetes.

SHx: Shirley has been sleeping more than usual lately. Her diet consists mostly of high-fat and processed foods. She eats many crackers, but few fruits and vegetables. Shirley lives at home with her mother and father. Shirley is a sophomore in high school with average grades. She does not drink alcohol, use drugs, or smoke cigarettes.

Family Hx: Everyone in Shirley’s family is a little overweight, according to Ms. Adams.

Ob/Gyn: Shirley has never had a period. That is another thing that Ms. Adams is concerned about. Ms. Adams states that Shirley is not sexually active—in fact, she has never had a boyfriend and has very few friends at all. Shirley is also very self-conscious about her weight and the fact that she has some facial hair and bad acne.

Physical Exam

There is no physical exam in this case.

THE CLOSING

Doctor: “Thank you for coming to talk to me today, Ms. Adams. I would like to review what we talked about today.” (Ms. Adams nods) “Shirley has been overweight her entire life. Now it is affecting her self-esteem.”

Ms. Adams: “Yes, that’s the short version.”

Doctor: “I’d like to examine Shirley as soon as possible. There are many conditions that can cause one to be overweight.”

Ms. Adams: “Like what? I thought it was just from overeating.”

Doctor: “That’s usually the case. But sometimes there are hormonal problems. I’ll need to take a blood test to check.”

Ms. Adams: “She won’t want to see you. Should I lie to her and trick her into coming to see you?”

Doctor: “No, we have found that telling the truth is always the best policy. Just tell her I want to help her with her weight. Tell her that she can talk to me confidentially.”
Be sure to mention the patient (who is not in the exam room) by name. It is more personable and demonstrates empathy. The doctor in this exchange showed great concern for his patient.

**CHALLENGING QUESTIONS**

Ms. Adams: “I’ve read about new FDA-approved pills for weight loss. Can’t you just give me a prescription?”

Answer: “I don’t know if that medicine would be right for Shirley without a physical exam and a blood test. Let me know if she refuses to come to the appointment. I can call her at home, or perhaps set up some counseling for her.”

As always, you cannot prescribe medication on this test without seeing the patient. You always need to see and examine the patient, and get test results back, to know if a medication is safe and indicated.

### GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Adolescent History</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Symptom: List symptoms</td>
<td>✓ Body image</td>
</tr>
<tr>
<td>✓ Intensity: Quantify weight</td>
<td>✓ Eating disorders</td>
</tr>
<tr>
<td>✓ Intensity: How does it affect/impact her life?</td>
<td>✓ Education: School performance</td>
</tr>
<tr>
<td>✓ Onset: Describe course and duration of weight gain</td>
<td>✓ Activities and friends</td>
</tr>
<tr>
<td>✓ Associated symptoms: Eating disorders</td>
<td>✓ Smoking, drug and alcohol use</td>
</tr>
<tr>
<td>✓ Associated symptoms: Hirsutism</td>
<td>✓ Sexual activity</td>
</tr>
<tr>
<td>✓ Associated symptoms: Depression</td>
<td>✓ Depression and suicide prevention</td>
</tr>
<tr>
<td>✓ Associated symptoms: Orthopedic symptoms</td>
<td>✓ Associated symptoms: Hair and/or skin changes</td>
</tr>
<tr>
<td>✓ Associated symptoms: Hair and/or skin changes</td>
<td>✓ PMH: Hospitalization, illnesses, trauma, surgery</td>
</tr>
<tr>
<td>✓ PMH: Medication allergies</td>
<td>✓ ROS: Sleep (signs of sleep apnea)</td>
</tr>
<tr>
<td>✓ ROS: Gastrointestinal symptoms (bowel movements, e.g., constipation)</td>
<td>✓ ROS: Gastrointestinal symptoms (bowel movements, e.g., constipation)</td>
</tr>
<tr>
<td>✓ Ob/Gyn: Menstrual history</td>
<td>✓ FH: History of obesity, cardiac disease, diabetes</td>
</tr>
<tr>
<td>✓ SH: Living arrangements. Other aspects of SH listed in adolescent hx</td>
<td>✓ SH: Living arrangements. Other aspects of SH listed in adolescent hx</td>
</tr>
<tr>
<td>✓ SH: Current diet and previous diets</td>
<td>✓ KAPLAN MEDICAL</td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

**CC:** 15 y/o female with weight gain

**HPI:** Hx comes from mother. Pt has been above 95% for weight her entire life. Now 5'2", 100 kg. Has tried multiple commercial diets without success. Pt has poor body image. Ms. Adams describes that Shirley frequently eats large amounts of food late into the night. Triggers include boredom and feelings of hopelessness. Has decreased energy. Her diet consists of few fruits and vegetables and mostly high-fat processed foods and crackers. No hx of self-harm ideation. Is an average student, a sophomore in high school. No recent change in grades. Does not have many friends. Mother reports pt has more acne and facial hair compared to her peer group.

Allergies: PCN
Meds: None

**PMH:** No hospitalizations, trauma, or surgery. No hx of DM, HTN, or orthopedic problems.

**ROS:** Sleeping more than usual lately

**FH:** Many overweight family members

**Ob/Gyn:** Has never had a period. Also has hirsutism and acne.

**SX:** Not sexually active

**SH:** Lives with mother and father. Does not smoke or use alcohol or drugs.

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Night eating disorder

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td></td>
</tr>
<tr>
<td>Binge eating at night</td>
<td></td>
</tr>
</tbody>
</table>

Diagnosis #2: Polycystic ovarian disease

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amenorrhea</td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td></td>
</tr>
<tr>
<td>Hirsutism</td>
<td></td>
</tr>
<tr>
<td>Acne</td>
<td></td>
</tr>
</tbody>
</table>

Diagnosis #3: Hypothyroidism

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td></td>
</tr>
<tr>
<td>Decreased energy level</td>
<td></td>
</tr>
<tr>
<td>Increased sleep requirements</td>
<td></td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

<table>
<thead>
<tr>
<th>Physical exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSH, CBC, lytes, BUN, Cr, Glu</td>
</tr>
<tr>
<td>FSH, LH, prolactin level</td>
</tr>
<tr>
<td>Ultrasound of the ovaries</td>
</tr>
</tbody>
</table>
CASE DISCUSSION

Notes about the History-Taking

Ms. Adams (the patient’s mother) is waiting for you when you enter the room. The term obesity is considered medical terminology. Use obesity in the note but not when talking to patients. Tell patients they are overweight. Also, stay away from calling patients fat.

The adolescent history includes asking about body image, eating disorders, education, friends, drugs, sex, smoking, and depression. Since no physical exam is possible—there is no patient present—use the time you would ordinarily spend on the physical exam filling in the details of the adolescent history you have not yet obtained. In this case, the adolescent history was merged and asked with the SIQORAAA PAMHRFOSS and written with the HPI and PMH. It would be equally correct to ask the adolescent history questions at the end of the standard history. It would be equally correct to write a separate heading on the note for “Adolescent Hx” and record your findings there.

Eating disorders that cause obesity include binge-eating disorder, nighttime eating disorder, and bulimia. They are commonly associated with depression but can occur without depression as well. With all of these disorders, the patient feels unable to control his/her eating. Specific eating disorders may be used as differential diagnoses in the obese patient. Binge-eating disorder manifests by eating large amounts of food over a 2-hour period. Patients with nighttime eating disorder, as the name implies, eat most of their daily calories in the period from after dinner to bedtime. Bulimia often causes patients to be overweight despite self-induced vomiting.

You may ask your patients about eating disorders by using the following questions:

- What are your eating patterns?
- Do you ever feel that you cannot stop eating when you want to?
- Do you eat mostly at night?
- Do you make yourself vomit after eating?

Notes about the Physical Exam

There is no physical exam in this case.

Comments about the Patient Note

In this case, there is no physical exam to perform. However, if this were an obese person coming for advice on weight loss, you would concentrate on the organ systems where obesity causes damage—namely, a good cardiovascular exam. Secondary organ systems could include the knees and the spine. Check the abdomen for gallstones (RUQ tenderness), and palpate the thyroid gland.

Be sure to include the current height and weight as well as a complete description of the patient’s weight throughout her life. You will not be expected to calculate the Body Mass Index.

Polycystic ovarian disease typically has a workup to include follicle-stimulating hormone (FSH), luteinizing hormone (LH), and prolactin. The use of abbreviations is acceptable. An ultrasound would look at the ovaries.
Case 31: Parkinson’s Disease

DOORWAY INFORMATION

Opening Scenario
Richard Wilson is a 70 y/o male with Parkinson’s disease and fever.

Vital Signs
- Temp: 38.9°C (102.0°F)
- BP: 160/114 mm Hg, right upper limb sitting
- HR: 110/min, regular
- RR: 24/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Pay close attention to known chronic conditions. When the Doorway Information indicates that your patient has a particular chronic disease, you likely need to consider complications of that chronic disease in your differential diagnosis. Parkinson’s patients are more prone to aspiration pneumonia, however complications from Parkinsonian medications can also cause fever.

For this case, consider the following common complications of Parkinson’s disease before you walk into the room:
- Dysphagia (can lead to aspiration)
- Depression
- Sleep disorders
- Constipation
- Falls (subdural hematoma)
- Side effects from too much medication
- Increased Parkinson's symptoms from too little medication

FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Wilson has 2 days of fever to 103°F. He has a cough productive of yellow sputum. Mild shortness of breath began last week, he believes, after he nearly choked on a piece of apple. Mr. Wilson has also had increasing problems walking over the past 2 weeks, and almost fell several times. In fact, today he really cannot walk at all and had to be carried into your office due to tremor and weakness. He complains of being very stiff. Tylenol controls the fever only for a few hours. He feels like he has been getting sicker every day this week and cannot tell why. He denies chest pain, headache or confusion.

Medications: Benztropine—dose increased one month ago. Levodopa—stopped taking 2 weeks ago because he ran out of medicine. No known drug allergies.

PMH: Mr. Wilson was diagnosed with Parkinson's 5 years ago. He was hospitalized for pneumonia 1 year ago, from which he made a full recovery. Mr. Wilson had many concussions in the past from boxing as a young man. No surgical history.

SH: Mr. Wilson has not been eating well because of increased drooling and, since the apple episode last week, the fear that he will choke on his food. He has not had any change in his sleep. He complains of difficulty swallowing. Mr. Wilson lives at home with his wife. He does not smoke or use alcohol.

Physical Exam

When you enter the room, you observe that Mr. Wilson is diaphoretic, lying back. He appears to be very stiff and uncomfortable from tremors. His head is without bruising or tenderness. His pupils are round and reactive to light. Mucous membranes of the mouth and pharynx are very dry. He is alert and oriented to person, place, and time. His neck is rigid with passive movement.

Patient’s lungs are clear to auscultation. He has normal respiratory excursion, tactile fremitus, and normal percussion. He is tachycardic. No abnormal heart tones are heard. Abdomen is soft. Bowel sounds are present. There is no suprapubic tenderness or masses. No CVA tenderness.

Mr. Wilson has severe bradykinesia and is too weak to walk. He is rigid in all four extremities with passive movement. His sensation is intact in all four extremities.

THE CLOSING

As with all cases, it is important to explain your clinical impression to your patient and discuss the next steps in working up his condition. You should provide some indication about the length of time he may be unable to walk, as this may affect his transportation and employment options. Be sure to answer any additional concerns he may have.

Doctor: "Mr. Wilson, I have finished my physical exam and would like to discuss what might be causing you to feel sick. First, I want to be sure I understand. You told me you have a high fever with yellow sputum. You ran out of levodopa about 2 weeks ago and now you feel very stiff and can't walk."
Mr. Wilson: “Yes.”

Doctor: “I think you might have an infection in your chest. Stopping the levodopa might also be part of the problem. I’ll need to take a picture of your chest and a sample of blood to look for infection. We can do those tests right now and I should have some answers for you in an hour. Then we will talk about treatment. Do you have any questions?”

In this case it is not appropriate to end the encounter by saying “We will meet again,” as this patient obviously needs urgent evaluation. It is more appropriate to say that you will do the tests now and have the results back soon. Even though it is appropriate in other cases, it’s best not to lecture this patient about the dangers of stopping his medication at this time: Right now he is simply too sick.

CHALLENGING QUESTIONS

Mr. Wilson: “Am I going to die?”

Answer: “What you have may be serious, but I am going to get you the appropriate treatment and will do everything I can to help.”

GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Symptoms: Fever, cough, SOB</td>
<td>❑ General appearance</td>
</tr>
<tr>
<td>❑ Intensity: Ask “How is this affecting your life?”</td>
<td>❑ HEENT: Inspection to look for trauma from fall</td>
</tr>
<tr>
<td>❑ Quality of pain</td>
<td>❑ HEENT: Palpation to look for tenderness</td>
</tr>
<tr>
<td>❑ Onset of symptoms</td>
<td>❑ HEENT: Pharynx</td>
</tr>
<tr>
<td>❑ Alleviating factors</td>
<td>❑ Chest: Inspection</td>
</tr>
<tr>
<td>❑ Aggravating factors</td>
<td>❑ Chest: Respiratory excursion</td>
</tr>
<tr>
<td>❑ Associated symptoms: Motor changes (weakness, tremor, rigidity, ambulation)</td>
<td>❑ Chest: Tactile fremitus</td>
</tr>
<tr>
<td>❑ ROS: Changes in urination, bowel movement</td>
<td>❑ Chest: Percussion</td>
</tr>
<tr>
<td>❑ PMH: Hospitalizations</td>
<td>❑ Chest: Auscultation</td>
</tr>
<tr>
<td>❑ PMH: Major illnesses</td>
<td>❑ CV: Auscultation</td>
</tr>
<tr>
<td>❑ PMH: Surgery</td>
<td>❑ Abd: Palpation</td>
</tr>
<tr>
<td>❑ Allergies</td>
<td>❑ Neuro: Mental status, orientation</td>
</tr>
<tr>
<td>❑ Medicines: Hx of increased benztrapine, and that pt stopped levodopa, tylenol</td>
<td>❑ Neuro: Motor</td>
</tr>
<tr>
<td>❑ Social HX: Who does he live with?</td>
<td>❑ Neuro: Gait</td>
</tr>
<tr>
<td></td>
<td>❑ Neuro: Check neck for meningitis</td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

**CC:** 70 y/o male. Fever

**HPI:** Pt with 2 days of fever up to 103°F. Has had a cough productive of yellow sputum after getting a bite of apple “down the wrong pipe” last week. MIlidy SOB. No chest pain. Pt also has been getting increasingly stiff, with difficulty walking and almost fell several times. This is because of severe weakness, tremor, and rigidity. He is completely incapacitated and cannot move on his own. This has been for the last week as well. The fever goes down with Tylenol just for a few hours. Nothing in particular seems to make it worse.

**Meds:** Benztropine (dose was recently increased last month). Levodopa (has not taken in 2 weeks because ran out). NKDA.

**PMH:** Hospitalized for pneumonia last year. Parkinson’s for 5 years. Had multiple concussions due to boxing in his youth. No recent trauma. No surgery.

**ROS:** No change in his sleep pattern. Decreased food intake because of drooling and trouble swallowing. No urinary symptoms.

**SH:** Lives with wife; denies tobacco, EtOH, or drug use

---

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** 160/114, 110, 24, 102°F

**GA:** Very rigid, diaphoretic

**HEENT:** Atraumatic, PERRL. Pharynx very dry. Neck supple.

**Chest:** Resp excursion NL, fremitus NL, percussion NL. Lungs clear to Auscultation.

**CV:** Tachycardia, S1 S2 NL

**Abd:** BS+, nontender all 4 quadrants and suprapubic. No CVA tenderness.

**Neuro:** Alert and oriented to person, place, and time. Motor hard to test, extremely rigid all 4 extremities to passive movement. + Bradykinesia. Pt too weak to walk. Sensation intact all 4 extremities.
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Aspiration pneumonia

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration of apple</td>
<td>Fever</td>
</tr>
<tr>
<td>Yellow sputum</td>
<td>Increased RR</td>
</tr>
<tr>
<td>Cough</td>
<td></td>
</tr>
<tr>
<td>Mild SOB</td>
<td></td>
</tr>
</tbody>
</table>

Diagnosis #2: Anticholinergic side effects

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased dose of benztropine</td>
<td>Increased HR</td>
</tr>
<tr>
<td></td>
<td>Dry pharynx</td>
</tr>
</tbody>
</table>

Diagnosis #3: Neuroleptic malignant syndrome

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to move</td>
<td>Fever</td>
</tr>
<tr>
<td>Recent change in medication</td>
<td>Rigidity</td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

- CBC, blood culture, sputum culture
- CXR
- U/A, urine culture
- Lytes, BUN, Cr
- CPK
CASE DISCUSSION

Notes about the History-Taking

This is a complex history in that the patient has two equally important complaints: pneumonia and the worsening Parkinson's symptoms. Usually the two illnesses portrayed will be related—one being a complication of the other—as it is in this case.

With multiple complaints you may not be able to do SIQORAAA on each complaint separately. This is sometimes confusing in this patient encounter because you have to make decisions and collect only the most relevant history of each complaint instead of strictly following the mnemonic.

One approach for patients with multiple disparate chief complaints is as follows: Make sure you understand the SQO (site/symptom, quality/quantity, and onset) for each complaint. R (radiation) is usually needed only when the patient has pain. Then, after you have identified all the major complaints, do the Intensity ("How is this illness affecting your life?") and AAA (aggravating, alleviating factors, and associated symptoms) once for all the major symptoms together.

Notes about the Physical Exam

This case demonstrates what to do when an SP is portraying a very ill patient. The history is highly suggestive of pneumonia, yet the SP portraying the case reveals no physical findings of pulmonary consolidation! It is impossible to simulate dullness to percussion, increased fremitus, or rales and rhonchi. So what you will document is exactly what the real physical findings are, as well as physical findings that are obviously simulated. However, when you get to the diagnosis, put more weight on the history. It is the history that gives you the diagnosis in most cases.

Comments about the Patient Note

This patient has separate issues discussed in the HPI. First is a discussion of his pneumonia-like symptoms with the history of the apple aspiration. Sputum and shortness of breath are used for the associated symptoms of his pneumonia. His other complaint is his worsening Parkinson's symptoms. The onset and course of his slow movement, tremor, and weakness are discussed.

Parkinson's consists of the triad of (1) resting tremor, (2) rigidity, and (3) bradykinesia. Also look for dementia and depression in a Parkinson's case.

The workup of this patient is that of any older person with high fever. Blood, urine, and sputum culture as well as CXR will always be correct. The CPK is to look for muscle destruction, which you would see from increased muscle rigidity associated with neuroleptic malignant syndrome (NMS). NMS can occur after stopping levodopa suddenly, as this patient did.

The medication history is very important in this case. Benztropine can also be used to treat Parkinson's, and it has anticholinergic properties.
Case 32: Breaking Bad News

DOORWAY INFORMATION

Opening Scenario
Paul Harris is a 50 y/o male who had a colonoscopy last week. He is here with his wife, Mary, to get the results of the pathology report on the polyp that was removed. The test shows he has adenocarcinoma of the colon.

Your task is to tell this patient that he has adenocarcinoma of the colon. There will be no Patient Note on this encounter.

Vital Signs
No vital signs given in this case.

Examinee Tasks
1. Tell the patient he has colon cancer.
2. There is no history or physical exam in this case.
3. There is no note in this case.

BEFORE ENTERING THE ROOM

Clinical Reasoning: The Doorway Information always contains the tasks that are asked of you. For this case you are told that there will be no Patient Note. For this case you are told there is no history or physical exam. A case that involves breaking bad news to a patient may take up the entire 15 minutes. If you are asked to do a history and write a note, you can still use the “telling bad news” technique, but do the six steps involved more briefly. It is less likely you’ll be asked to do a telling bad news case like this that also requires a physical exam.

The S-P-I-K-E-S protocol is a strategy to tell bad news. The six steps are S—Setup, P—Perception, I—Invitation, K—Knowledge, E—Emotions, and S—Strategy and Summary. (Reproduced with permission from Dr. Walter F. Baile and Dr. Robert Buckman.)

Using the techniques of the SPIKES protocol would be an excellent way to approach a “telling bad news” case in Step 2 CS. Of course since there is no treatment in Step 2 CS you would not go into detailed explanation of
treatment options as you would in real life. The rest of this case is mostly based on the original SPIKES protocol but is slightly adapted for the Step 2 exam.

- **Step 1: Setup:** Enter the room, look the patient in the eye, and do your standard introduction. If there are two SPs in the room and you aren’t sure who the patient is, you can find out by asking. Try to address most of your conversation to, and make the most eye contact with, the patient and less eye contact with the family member.

  **Doctor:** “Hello, Mr. Harris?”
  
  **Mr. Harris:** “Yes, Doctor. I’m Paul Harris.”
  
  **Doctor:** “My name is Dr. First-Name Last-Name. I will be helping you today.”

Next, you need to introduce yourself to other people in the room, in this case, Mrs. Harris. Do not simply assume that the man and woman seated before you are husband and wife. You need to know everyone’s name and how they are related. Handshakes would generally be in order with the patient and adult family members. Since the patient is wearing normal street clothes and not a patient gown, no drape is given.

  **Doctor:** “Mr. Harris, could you please introduce me?”
  
  **Mr. Harris:** “Oh, I’m sorry. This is my wife, Mary Harris.”
  
  **Mrs. Harris:** “Hello, Doctor.”
  
  **Doctor:** “Hello, Mrs. Harris.”

In this type of case, you should sit down and conduct the interview.

The next part of the setup is to ensure privacy. Two sample lines are:

  **Doctor:** “I’ve scheduled a full 15 minutes and asked that my staff not interrupt us.”

or

  **Doctor:** “I have turned off my pager and asked that we not be disturbed.”

Using either of these phrases subtly tells the patient that this is not going to be a normal, routine doctor visit. The patient will have a sense that something important is about to happen. You can pretend to turn off an imaginary pager. If you are still in the room when the overhead announcement tells you the case is over at the end of 15 minutes, simply say “I’m sorry—I have to answer this overhead page. I’ll be back as soon as I can.”

The next part of the setup entails figuring out which family members the patient wants to have present while you have this conversation. The patient almost always brings a family member along for support, and that person should not be encouraged to leave. Coming in to receive biopsy results is a special situation and is different from a first visit, where you generally interview the patient alone, in private.

If you ask the wife to leave, it will mostly likely go like this:

  **Doctor:** “Mrs. Harris, would you please step out while I go over the test results with Mr. Harris?”

  **Mr. Harris and Mrs. Harris, in unison:** “Oh no, Doctor!”

  **Mrs. Harris:** “I want to stay.”

  **Mr. Harris:** “Doctor, I want my wife to stay.”

  **Doctor:** “Oh, ok, sure, you may stay.”

A better approach is to look at the patient and say the following:
Doctor: “Would you like your family member to stay or step out while we discuss the results today?”

Mr. Harris: “Of course I want her to stay.”

It is also correct to ask if the patient wants anyone else (not currently present) included in the conversation.

Doctor: “Is there anyone else we should call in to discuss the results?”

Mr. Harris: “No.”

If the patient says yes, the conversation could go something like this:

Doctor: “Is there anyone else we should call in to discuss the results?”

Mr. Harris: “Yes, my daughter.”

Doctor: “Is she here?”

Mr. Harris: “No.”

Doctor: “Would it be all right if she came next visit? I’d still like to talk with you today. I will be happy to talk to your daughter on the phone also.”

Mr. Harris: “Yes, that’s fine.”

• **Step 2: Patient perception:** The next step is to find out what the patient thinks about his health problem, and what he understands so far about the workup of his condition. At this point, you should correct any misunderstandings the patient may have. For example, a patient who had a colonoscopy may not remember that he had a polyp removed. He might have been told immediately after the procedure, but does not remember. Since the examinee tasks asked you to obtain a focused history, it is appropriate to take a few moments to obtain and summarize the history to date.

Doctor: “Do you remember why we did this test?”

and/or

Doctor: “What have you been told about your symptoms?”

If you know the symptoms, you could ask the patient when he first had the symptom and what he thought it might be. Or you could ask at what point the patient thought something serious was going on.

If the patient has been seeing multiple physicians, it is fine to ask the patient what the other doctors have told him about his condition.

In this example the exchange might go something like this:

Doctor: “Mr. Harris, do you remember why we did the colonoscopy?”

Mr. Harris: “Yes, to find out why I was having blood in my stool.”

Doctor: “That’s right. What did you think the bleeding was from?”

Mr. Harris: “Well, I thought my hemorrhoids were acting up again.”

Doctor: “Did you think it was something serious when you saw the blood?”

Mr. Harris: “Not really, but I got scared one night when I really saw a lot of blood.”

Doctor: “Have you seen any other physicians for this problem?”

Mr. Harris: “Yes, the night I saw a lot of blood I went to the emergency room to get checked out.”

Doctor: “And what did they tell you?”
Mr. Harris: “They told me I was ‘stable’ but that I needed to do the colonoscopy.”

Doctor: “Do you remember the doctor talking to you immediately after the colonoscopy?”

Mr. Harris: “Not really, I was little groggy.”

Doctor: “The doctor removed a tiny piece of skin from the inside of the bowel during your colonoscopy.”

Mr. Harris: “Oh! I didn’t know that.”

Mrs. Harris: “I was there, dear, when the doctor told you.”

Doctor: “It is normal not to remember everything you are told immediately after receiving sedatives. Removing a small piece of skin or tissue is called a biopsy.”

• **Step 3: Invitation:** Even though the patient came in specifically to get the test results, it’s best not to blurt out the result when it is bad news. It is much better to tell the patient you are ready to go over the results today. Then get the patient’s permission to tell the news, and have some idea about the level of detail the patient is expecting. Different patients have different needs for the level of detail they wish to know.

  Doctor: “I have the test results back. Would you like to go over them now?”

  Mr. Harris: “Yes.”

  Doctor: “Would you like basic information or all the details?”

  Mr. Harris: “The details, I guess.”

  Doctor: “So if it turns out to be something serious, you would like to know.”

  Mr. Harris: “It is serious, isn’t it?”

By going through this process, the patient already has a good idea of what the problem is even before you tell him about the cancer. This technique of “telling the whole truth and nothing but the truth, but in small doses” gives the patient time to comprehend the life-changing news you are delivering.

• **Step 4: Give knowledge:** You need to explain to the patient precisely what the problem is. Give the news in small doses.

  Doctor: “Yes, Mr. Harris, I’m sorry to have to tell you that the pathology report shows that what you have is serious and will require treatment.”

  Mr. Harris: “Really?”

  Doctor: “Yes, the biopsy showed a tumor.”

  Mr. Harris: “A tumor! Like a growth, you mean?”

  Doctor: “Yes, exactly.”

  Mr. Harris: “Huh . . .”

  Doctor: “When we looked at the tumor with a microscope, we saw that the tumor is cancerous. What we mean when we say something is cancerous is that the growth is uncontrolled.”

  Mr. Harris: “Cancerous?”

  Doctor: “Yes, the test shows that you have colon cancer.”

  Mr. Harris: “That report must be wrong!”

  Doctor: “I’m sorry to have to tell you that the report is correct. The pathology reports that you have cancer of the colon.”
You will notice that the word *sorry* is acceptable. Also, the doctor in this exchange kept away from medical terms such as adenocarcinoma or metastasis. If there were metastasis to tell the patient about, you would tell the patient that the cancer has spread.

Telling the patient that he has cancer is not the end of the “Give knowledge” section. You must also tell the patient about future treatment plans. For Step 2 CS, you do not need to know the 5-year survival statistics or even if a particular cancer is a medical or surgical problem. Give the SP a few seconds to respond, then say the following:

**Doctor:** “I know this is serious news. But I want to tell you that there are treatment options available for your condition.”

**Mr. Harris:** “It’s curable?”

**Doctor:** “The type of cancer you have does have treatment options. You will have a specialist that is an expert in dealing with this sort of cancer and you will get the best care available for your condition.”

From the moment you tell the patient he has cancer, there has to be a lot of repetition of facts and the counseling you give the patient. That is because the patient will have a difficult time remembering and concentrating on what you are saying. An SP who asks the same questions over and over at this point is giving a realistic performance. It is not because he doesn’t understand you.

Go on at this point and give additional knowledge about the treatment plan. Besides indicating that there is treatment available, tell the patient more about the cancer specialist in addition to you. It is important that the patient understands that you will remain the primary care physician and that you are not abandoning him to the specialists.

**Doctor:** “You will be treated by a team of doctors. I will remain your primary physician, of course, and I am referring you to a cancer specialist named Dr. Brown. She has many years of experience in managing colon cancer. I’ll bring you her number, and I have already made an appointment for you. I would then like to see you again back here in my office. Okay?”

- **Step 5: Manage emotions:** The patient will probably make some comment to indicate that he can’t believe this is true or that he doesn’t understand. If this happens, explain again about the positive pathology report (in nonmedical terms) and how you have medication and treatment options available, how the patient will be meeting a cancer specialist, and how you will remain his regular doctor.

If the patient is tearful or crying, this is a good time to use the appropriate touch on the shoulder or forearm and say something like the following:

**Doctor:** “I can see you are upset. I was upset also when I got the results.”

Certainly you can offer the patient a tissue or sip of water, or just sit quietly with him for a few seconds while the information soaks in. If the patient says, “Am I going to die?” or “What is my 5-year survival?,” the answer is always the same.

**Doctor:** “What you have is serious, but we have medications and treatment available.”

**THE CLOSING**

- **Step 6: Summarize:** Summarizing the encounter consists of getting the patient to paraphrase everything that you talked about today.

**Doctor:** “Mr. Harris. I know I gave you a lot of information to remember today. I want to make sure you understand me correctly.”
Mr. Harris: "Okay."
Doctor: "Can you repeat back to me what I have told you today?"
Mr. Harris: "You told me I have colon cancer, that it is treatable, and that you want me to see an additional doctor to help treat it, and that I should continue to consider you my regular doctor."
Doctor: "That's right."

If the patient has any misconceptions, explain again what you want until the patient can repeat it back to you. Then ask about any additional questions.

Doctor: "Mrs. Harris, I haven't heard from you. Do you have any questions for me now?"
Mrs. Harris: "No, Doctor, I'm just kind of stunned, I guess."
Doctor: "You can call me anytime with questions, and of course come to our next appointment. And I'm looking forward to meeting your daughter also."
Doctor: "Mr. Harris, any questions for me?"
Mr. Harris: "No, not now."
Doctor: "Here is my phone number. Please call me if you have any questions before our next visit. You have an appointment scheduled for Tuesday. I would like to see you back here next week after your appointment. Is that all right with you?"
Mr. Harris: "Yes."

CHALLENGING QUESTIONS

Mrs. Harris: "If it's cancer that my husband has, please don't tell him."

Answer: The key to this challenge is not to get defensive or dismissive.

Incorrect:
Doctor: "Mrs. Harris, my responsibility is to my patient, not you, and I'm telling him."

Correct:
Doctor: "Why do you feel that way?"
Mrs. Harris: "Well, I think it would depress him."
Doctor: "We have found that if we don't tell patients they have cancer, they eventually find out anyway. Then they're often angry and resentful toward their doctors and family."
Mrs. Harris: "But what about depression?"
Doctor: "It's best to get the news out in the open. If he gets depressed I can help treat that also. I'll ask Mr. Harris if he wants to know the test results. If he doesn't, I will speak only with you about it. If he does want to know, I need to tell him and we both can help support him."
Mrs. Harris: "I guess you're right."
GRADING CHECKLISTS

History Checklist
- Did the doctor introduce self to everyone in the room?
- Setup
- Patient perception
- Invitation to give bad news
- Give knowledge
- Manage emotions
- Summarize; have SP paraphrase

Physical Checklist
Not applicable in this case.

CASE DISCUSSION

Notes about the History-Taking
There is no formal history-taking in this case.

Notes about the Physical Exam
There is no physical exam in this case.

Comments about the Patient Note
No patient note in this encounter.
Case 33: Smoking

DOORWAY INFORMATION

Opening Scenario
Brian Black is a 48 y/o male who wants to stop smoking.

Vital Signs
- Temp: 37.2°C (98.9°F)
- BP: 130/80 mm Hg
- HR: 84/min
- RR: 24/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Write your mnemonics on your blue sheet. These will remind you of other questions to ask and will ensure you don’t skip pertinent aspects of the history. Be sure to make note of the elevated RR given in the doorway vital signs.

Looking at this Doorway Information you should realize that a complete smoking history is needed: when did the patient start to smoke, how many packs/day, number of years he has smoked. You should also find out what the patient has done to stop in the past and how successful he was. It is important to not be judgmental, and to be encouraging of the patient’s desire to stop. Do not belittle his past failures in attempting to quit.

In this type of case you will also need to ask if the patient has any additional symptoms that he can describe. If he says no, you can use the SIQORAA mnemonic to find out all about the smoking history. When asking about associated symptoms, ask a few questions about the complications of smoking, e.g., shortness of breath, weight loss, cough, hemoptysis, and hoarseness, to name a few.
The vital signs are very important and should always be scrutinized for clues. Normal breathing rate in adults is 16 breaths/min. When you see respiratory rates in the 20s, ask a few questions to find out why the patient is breathing fast. Also, few patients in the real world have temperatures of exactly 98.6°F. Most clinicians define a fever as a temperature of greater than 100.4°F. Certainly, if the temperature is above this level, think of it as a fever case. If the temp is between 98.6°F and 100.4°F, ask a few questions about the patient having fever and chills at home. But generally, a temperature less than 100.4°F is not a fever.

Mr. Black’s vital signs show that he is tachypneic but not febrile.

FROM THE STANDARDIZED PATIENT

History

Mr. Black states that his mother died last month from lung cancer and emphysema. He realizes it is time for him to stop smoking.

Doctor: “How can I help you today?”

Mr. Black: “I want to stop smoking.”

Doctor: “Great, I am glad you came to see me. I can help with that. Do you have any symptoms right now that I can help with as well?”

Mr. Black: “No, I’m all right now. I just watched my mother die of emphysema and lung cancer over the last 6 months. I know I need to stop.”

So in this case use the SIQORAA to get his entire smoking history.

Patient started smoking when he was 12 years old. By age 18 he was smoking one pack a day. By age 30 he smoked 2 packs/day until now. He has tried to quit several times in the past. He has tried going cold turkey, a nicotine patch, even bupropion a couple of years ago. At the most, he can stop smoking for a week or so before he restarts. He has noticed that he has a cough productive of greenish sputum for months at a time most winters. Mr. Black considers this a normal finding for smokers.

It is also affecting his life in that he stopped playing racquetball because he gets too winded and a little wheezy with intense physical exertion. He no longer runs for the commuter train when he is late because it would take the entire ride home to catch his breath. Once the conductor wanted to call an ambulance for him, but Mr. Black refused. He has had no fevers, and he has lost about 10 lb in the last 2 years. He is not on a diet. Occasionally, when he has a hard coughing spell, a tiny streak of blood comes up. He is not hoarse. He has no episodes of chest pain.

Mr. Black takes no medications and has no allergies.

He has never been hospitalized. He has had no trauma or major surgery. He did have pneumonia last winter, for which he received antibiotics. No history of DM, HTN, or heart or lung disease. He has never had any exposure to tuberculosis.

Mr. Black lives with his wife of 25 years. He works as a consultant. He states that his job is somewhat stressful, and says that’s why he smokes. He does not drink alcohol or use recreational drugs.
**Physical Exam**

When you walk into the room you will see an SP demonstrating pursed-lip breathing and a prolonged expiratory phase. The SP will probably simulate this physical finding for only the first minute or two of the case. His color is pink. The pharynx is normal. There is no supraclavicular or cervical adenopathy. His chest appears normal. Palpation and respiratory excursion, tactile fremitus, percussion, and auscultation will all be normal. He has no jugular venous distension. His heart tones are regular. There is no cyanosis or peripheral edema. Mr. Black does have clubbing. He is awake and alert.

**THE CLOSING**

**Doctor:** "Mr. Black, I have finished your physical exam and would like to talk to you about how you can stop smoking."

**Mr. Black:** "Good."

**Doctor:** "It sounds to me like you are also having some symptoms from smoking: the cough and sputum, the time you had pneumonia, and the short-of-breath feeling that has stopped you from playing racquetball."

**Mr. Black:** "Well, that’s all just normal smoking stuff."

**Doctor:** "It is likely related to smoking. On your exam I see that you are breathing a little fast at rest. We need to take a picture of your chest and have you take a breathing test. I want to see if the smoking has done any damage to the lungs."

**Mr. Black:** "Do you think I’m too late?"

**Doctor:** "No, no. Every day is a good first day to be smoke-free. I’d like you to start attending the smoking cessation classes here at the hospital immediately. When the tests are back, I’ll call you. It’s great that you are here today. It shows you are serious about stopping, and I’ll help however I can."

**CHALLENGING QUESTIONS**

**Mr. Black:** "But I’ve failed so many times before!"

Answer: "It’s better to think positively. Now you have another opportunity, with help from me and the stop-smoking classes."

**CASE DISCUSSION**

**Notes about the History-Taking**

In this case it is important to get the amount of cigarettes smoked. Find out when he started smoking as well as the course and duration of tobacco use. Ask if the patient ever got treatment and was able to stop. Asking about complications of tobacco use such as heart, lung disease and symptoms of cancer would be appropriate.

**Notes about the Physical Exam**

This case requires a complete chest exam as well as some of the cardiovascular exam. Focusing the most attention on the lungs is based on his history of sputum and dyspnea.
Case 33

GRADING CHECKLISTS

History Checklist
This case is complex in that there really are many additional problems that need to be included in the HPI as well. For example, Symptoms: shortness of breath, cough, sputum, smoking are included in the HPI.

- Symptoms
- Intensity: How it is affecting the pt's life? Can no longer exercise
- Onset: When did shortness of breath start? When did pt start smoking?
- Onset: Course of smoking, course of dyspnea
- Progression of symptoms
- Previous attempts to quit smoking
- Associated symptoms: Ask about heart disease, COPD, and cancer
- Allergies
- Medications
- PMH
- FH: Mother died 6 mo from emphysema
- SH: Living arrangement, stress
- SH: Alcohol, recreational drug use
- Associated symptoms (resp): cough, sputum production, presence of blood, hoarseness
- Associated symptoms (CVS): Chest pain, dyspnea on exertion, PND

Physical Exam Checklist
- GA: Notice the pursed-lip breathing
- HEENT: Pharynx
- HEENT: Adenopathy
- CV: Heart auscultation, PMI
- CV: JVD
- Chest: Inspection
- Chest: Palpation/respiratory excursion
- Chest: Tactile fremitus
- Chest: Percussion
- Chest: Auscultation
- Extremities: + Clubbing. No edema or cyanosis.

Comments about the Patient Note
As smoking was discussed in detail in the HPI, there is no need to mention it again in the social history. It is important to note that although your SPs will not have any “real” acute findings, you may have patients that do have symptoms of chronic illnesses. It would not be unusual to have an SP with changes in the chest wall (e.g., increased chest AP diameter) and possibly signs of clubbing. Don’t be surprised to find real physical findings as well as simulated.

Emphysema and Chronic Obstructive Pulmonary Disease would also be accepted as correct diagnoses. One pack-year (pk-yr) is defined as smoking one package of cigarettes a day for one year.
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** Dyspnea, wants to stop smoking

**HPI:** Pt presents wanting to stop smoking. Has smoked since age 12. ~50 pk-year hx. Has tried nicotine patch and bupropion without success. Feels he smokes due to stress of job.
+ Cough productive of sputum for several months each winter; occasional streak of blood
+ SOB, DOE that prevents exercise
+ 10-lb weight loss,
- Chest pain, hoarseness, fevers

NKMA, no meds

**PMH:** No hospitalizations, trauma, or surgery. Had pneumonia last year Rx as outpt.

**FH:** Mother died of emphysema and lung Ca

**SH:** Lives with wife, works as consultant. No alcohol or recreational drugs.

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** 37.2 130/80 84 24

**GA:** Looks mildly SOB, pursed-lip breathing

**HEENT:** Pharynx is clear. No abnormal cervical or supraclavicular adenopathy.

**Chest:** Prolonged expiratory phase. Chest with increased AP diameter. NL respiratory excursion. Normal tactile fremitus, percussion, and auscultation.

**CV:** S1, S2 WNL; no murmur, rub, or gallop. No JVD. PMI not displaced.

**Ext:** No cyanosis or edema. + Clubbing.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Emphysema

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOB</strong></td>
<td><em>Increased RR</em></td>
</tr>
<tr>
<td><strong>50 pk-yr smoking history</strong></td>
<td><em>Pursed-lip breathing</em></td>
</tr>
<tr>
<td></td>
<td><em>Prolonged expiratory phase</em></td>
</tr>
<tr>
<td></td>
<td><em>Increased AP diameter of chest</em></td>
</tr>
<tr>
<td></td>
<td><em>+ clubbing</em></td>
</tr>
</tbody>
</table>

### Diagnosis #2: Chronic bronchitis

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Productive cough several months each winter</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Diagnosis #3: Lung cancer

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>50 pk-yr smoking hx</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hemoptysis</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Weight loss</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- **CXR**
- **CBC**
- **Pulmonary function test**
- **PPD**
- **CT chest**
Case 34: Schizophrenia

DOORWAY INFORMATION

Opening Scenario
Ken Lee is a 22 y/o male graduate student. He is brought to you because he is “not acting right.”

Vital Signs
- Temp: 37.2°C (99.0°F)
- BP: 140/80 mm Hg
- HR: 90/min
- RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Altered mental status indicates that you will need to complete a neuro exam and a psychiatric exam as well. When you enter the room this patient will be wearing street clothes so no physical exam will be possible. Do not give the drape to standardized patient wearing street clothes. You still should do a complete Mini Mental Status exam.

Mental status changes can be caused by psychiatric illness as well as causes that are considered more organic, such as recreational drug use and encephalitis.

The psychiatric exam consists of the following:
- General appearance
- Orientation to person, place, and time
- Speech
- Recent and remote memory
- Attention and concentration
- Mood and affect
- Thought process
- Hallucinations, delusions, or paranoia
- Suicidal/homicidal ideations
- Insight

General appearance is no different from any other case. Simply describe how the patient looks, any poor hygiene, disorganized appearance, and anything out of the ordinary.

A large part of the psychiatric exam is simply the Mini Mental Status exam. In addition to Mini Mental Status, you will need to comment on the patient’s speech, mood, and affect, and the presence or absence of hallucinations and/or delusions. Finally, no psychiatric chart is complete without commenting on suicidal ideations.

Speech can be described as normal, pressured, or rapid. Feel free to comment on the volume, rate, tone, and accent, and any stuttering or idiosyncratic features.

Mood is what the patient reports:

Doctor: “How do you feel?”

Whatever the patient says in response to this is considered his mood.

Affect is the emotional state that you (as the physician) observe: euthymic, neutral, euphoric, dysphoric, flat, and blunted are all psychological terms. Simply describe, in your own terms, what you see.

Thought process is the organization of the patient’s thought process: logical, loose associations, flight of ideas, tangential, and circumstantial are all common descriptors.

Hallucinations

Doctor: “Sometimes people see or hear things that are not really there. Does this ever happen to you?”

Delusions

Doctor: “Do people ever tell you that you have very unusual ideas about yourself or the world?”

Insight is what the patient thinks he needs in terms of treatment.

Doctor: “What do you think about your symptoms (illness)?”

FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Lee is brought to you by the police. Of course, the police have left before you arrive and are unavailable for interview. Mr. Lee is fully dressed so you know a physical exam involving heart, lungs, and abdomen will not be needed on this case. When you enter the room he is standing, staring at the wall. His clothes are torn and dirty. It looks like he hasn’t showered in a week. He appears to be staring intently at a small spot on the wall.

When you call his name he startles and turns to stare at you. To your surprise, he answers questions quite bluntly and efficiently. He tells you he is not sure why he was brought to the doctor. He states that he “on a mission” to stop the university from making any additional mistakes and thereby “save the solar system.” He tells you he is a graduate student in astrophysics at the university. Or rather, he was a student until he was expelled for his thesis idea that no one else could understand. He states that he made such a breakthrough while in communication
with Alpha Centaurians. He has felt this way for several months. Prior to this he was not so sure about the alien
communication, but now he has proof. He tells you that at one time he fit into the establishment and got a full-ride
scholarship to the university right out of high school. But over the years, as he concentrated on his work to the
exclusion of all social contact, he made this discovery. Nothing has made the voices better or worse. He has felt sad,
hopeless, or guilty at times. He is somewhat angry about being forced out his apartment and living on the street.

He has no allergies and is not taking any medications.

**PMH:** Mr. Lee says he has never felt like this before. He states he has no allergies. He takes no medications
because there “may be a government plot preventing [him] from saving the solar system.”

He was hospitalized once for 3 days last month when he was found talking to himself in the park. The hospital
released him with a bottle of pills that he discarded to prevent government eavesdropping. No trauma. No
surgery. No history of high blood sugar or high blood pressure.

**ROS:** He has not been sleeping more than an hour or two a night. He has lost 20 to 30 lb.

**PH:** There is no family history of psychiatric disease. His father died last year at age 72.

**SH:** He is not sexually active. He has no family. He does not smoke or use alcohol.

Mr. Lee is oriented to person, place, and time. He seems intelligent. He frequently uses novel new words and has
to explain their meaning. His recent and delayed memory are intact. He will not spell the word *world* backwards
to test attention and concentration. He feels that is beneath someone of his stature. He states that he feels elated
and honored to be the contact person for the aliens. He looks agitated. He does not feel he needs the attention
of a physician because nothing is wrong. His work must not be interrupted. He has no plans to harm himself
or anyone else.

**Physical Exam**

In this case you have only general appearance, vital signs.

**THE CLOSING**

*Doctor:* “Mr. Lee, thank you for speaking with me. Thank you for telling me about the voices and the
communications you have been receiving. I want to get a blood test to check your sugar and look for any
chemical imbalance that is causing your symptoms.”

**CHALLENGING QUESTIONS**

*Mr. Lee:* “I don’t want any tests. I don’t want you to inject me with any monitoring devices.”

Answer: “I’m here to help and would never do anything to harm you. I’ll have the counselor come and speak
to you now. Do you have any questions?”
GRADING CHECKLISTS

History Checklist
- Symptoms
- Intensity
- Onset
- Aggravating factors
- Alleviating factors
- Associated symptoms
- Allergies
- Medications
- Hospitalizations, major illness, trauma, surgery
- ROS: Sleep
- ROS: Diet
- Family history
- Social Hx: Alcohol
- Social Hx: Drug use
- Social Hx: Living arrangements—homeless

Psychiatric Checklist
- Orientation
- Memory
- Attention and concentration
- Language
- Obey commands
- Mood
- Affect
- Speech
- Thought process
- Hallucinations
- Suicidal ideations
- Insight

CASE DISCUSSION

Notes about the History-Taking
This patient is blatantly psychotic and is very verbal about what he experiencing. Many patients with schizophrenia have much less speech. The USMLE, however, will not give you a patient with catatonia (there would be no way to test your interpersonal skills and English proficiency).

Many patients are reticent to speak about the voices, and it may take a few minutes for you to realize that the patient is having auditory hallucinations, tangential thinking, loose associations, or bizarre thoughts.

A good way to ask about psychosis if it is:

Doctor: “Sometimes when people are under a lot of stress, they hear or see things that other people do not. Has this ever happened to you?”

Comments about the Patient Note
Always read the Doorway Information carefully, as it will say what the tasks are and if a note and physical are wanted. This patient is wearing street clothes and you will need to include a physical exam in the workup. This is because a patient who is to be examined must first change into a gown. In real life it is proper for the doctor to step out of the room while the patient is changing. On this test, once you leave the room, you cannot go back in.

Do not worry where you write the psychiatric exam—either the History section or the Physical Exam section of the note is correct. Where you write it is not important. What you write—and your legibility—is important.
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: On a mission to save the solar system

HPI: 22 y/o male brought in by police. Pt is hearing voices. Has plan to save solar system. Recently lost his housing. Is a former university student who states he is in communication with aliens. This has been continuous for at least 3 months but has been slowly worsening for years. Nothing has made it better, including a brief hospitalization last month. Pt states at times feels sad and hopeless, at other times is angry over loss of housing and possible government eavesdropping.

PMH: No previous psychotic episodes

NKMA, noncompliant with any medication

Hospitalized last month for similar symptoms. Denies trauma, DM, HTN, or surgery.

ROS: Not sleeping, 1–2 hours/day, 20-lb weight loss

FH: No hx of psychiatric illness. Father died last year at age 73.

SH: No alcohol or recreational drug use.

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

GA: Pt is dirty and staring at wall

VS: 37.2 140/80 90 16

Psychiatric history: Pt is alert and oriented to person, place, and time

Speech is rapid and pressured

Recent and remote memory intact

Not cooperative to check attention and concentration

Mood: Expansive, elated

Affect: Agitated, jittery

Thought process: Delusional

+ Psychosis, hearing voices of the “aliens”

Denies suicidal or homicidal intent
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1: Schizophrenia

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing voices</td>
<td>Delusional thought process</td>
</tr>
<tr>
<td></td>
<td>Out of touch with reality</td>
</tr>
</tbody>
</table>

Diagnosis #2: Bipolar with manic episode

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing voices</td>
<td>Poor concentration</td>
</tr>
<tr>
<td>Not sleeping</td>
<td>Rapid, pressured speech</td>
</tr>
<tr>
<td>Elated mood</td>
<td>Delusional thoughts</td>
</tr>
</tbody>
</table>

Diagnosis #3:

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
</table>

Diagnostic Study/Studies

- Physical exam
- CBC, lytes, BUN, Cr, Ca, glucose
- TSH
- Drug screen
- EtOH
Case 35: Pediatric Temper Tantrum

DOORWAY INFORMATION

Opening Scenario
Betty White is the grandmother of Amy White (age 24 months). She wants to speak to you about the child’s emotional problems.

Vital Signs
There are no vital signs in this case.

Examinee Tasks
1. Obtain a focused history.
2. You will not be required to perform a physical examination in this case.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Since this is a pediatric case you already know there will be no patient to examine and you will have the entire 15 minutes for the history. A pediatric history will be important. This case could be done as a phone case, or the caretaker of the child may come and speak to you in person, as in this case. Assume that you have permission for discussion and treatment of all patients on this test.

Most temper tantrums are part of normal growth and development. They occur in preverbal or minimally verbal children who cannot express themselves. These spells occur mostly in the presence of the primary caretaker. They happen more often when the child is tired, hungry, bored, in physical discomfort, or just having a day that is different from the normal routine.

Temper tantrums start suddenly and are characterized by the child crying or screaming, turning red in the face, looking very upset or mad, and flailing all four extremities. The child is conscious, and this is not a seizure. These tantrums last only a minute or two (though it seems a lot longer if you are the parent).
FROM THE GUARDIAN

History

Mrs. Betty White made an appointment to meet with you regarding Amy, her grandchild. She tells you that she lives with Amy and Amy’s mother (Lisa White). Betty is the primary caregiver and Lisa works two jobs to provide income for the three of them. Betty states that she is happy to help out raising the child, but at times Amy is hard to control.

Approximately twice a week Amy seems to have a sudden crying spell, where she is crying as loudly as she can while kicking, screaming, and moving her arms about wildly. It is very embarrassing because it often happens when Mrs. White has taken Amy with her to a 2-hour church service or when they are out shopping. She tries to comfort the child, and the tantrums generally stop after a minute or so. Immediately before and afterward, the child’s behavior is normal, and she never faints or harms herself in any way. The child does not “turn blue.” These spells or episodes started happening a couple of months ago. Nothing seems to make them less frequent, and nothing can be done to stop an episode once it starts.

Amy takes no medicine other than pediatric vitamins, and has an allergy to strawberries.

Amy has never been hospitalized other than at birth. Lisa had an uneventful labor and a normal delivery. The whole time in the hospital was 30 hours, but they are still paying the bill off for a 2-day hospital stay. Amy has never had surgery and only rarely gets sick. Last month she had an ear infection, and she has had a couple of colds in her lifetime. Amy sleeps through the night, 11 hours. She was reliably taking two naps a day, but now some days will take only one nap. Betty has noticed that Amy is more likely to have a crying spell if she misses her nap altogether. Amy is recently toilet-trained but she still wears a diaper at night “just in case.” She does not appear to be in any pain when she urinates. She is growing and gaining weight.

Mrs. White recalls that her daughter, Lisa, also had crying spells, but states, “I was a lot younger then and could handle it better.” Betty never feels like she is going to lose control of herself and hit or shake the baby. When the “episodes” happen, Mrs. White tries to console the child with a hug, but the baby just kicks harder. The three of them are generally happy with their life, but both Lisa and Betty wish that Lisa had more time to spend with Amy.

No one in the household smokes. Betty is primary caregiver. Lisa, the child’s mother, works two jobs to make ends meet. The father is no longer in contact with the family.

Amy was a full-term baby and had no problems after birth. Lisa did get prenatal care and did not smoke or use alcohol. Amy was 7 lb 3 oz at birth and has had no problems with breathing, no turning yellow, and no fevers. She was bottle-fed with Enfamil and Similac until age 1 year. She started with vegetables and cereals at 5 months of age. Now Amy eats normal table food and drinks cow’s milk without any problems.

Amy’s immunizations are up to date. She has had regular checkups. She started walking and speaking words at age 11 months. She now says 200 words or so, and is starting to use sentences.

Physical Exam

There is no physical exam in this case.
THE CLOSING

**Doctor:** "Mrs. White, I'd like to review what you have told me. You are the primary caretaker for your grandchild, Amy." *(Mrs. White nods in agreement)* "Amy has been having episodes where she is screaming and crying and is inconsolable that last for a couple of minutes. In between episodes, everything is fine with her."

**Mrs. White:** "Yes, that's correct."

**Doctor:** "What you are describing sounds like temper tantrums. I do want to see Amy for a physical exam to be sure."

**Mrs. White:** "What can we do about them?"

**Doctor:** "They usually happen when a child is tired, hungry, or not doing something that is in her regular routine. All you can do is sit quietly with her until it passes. Punishment doesn't work to prevent tantrums. Usually children grow out of them as they get older. Would it help you to know that temper tantrums are a normal part of growing up?"

**Mrs. White:** "Yes."

**Doctor:** "Do you have any questions?"

The key to the closing here is to counsel the caretaker that tantrums are normal. You also say that to be sure, you want to see the child for a physical exam. It is key to elicit the caretaker's response to the tantrums. If someone tells you he/she is punishing a child, you need to correct his/her parenting skills.

**Guardian:** "Whenever my 2-year-old has a temper tantrum, I send him to bed without dinner."

**Doctor:** "We have found that punishment does not work for temper tantrums. It would be much better if you could just put your child in 'time-out' for a minute. Once the tantrum and the time-out are over, forget about it and pretend it never happened."

Time-out is a popular parenting technique that seems to work to the advantage of the child and the equally frustrated parent. Pick a spot in the house or specific chair to be the time-out chair. (It can be a chair, a couch, a bed, or a spot on the floor.)

The parent should remain calm, take the thrashing toddler to the time-out chair or spot, and gently place him there. And then just wait for the tantrum to pass. Add on another 30 seconds or minute or so for the child to regain his composure. Once time-out is over, the parents should not hold any grudges and should just get on with life!

CHALLENGING QUESTIONS

**Mrs. White:** "Should I take Amy to a child psychologist?"

*Answer:* "No, but I’d like to examine Amy. Can you bring her to the office tomorrow?"

The grandmother has not told you anything to suggest that the child's behavior is abnormal. Temper tantrums are a normal developmental stage that is part of the human condition.

CASE DISCUSSION

Notes about the History-Taking

If you enter a room and are not sure if the person is the patient or not, ask the SP for his/her name.
## History Checklist
- **Symptoms:** Get description of “emotional problems”
- **Intensity:** Find out how Mrs. White responds to these episodes
- **Onset:** When did tantrums start?
- **Duration:** How long do the tantrums last?
- **Progression:** What is the frequency? Is the number of tantrums changing with time?
- **Have you noticed anything that precipitates a tantrum? (What makes it worse?)**
- **Have you noticed anything that makes them occur less often? (What makes it better?)**
- **Associated symptoms:** You want to ask about any fainting spells, turning blue, or if the child ever gets hurt during a tantrum
- **PMH:** Past hospitalizations, trauma, major illness, and surgery
- **ROS:** Sleep history, any problems urinating, dietary history
- **FH:** This is not a genetic condition, but might be a good time to see if the grandmother can remember her own daughter’s childhood. It’s likely that daughter Lisa also had temper tantrums at this age.
- **SHx:** Who lives in the household? Is there any new or excessive stress at home? What is Mrs. White’s reaction to the temper tantrums? Screen for any worries about child abuse.

## Pediatric History Checklist
- **Prenatal Hx:**
- **Ped Hx:** Did mom get prenatal care? Did she refrain from smoking and alcohol?
- **Birth Hx:** Birth full-term? Normal delivery or C-section?
- **Neonatal Hx:**
- **Feeding Hx:**
- **Growth and development**
- **Routine care:** Immunizations and checkups

---

**Doctor:** “Hello, My name is Dr. First-Name Last-Name. What is your name?”

**Mrs. White:** “I am Mrs. Betty White. I am Amy’s grandma.”

Sometimes patients’ stories are complicated, with multiple family members being important. It is important for CIS and SEP to ask questions, and paraphrase until you understand that Betty White is the grandmother, Lisa White is the mother, and Amy is the grandchild and patient.

Primary care physicians caring for children should ask about secondhand smoke, smoke detectors, firearms in the home, car seats, and being sure poisons are locked out of reach. These are all good preventative medicine questions. If you have a case of a child being brought in for a school physical or general checkup, go ahead and
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

HPI: Onset a couple of months ago, 1–2 episodes a week of crying, screaming, and generally thrashing about. Lasts 1–2 minutes. Nothing makes it better, seems to be more frequent when child is tired. No fainting, turning blue, or breath-holding spells. Child does not injure herself during tantrums.

Allergies: Strawberries

Meds: Pediatric vitamins. Immunizations are up-to-date.

PMH: Mother had prenatal care, no alcohol or cigarettes during pregnancy. Full term, NSVD. No problems in neonatal period. No hospitalizations, trauma, or surgery.

ROS: Sleeps well at night, down to 1 nap a day on most days. Toilet-trained, does not appear uncomfortable urinating.

SH: Grandmother is primary caretaker, mother works 2 jobs, and patient in household. Denies unusual stresses. Caretaker is not worried she will harm the infant.


SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

There is no physical exam in this case.
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

### Diagnosis #1: Temper tantrums

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief episodes of crying</td>
<td></td>
</tr>
<tr>
<td>No cyanosis</td>
<td></td>
</tr>
<tr>
<td>No fainting</td>
<td></td>
</tr>
<tr>
<td>No injury</td>
<td></td>
</tr>
<tr>
<td>Occurs when child is upset</td>
<td></td>
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</tbody>
</table>

### Diagnosis #2:

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
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</thead>
</table>

### Diagnosis #3:

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
</table>

**Diagnostic Study/Studies**

*Physical exam*

*No tests indicated at this time*
ask these questions. If the case has a chief complaint of a site or symptom, concentrate on learning about the chief complaint first.

**Notes about the Physical Exam**

There was no physical exam in this case.

**Comments about the Patient Note**

If the guardian seems unduly stressed or feels that he/she may harm the child, offer a meeting with a counselor. You can also offer a support group.

**Parent/Guardian:** "Sometimes I feel so frustrated when my child has a tantrum. I like the time-outs because it gives me a chance to cool down too."

**Doctor:** "Are you ever worried that you might hurt or shake the child?"

**Parent/Guardian:** "To tell you the truth, I did scare myself a couple of times but no, I never have."

**Doctor:** "Thank you for telling me. Your feelings are not unusual. I’d like to give you the number of a parenting support group. It helps to talk to others in the same situation."

The danger signs of temper tantrums are if they are starting or getting worse after 4 years of age. Sometimes this can be an indication of depression, autism, or attention deficit disorder. Consider these diagnoses only with tantrums that are getting worse after age 4.

**Doctor:** "Does your child pass out?"

Ask about any fainting. If the child faints, consider seizure or arrhythmia as a possibility and get the appropriate tests of EEG (electroencephalogram) and neuroimaging. For arrhythmia, of course, you need an ECG, perhaps an echocardiogram, and a Holter monitor.

**Doctor:** "Does your child ever get hurt during an episode?"

Ask about self-harm. In an uncomplicated temper tantrum, the child does not hurt himself.

**Doctor:** "Does your child hold her breath?"

Lastly, ask about breath-holding spells. You can also ask if the child’s color changes. (Blue is bad.)

For these types of behavioral cases, it is essential to find out if there is any new stress in the family. Also, get the parents’ reaction to the temper tantrum and counsel them on dealing appropriately with the behavior.

The doctor in this exchange wrote much of the pediatric history under the headings of HPI and PMH. It would be just as correct to write all the history under the Ped Hx heading, or to omit the Ped Hx heading entirely. As long as the relevant and critically important information is on the note, the graders will not be concerned with exactly where you convey it.

A physical exam is always indicated. Some children have more tantrums when they have physical discomfort that they cannot communicate to the adults. Kids are more cranky if they have untreated otitis or a UTI. Writing “No tests indicated” tells your examiner that you recognize that this condition needs no testing to confirm the diagnosis.

In this note, the correct answer was only one diagnosis because you were expected to recognize that tantrums are a normal part of growth and development.
Case 36: Asthma Exacerbation

DOORWAY INFORMATION

Opening Scenario
Susan Gibbs is a 30 y/o female who states she is having an asthma attack.

Vital Signs
1. Temp: 37.0°C (98.6°F)
2. BP: 138/90 mm Hg
3. HR: 100/min
4. RR: 24/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your Patient Note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: You may be thinking, “How difficult can this be? They are telling me the diagnosis is asthma!” Most likely this case is about you finding out why this patient is having an exacerbation of her chronic illness. Is the patient noncompliant to medications? Has she been exposed to an allergen or another trigger? Does the patient have an additional infection, or is there some other complication of the disease?

Additionally, ask a few questions to assure yourself that the patient’s self-diagnosis is correct. Not everyone who wheezes has asthma. Keep in mind your shortness of breath differential diagnosis.
FROM THE STANDARDIZED PATIENT

History

HPI: Ms. Gibbs states she has been coughing more and having a harder time breathing for the past week. She says she has been wheezing and her chest feels really tight. She has not been checking her peak flows lately. Ms. Gibbs states she has been using her inhaler (salmeterol) more than she should (4 times a day instead of the prescribed twice a day). She states it was really bad when she went snow skiing last week and there was a cat at the friend's house where she was staying.

Medications: Salmeterol (Serevent), beclomethasone inhaler. She ran out of the beclomethasone inhaler the day she left for her ski trip.

Ms. Gibbs states she has had a nonproductive cough and some wheezing. She has not had any chest pain but says it feels really tight to breathe. She has not been coughing up blood.

PMH: Ms. Gibbs has been diagnosed in the past with cat and dog allergies. Since childhood, she has had multiple hospitalizations for asthma. She has never been intubated. She has not had any surgery.

Social Hx: Ms. Gibbs lives alone, is sexually active, and uses a diaphragm for contraception. She lives a short drive away from the ski resort and has not had any long trips recently. She does not smoke.

Physical Exam

Ms. Gibbs appears anxious and short of breath when you enter the room. She is alert, not lethargic, and displays no cyanosis about the lips. Her voice is normal and there is no stridor. Pharynx is clear.

She seems to be using some accessory muscles to breathe and is somewhat barrel-chested in appearance. There is no tenderness about the rib cage. There is decreased air entry into both lungs and a prolonged expiratory phase with wheezing. The tactile fremitus is decreased in a symmetric fashion on both sides of the chest. Heart sounds are normal.

Ms. Gibbs's gait is normal, but while walking she gets a little more short of breath. Extremities are not swollen.

THE CLOSING

In the closing, you need to educate Ms. Gibbs about the importance of checking her peak flow regularly even before she feels shortness of breath, of not taking more of her long-acting beta agonist than prescribed, and of not stopping the inhaled steroids. This must be done in a caring way that is neither condescending nor angry.

Doctor: "I have finished your physical exam and will tell you what will happen next. But first let me make sure I understand. For the past week, your breathing has been getting a lot worse. You ran out of the beclomethasone and have been taking the salmeterol more often. Is that correct?"

Ms. Gibbs: (Nods head up and down in agreement)

Doctor: "Also you were exposed to cats, which you are allergic to."

Ms. Gibbs: (Again nodding head)

Doctor: "I think all these things combined led to this asthma attack. I will take a chest x-ray, measure your oxygen level, and get a peak flow now, and we will start treatment. When you are feeling better, I want you to check your peak flow every day, take your medicine as prescribed, and call me if you are running low
on medicine. I don't want you to run out of medicine, and I want to hear first thing if your peak flow is less than baseline."

Ms. Gibbs: (Still nodding)

Doctor: "Do you have any questions?"

Ms. Gibbs: (Now shaking head from side to side, indicating "No")

CHALLENGING QUESTIONS

This would be a good challenging question for the SP to ask within the first few seconds of you entering the room. USMLE wants you to recognize the SP is very tachypneic and is displaying the simulated dyspnea.

Ms. Gibbs: "I'm scared."

Doctor: "I can see you are feeling short of breath. I am here to make you better."

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Symptoms</td>
<td>☑ HEENT: Pharynx</td>
</tr>
<tr>
<td>☑ Intensity</td>
<td>☑ Chest: Inspection</td>
</tr>
<tr>
<td>☑ Onset</td>
<td>☑ Chest: Auscultation</td>
</tr>
<tr>
<td>☑ Aggravating factors</td>
<td>☑ Chest: Percussion</td>
</tr>
<tr>
<td>☑ Associated symptoms</td>
<td>☑ Chest: Tactile fremitus</td>
</tr>
<tr>
<td>☑ Previous episodes</td>
<td>☑ Heart: Auscultation</td>
</tr>
<tr>
<td>☑ Medications</td>
<td>☑ Extremities: Check for swelling</td>
</tr>
<tr>
<td>☑ Allergies</td>
<td></td>
</tr>
<tr>
<td>☑ Social Hx: Smoking</td>
<td></td>
</tr>
</tbody>
</table>
CASE 36

SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: 30-y/o female reports asthma attack happening now

HPI: Increasing dyspnea, nonproductive cough, wheezing, and chest tightness to the point of being “scared”

Exacerbated by cold air, skiing, and exposure to cats

No sputum, hemoptysis, fever

Has not been checking her peak flows

PMH: Has had a long history of asthma, with multiple hospitalizations

Meds: Salmeterol—taking more often than prescribed

Beclomethasone—ran out before symptoms worsened

Allergies: Cats and dogs

SH: Nonsmoker, lives alone

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: T 37.0, BP 138/90, HR 100, RR 24

GA: Appears in distress 2nd dyspnea and is anxious. Alert and not lethargic.

Skin—pink, cap refill normal

HEENT: Pharynx clear, voice normal, no stridor

Chest: Appears somewhat barrel-chested. No tenderness to rib cage.

Decreased air entry bilaterally with expiratory wheeze

Hyperresonant to percussion—equal bilaterally

Tactile fremitus decreased—eq. B/L

CV: Tachycardic, not RMG

Ext: Legs—no edema

Neuro: Gait normal
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

Diagnosis #1 Asthma exacerbation—noncompliance with meds

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMH asthma</td>
<td>Tachypnea</td>
</tr>
<tr>
<td>Stopped steroid inhaler</td>
<td>Wheeze, hyperresonant, decreased fremitus</td>
</tr>
<tr>
<td>c/o SOB, wheezing, chest tightness</td>
<td>No stridor</td>
</tr>
<tr>
<td></td>
<td>Decreased air entry</td>
</tr>
</tbody>
</table>

Diagnosis #2: Asthma exacerbation—exposure to cats

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMH asthma</td>
<td>Tachypnea</td>
</tr>
<tr>
<td>Exposed to cats</td>
<td>Wheeze, hyperresonant, decreased fremitus</td>
</tr>
<tr>
<td>c/o SOB, wheezing, chest tightness</td>
<td>No stridor</td>
</tr>
<tr>
<td></td>
<td>Decreased air entry</td>
</tr>
</tbody>
</table>

Diagnosis #3: Asthma exacerbation—exposure to cold air

Differential diagnosis and diagnostic reasoning

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMH asthma</td>
<td>Tachypnea</td>
</tr>
<tr>
<td>Exposure to cold air</td>
<td>Wheeze, hyperresonant, decreased fremitus</td>
</tr>
<tr>
<td>c/o SOB, wheezing, chest tightness</td>
<td>No stridor</td>
</tr>
<tr>
<td></td>
<td>Decreased air entry</td>
</tr>
</tbody>
</table>

Diagnostic Study/Studies

- Pulse oximetry
- Peak flow
- CXR
CASE DISCUSSION

Notes about the History-Taking
Any history of pleuritic chest pain should prompt a search for pneumothorax. When there is sputum production and/or fever, consider superimposed pneumonia. Odds are you will have to ask specifically about compliance with medication in a case like this. You will also have to ask about other exposures that may have set off this attack.

Notes about the Physical Exam
Remember to record the general appearance of the patient. “Anxious” in this setting means hypoxia. “Alert and oriented” would be important to observe and put in the note as well, as “lethargy” would indicate hypoventilation. If you have a patient walk and she “gets sicker,” as this patient did, be sure to have her stop walking immediately and help her back to bed.

Comments about the Patient Note
Patients with long history of asthma who claim they are having an exacerbation generally are correct. However, you should keep an open mind about complications of asthma or additional new diagnoses that have the same or similar signs and symptoms.

Depending on how short of breath the SP is pretending to be, you will need to have patience and let them answer. They may take a breath between each 3 or 4 words. This may be a case where, after the initial open-ended question is asked, closed-ended questions that the patient can nod yes or no to are important.
Case 37: Back Pain

DOORWAY INFORMATION

Opening Scenario
Mr. Jason McGee is a 36 y/o man with back pain.

Vital Signs
1. Temp: 37.2°C (99.0°F)
2. BP: 160/80 mm Hg
3. HR: 90/min
4. RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: You are left with a very broad differential of what the back pain could be. Pain in the back of the neck, center of back of thorax, lower lumbar back pain, and pain over the back of the sacrum and coccyx all have different differential diagnoses. So you will have to keep an open mind. Determining the site of the pain in the initial question will greatly aid you in reaching the correct diagnosis.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. McGee states that he has achy pain that came on gradually over the last 8 hours. It is located on the right side, at the lower rib down to the top of the iliac crest. “It’s sort of hard to exactly define where the pain is. It is coming in waves and getting worse all the time.” The pain is now 6/10 at its peak, and it does not change with respiration. The pain seems to move down and around to the front, and now it feels like he was “kicked in the balls” on the right side as well. He finds he can’t sit or lie still. He has never had this before.

He is nauseated and vomited the lunch he ate 1 hour ago. Mr. McGee has no diarrhea, dysuria, hematuria, or penile discharge. He last urinated 4 hours ago and it was normal.

Allergies: none

Meds: none

PMH: Mr. McGee has no history of diabetes or hypertension and no surgical history. He has not been injured or been in an accident.

Social Hx: Mr. McGee has 2 drinks maybe once a week. He is a nonsmoker.

Sexual Hx: Mr. McGee is sexually active, 1 female partner.

Physical Exam

Mr. McGee is standing up, moving about, and cannot seem to sit still. He looks sweaty. His sclera are clear. Lungs are clear to auscultation. Percussion of lower posterior chest is normal resonance and equal bilaterally. There is no tactile fremitus. Heart sounds are normal.

Inspection of Mr. McGee’s abdomen reveals no abnormality. There is no epigastric tenderness or masses. He has mild right-sided midabdominal tenderness with no rebound; the rest of the abdomen is nontender. No tenderness at inguinal ligament. The bowel sounds are normal. There is marked CVA tenderness on the right, no CVA tenderness on the left. Mr. McGee is alert and gait is normal.

THE CLOSING

The closing or summary for this case follows the same format as all cases with these kinds of instructions at the doorway. Repetition will make it easier.

Doctor: “Mr. McGee, I have finished your exam and would like to tell you what I am thinking. You told me that you have had about 8 hours of right-sided back pain that moves around to your groin. Is that correct?” (Pause for response. If patient says you are incorrect, find out what part of the history you don’t understand)

Mr. McGee: “Yes, Doctor.”

Doctor: “I found that you are tender over the kidney. I think you may have a kidney stone causing the pain. I’ll need to check your urine for traces of blood, and I will take an x-ray of your kidney to look for the stone. We will also need a blood test to make sure the kidneys are working fine—I suspect they are, with only 1 day of symptoms. We can do the tests now, and I will give you the results and get this treated. Do you have any questions?”
CHALLENGING QUESTIONS

There can be any number of questions from this patient. Perhaps he would ask:

Mr. McGee: “Do I have high blood pressure?”

Doctor: “Is today the first time you have had an elevated reading?”

Mr. McGee: “Yes.”

Doctor: “It’s likely your high reading today is just because of the pain. I’ll check it again when you are feeling better.”

GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Finding(s) Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Site of pain</td>
<td>✓ Chest: Auscultation, tactile fremitus, and percussion of posterior lower chest</td>
</tr>
<tr>
<td>✓ Intensity of pain</td>
<td>✓ Back: Check for CVA tenderness</td>
</tr>
<tr>
<td>✓ Radiation of pain</td>
<td>✓ Abd: Inspect, palpate 4 quadrants, check for rebound</td>
</tr>
<tr>
<td>✓ Onset of pain</td>
<td>✓ Abd: Examine down to inguinal ligament</td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** 36 y/o man with 8 hours of colicky R flank pain. Getting worse, now 6/10.

**HPI:** Pain radiates to R testicle
- No prior episodes
- + nausea and emesis x 1 (no blood)
- - hematuria, fever, dysuria, or penile discharge
- No meds, allergies, trauma, DM, HTN, or surgery

**SX:** Sexually active, 1 partner

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** T 37.2, BP 160/80, HR 90, RR 16

**GA:** Pt standing in room, diaphoretic, does not want to lie down, alert, cooperative, in distress from pain

**HEENT:** Sclera clear

**Lungs:** Clear to A, NL fremitus and percussion B/L

**Heart:** Normal heart sounds

**Abd:** Soft BS+, tender mildly right mid-abdomen. No rebound.
- ++ R CVA tenderness, L CVA nontender

**Neuro:** Gait normal
**SAMPLE PATIENT NOTE**

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Renal colic from stone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Colicky pain R flank</td>
</tr>
<tr>
<td>Radiates to groin</td>
</tr>
<tr>
<td>No fever, no dysuria</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2: Biliary colic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Right abdominal pain</td>
</tr>
<tr>
<td>No fever</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #3: Testicular torsion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td>History Finding(s)</td>
</tr>
<tr>
<td>Pain radiating to testicle</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Exam of testicle, inguinal hernia exam
- BUN, Cr, CBC, alk phos, T. bili, D. bili
- CT Abd and pelvis
- Urine dip for heme, U/A
CASE DISCUSSION

Notes about the History-Taking
It is perfectly fine to write down exactly what the patient says even if it is slang or is a crude form of speech. This patient referred to his testicles as his “balls,” and it is correct to use the patient’s own words when possible in recording the history. However, in the Diagnosis section, stick to standard medical nomenclature.

Notes about the Physical Exam
Pay close attention to what the patient is doing when you walk into the room. The SP's behavior is part of the case. To simulate diaphoresis, the SP may have sprayed himself with a water bottle before you came into the room.

Comments about the Patient Note
Be sure to remember parts of the exam that are forbidden. The doctor really thought this was a renal stone case (which it is). Notice his intent to exclude the unlikely diagnosis of testicular torsion with the physical exam.

Plain films of the abdomen are generally not done with a strong suspicion of kidney stone.
Case 38: Diarrhea

DOORWAY INFORMATION

Opening Scenario
Congressman Larry Todd is a 55 y/o man with diarrhea.

Vital Signs
1. Temp: 38.0°C (100.4°F)
2. BP: 120/80 mm Hg
3. HR: 70/min
4. RR: 20/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Patients have variable definitions of what constitutes diarrhea. Establish if the patient means watery stools or soft stools, and quantify the number of trips to the bathroom each day. Diarrhea can be caused by infectious agents, so travel history and sick contacts are important. Some foods may cause diarrhea in those who are lactose or fructose intolerant. Medications or inflammatory bowel disease may be the cause. Irritable bowel is a common problem.

From the doorway you can anticipate the need to assess the SP’s hydration status and to identify an abdominal exam as a needed part of the physical exam.
FROM THE STANDARDIZED PATIENT

History

HPI: The patient, Congressman Todd, states that his diarrhea started abruptly as brown, watery stool multiple times a day 9 months ago. He had fever, cramps, and vomiting. Congressman Todd was on a camping and hunting trip in the western United States when the symptoms started; he thought he got some bad water from a mountain stream. After 4–5 days his symptoms started to improve, but now off and on he has all-over abdominal cramping with loose stools 2–3 times per day. Cramps are intense but brief.

Congressman Todd has had some weeks where he experiences bloating, some greasy stools, and nausea. The vomiting has stopped. He has not noticed any fever or observed vomit or blood in the stool (no stool that is red or black). He has had a 10-pound unintentional weight loss in the last 3–4 months. He feels less energetic and has a lot of belching.

No one else has had diarrhea. His hunting buddies who went on the trip with him did not get sick.

PMH: Congressman Todd was hospitalized for gallbladder removal 5 years ago.

Medications: None

Allergies: None

Social Hx: Congressman Todd denies alcohol. He states that he enjoys smoking a good cigar when he can get one. He lives in Washington, D.C., most of the year.

Physical Exam

Congressman Todd does not appear to be in acute distress. He has no jaundice. His mucous membranes appear moist. His lungs are clear to auscultation bilaterally. The heart sounds are normal. On inspection of the abdomen, you see no surgical scars. The bowel sounds are hyperactive. The liver and spleen are not enlarged. There is diffuse abdominal tenderness without any rebound in all 4 quadrants. He is hyperresonant in all 4 quadrants.

THE CLOSING

The closing follows the usual pattern.

Doctor: "Congressman, I'd like to review your case so far. You have had 9 months of crampy diarrhea off and on since a camping trip. Is that correct?"

Congressman Todd: "Well, most of the time I'm fit as a fiddle, fully able to serve my constituents."

Doctor: "I understand. On your exam, I find some tenderness in the belly, most likely from an infection you picked up while camping. I will need to take a stool sample to check for infection, as well as ask you to have a colonoscopy."

Congressman Todd: "The election is next week. Can it wait until then?"

Doctor: "Yes. Any other questions?"

Congressman Todd: "My aide will be in contact with you."

Doctor: "I can talk to your aide about your health if you give permission."

Congressman Todd: (Grimacing) "Yes, yes. I think I can give a sample now."
There will not be any official privacy protection form for an SP to sign on the exam. Just noting verbally that you will need the patient's permission to talk to anyone else will suffice for the exam.

**CHALLENGING QUESTIONS**

Handle questions the same way for famous, powerful people and the most vulnerable, powerless people in our society.

**Congressman Todd:** "I don't mean any offense, but you look a little young. I'd like to see a more senior physician."

**Doctor:** "I can arrange that for you. I am here now and would like to help. How about I finish seeing you today and arrange that for your follow-up visit?"

**Congressman Todd:** "All right, I'll give you a chance."

---

**GRADING CHECKLISTS**

**History Checklist**
- Symptoms
- Intensity: How often having diarrhea?
- Onset: When did this begin, and what preceded the onset?
- Intensity: Pain scale on cramps
- Associated symptoms: Fever, dysuria, wt loss, vomiting, and anorexia
- Medications
- Previous episodes
- Surgical history
- Social history

**Physical Exam Checklist**
- HEENT: Mucosae for level of hydration
- Chest: Auscultation of lungs and heart
- Abd: Inspection
- Abd: Palpation
- Abd: Percussion
- Abd: Auscultation
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

CC: 55-y/o man with 9 months of intermittent crampy diarrhea. Denies blood in stool
HPI: Started suddenly after camping trip
No previous episodes
Positive: Belching, weight loss
Negative: Blood in stool
PMH: Gallbladder removal
No medications, NKDA
SH: Smokes cigars

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: T 38.0, BP 120/80, HR 70, RR 20
GA: NAD
HEENT: Mucous membranes moist
Chest: Lungs clear to A
CV: Heart regular, no MRG
Abd: Appears normal. BS++, hyperresonant to percussion all 4 quadrants. Diffuse tenderness all 4 quadrants. No rebound. No hepatosplenomegaly
**SAMPLE PATIENT NOTE**

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

**Diagnosis #1: Giardiasis**

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>9 months diarrhea with cramps</td>
</tr>
<tr>
<td>Occurred after camping trip</td>
</tr>
<tr>
<td>Weight loss</td>
</tr>
<tr>
<td>No prior episodes</td>
</tr>
</tbody>
</table>

**Diagnosis #2: Amebiasis**

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>9 months diarrhea with cramps</td>
</tr>
<tr>
<td>Occurred after camping trip</td>
</tr>
<tr>
<td>Weight loss</td>
</tr>
<tr>
<td>No prior episodes</td>
</tr>
</tbody>
</table>

**Diagnosis #3: Crohn disease**

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Chronic diarrhea</td>
</tr>
<tr>
<td>Weight loss</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Stool for ova and parasites
- Stool for fecal leukocytes
- CBC, electrolytes
- Stool for enteric pathogens
- Colonoscopy
CASE DISCUSSION

Notes about the History-Taking

Even if the SP is pretending to be someone famous or powerful, we treat each of our patients as a VIP (very important person), and there is no need to treat this patient any differently from anyone else. In this particular case, you will address the patient using the title “Congressman” instead of “Mr.” We call him by the name and title he prefers, as we do with all patients.

Notes about the Physical Exam

A complete abdominal exam including inspection, auscultation, percussion, and palpation will be on the SP’s checklist. To let the SP know you have inspected the abdomen without going out of character, try the following when you are ready to start the exam:

Doctor: "Next I'm going to look at your tummy. Would you please raise your gown?"

Comments about the Patient Note

According to the Doorway Information, the patient has a low-grade fever. So even before you hear about the weight loss and other symptoms, you know irritable bowel syndrome and other causes of diarrhea not associated with fever are unlikely.
Case 39: GERD

DOORWAY INFORMATION

Opening Scenario

Mrs. Anne Marie Grenelli is a 30 y/o woman with chest pain.

Vital Signs

1. Temp: 37.0°C (98.6°F)
2. BP: 122/84 mm Hg
3. HR: 72/min
4. RR: 16/min

Examinee Tasks

1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: The chest pain differential diagnosis is broad. In this age group with essentially normal vital signs, diagnosis that presents immediate life and limb threats such as any form of myocardial ischemia, aortic dissection, pulmonary embolism, pneumothorax, or Boerhaave syndrome already seems unlikely.

FROM THE STANDARDIZED PATIENT

History

HPI: Mrs. Grenelli states she has had a burning feeling in her chest off and on for the past 2 years. She states that the pain is in the center of chest, underneath the breastbone, and sometimes goes from the top of her stomach.
(She points to her epigastric region during the interview when you ask her to show you where it hurts.) The pain moves up to the throat frequently. It does not go to her neck, back, jaw, or arms.

Pain episodes typically last 5–15 minutes or until she takes a glass of water or a calcium carbonate tablet. They occur about 3–5 times a week. She notices the problem more after a big meal, when she lies down, and when she bends over to pick up something from the floor.

The pain does not seem to change when she goes for a walk. There is no shortness of breath or sweating. There is no vomiting or diarrhea, and no blood in the stool. There is sometimes nausea and a sour taste when she has reflux of food. She never coughs or chokes.

**PMH:** Previously Mrs. Grenelli had heartburn only with pregnancy. She has 2 children, ages 2 and 5. Both were normal deliveries. She has had no surgery, and she does not have diabetes, hypertension, or breathing difficulties.

Mrs. Grenelli still takes a prenatal vitamin daily even though she is not pregnant. Her last period was 2 weeks ago and normal.

**Social Hx:** Mrs. Grenelli lives with her husband and 2 children, works as an administrative assistant. She denies the use of recreational drugs. She has an occasional alcoholic beverage and has smoked 1.5 packs of cigarettes a day for the past 10 years.

**Physical Exam**

On physical exam Mrs. Grenelli states she is 20 pounds overweight since the birth of her second child 2.5 years ago. Her head is normal in appearance, and skin and sclera are not jaundiced. Her neck is supple and there is no jugular venous distension.

Mrs. Grenelli's lungs are clear to auscultation anterior and posterior. Heart sounds are normal, without rub, murmur, or gallop. Her abdomen appears normal, and bowel sounds are normative. Percussion in each of the 4 quadrants is normal. There is no enlargement of the liver or spleen. The only tenderness is mild epigastric tenderness. There is no rebound or Murphy's sign.

Mrs. Grenelli's extremities appear normal. She is alert and oriented, in no distress, and does not currently have the chest discomfort.

**THE CLOSING**

**Doctor:** "I'd like to review what you have told me. Please let me know if I've misunderstood. For the past 2 years you have had a burning, heartburn-like feeling in the chest like you did when you were pregnant. It is worse lying down and better when you take an antacid." *(Pause for patient to respond)*

**Mrs. Grenelli:** "Yes, that is correct."

**Doctor:** "On your exam your blood pressure is normal. You have a little tenderness in the tummy. I think what you have is most likely heartburn, also known as GERD."

**Mrs. Grenelli:** "Yes, I thought so too."

**Doctor:** "It's much less likely that this is the beginning of an ulcer or pain from one of the other organs in the belly. I'd like for you to have a blood test today and schedule an endoscopy to look at the inside lining of the stomach to make sure there are no other problems."
Mrs. Grenelli: "I don’t mind a blood test, but can’t we try something else before I go through a big procedure?"

Doctor: “If this is GERD, it often gets somewhat better if you lose any extra weight, stop smoking, and avoid eating large meals before lying down.”

Mrs. Grenelli: "That’s a lot to do all at once! I only have so much willpower."

Doctor: “I’d like you to attend the smoking cessation clinic here at the hospital. That would be the place to start."

Mrs. Grenelli: "And the endoscopy?"

Doctor: «I can see you are reluctant. Why don’t we talk again in a couple of days when I call you with the blood work results."

Mrs. Grenelli: “Thank you, Doctor.”

CHALLENGING QUESTIONS

Mrs. Grenelli: “Can’t you just give me a prescription for the ‘purple pill’ I see advertised on TV?"

Doctor: “It’s important to be sure what is wrong first. We will talk more about treatment when I get the test results back.”

GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Finding(s) Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Site of pain</td>
<td>☑ General appearance</td>
</tr>
<tr>
<td>☑ Symptoms</td>
<td>☑ HEENT: Inspection for jaundice</td>
</tr>
<tr>
<td>☑ Quality of pain</td>
<td>☑ Chest: Auscultation of heart</td>
</tr>
<tr>
<td>☑ Onset of pain</td>
<td>☑ Chest: Auscultation of lungs</td>
</tr>
<tr>
<td>☑ Frequency of pain</td>
<td>☑ Abd: Inspection and auscultation of abdomen</td>
</tr>
<tr>
<td>☑ Radiation of pain</td>
<td>☑ Abd: Percussion of abdomen</td>
</tr>
<tr>
<td>☑ Alleviating factors</td>
<td>☑ Abd: Palpation of abdomen</td>
</tr>
<tr>
<td>☑ Aggravating factors</td>
<td></td>
</tr>
<tr>
<td>☑ Associated symptoms</td>
<td></td>
</tr>
</tbody>
</table>
Case 39

SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient’s problem(s).

30 y/o female
CC: 2 yrs burning substernal chest pain, can radiate to throat and epigastrium
HPI: Feels “burning,” lasts 5-15 min. Happens several times per week. Feels like the same heartburn she had when she was 3rd trimester pregnant.
Worse with large meal, lying down, or bending over
Better with drinking water or taking calcium carbonate tabs
No SOB, vomiting, radiation to back, blood in stool
+sour taste of food reflux, with occasional nausea
PMH: G2P2, LMP 2 weeks ago; states not pregnant
Antacids, no other meds
No surgery, DM, HTN

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient’s problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: T 37.0, BP 122/84, HR 72, RR 16
GA: Alert, NAD
HEENT: Normal, no jaundice
Chest: Lungs clear to A, heart S1, S2, no RMG
Abd: Appears normal, BS+. No hepatosplenomegaly or rebound. Mild epigastric tenderness. Percussion NL all 4 Q’s. Neg Murphy’s
SAMPLE PATIENT NOTE

Data Interpretation: Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.)

Diagnosis #1: Gastroesophageal reflux disease

Differential diagnosis and diagnostic reasoning
History Finding(s) | Physical Exam Finding(s)
--- | ---
5-15 min episodes of chest discomfort | No jaundice
Better with antacids | Normal vital signs
Worse with large meal | 
No vomiting or blood in stool |

Diagnosis #2: Gastritis/peptic ulcer disease

Differential diagnosis and diagnostic reasoning
History Finding(s) | Physical Exam Finding(s)
--- | ---
Pain after eating large meal | Tender epigastrium
Better with antacids | 

Diagnosis #3: Pancreatitis

Differential diagnosis and diagnostic reasoning
History Finding(s) | Physical Exam Finding(s)
--- | ---
Chest pain | Mild epigastric tenderness

Diagnostic Study/Studies
Rectal exam and stool for occult blood
Esophagogastroduodenoscopy
CBC, amylase, lipase
T. bili, alk phos, ALT, AST
CASE DISCUSSION

Notes about the History-Taking
The fact that this patient’s pain started 2 years ago makes a diagnosis of chest pain that causes immediate loss of life unlikely. Finding out the specific factors that improve or worsen these chronic symptoms will narrow down the possibilities.

Notes about the Physical Exam
The physical exam focuses on the abdominal exam in this case. It is more useful to exclude a peptic ulcer or pancreatitis than to prove this is GERD.

Comments about the Patient Note
It is better to document the exact amount of alcohol consumed rather than saying “occasional.” Try to quantify the number of alcoholic beverages, and make a note of it. In this case, you could have written “<2 drinks/wk,” as she would have told you she drinks on average less than 2 alcoholic beverages per week.
Case 40: Hearing Loss

DOORWAY INFORMATION

Opening Scenario
Steve Black is a 65 y/o man with loss of hearing.

Vital Signs
1. Temp: 37.0°C (98.6°F)
2. BP: 130/80 mm Hg
3. HR: 76/min
4. RR: 12/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Hearing loss can occur with age, but it would be a mistake to conclude at the doorway this must be simply the result of the aging process. Loud noises such as from firearm discharge—either onetime events or chronic recreational or occupational exposure—can cause the dysfunction. Wax buildup is another common cause. However, damage from infection or tumor, or even gentamicin, some chemotherapeutic medications, and other meds, can cause hearing loss.

From the chief complaint, you realize a history of sound exposure and past medical illness will be important. This is the case to check the patient’s hearing on the physical exam.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Black’s main complaint is “I can’t hear out of my right ear, and the ear hurts.” He says the pain feels achy and is 4/10, just enough pain to keep him from getting to sleep. The pain and difficulty hearing started about 3 days ago. Mr. Black says he can’t remember having ear pain since childhood. About 5 years ago, he had loss of hearing like this in both ears. In the previous episode, the hearing loss was from wax in the ears.

He has had no cough or facial weakness. He has not noticed any swelling. He had a cold last week with a couple of days of stuffy, runny nose. He thought it might have been allergies, although he has never had allergies to anything else in the past.

Mr. Black has not been exposed to loud noises recently and has no tinnitus.

Allergies: None

Meds: Norvasc

PMH: Mr. Black was hospitalized 8 years ago for left knee replacement (old football injury induced arthritis). He has had no recent trauma or surgery. He has had high blood pressure for about 10 years.

Social Hx: Mr. Black lives and works at home as a publisher.

Physical Exam

Mr. Black is alert and in mild pain, with his hand over his right ear when you walk into the room. Head and ear appear normal to inspection on both sides. There is no facial swelling, no pre- or postauricular nodes, no tenderness over the mastoid on either side. The temporomandibular joint has a full range of motion without any pain.

Mr. Black’s pharynx is clear. There is no significant anterior or posterior cervical adenopathy.

There is no tenderness of the pinna on either side. The pinna is not red, warm, swollen, or tender and does not hurt when wiggled. The eardrum itself is red and bulging on the right. The tympanic membrane is intact. There is no wax.

Mr. Black has decreased hearing on the right compared with the left. He cannot hear fingers rubbing together 3 inches from the right ear; on the left he hears the fingers rubbing together normally. On the right ear, the Rinne test shows the bone conduction is louder than the air conduction. On the left ear, the Rinne test shows the air conduction is louder than the bone conduction. The Weber test sounds louder on the right side.

THE CLOSING

For this closing the SP may feign inability to hear you very well if you stand on his right side. If this happens, here is a way you can handle the situation.

Doctor: (Standing on Mr. Black’s right side) “Mr. Black, I have finished examining you and I’d like to tell what I am thinking.”

Mr. Black: (Frowning, holds hand up to his ear to cup sound and leans forward in an effort to hear)
Doctor: “Excuse me, let me stand on your other side so you can hear me better. (Doctor moves to Mr. Black’s left side and continues) You have told me you have had pain and loss of hearing in the left ear for 3 days. Is that correct?”

Mr. Black: (Looking more comfortable now) “No, Doctor, it’s the right ear.”

Doctor: “So sorry; yes, the right ear. On your exam I find it looks very red. I think you have an ear infection. I will start you on an antibiotic, and I’d like to see you back in a week to recheck your hearing. Do you have any questions?”

Even this closing encounter with a couple of gaffes will not necessarily mean a terrible CIS score, as the doctor recognized the patient’s nonverbal cues and understood the correction about what side the earache was on.

CHALLENGING QUESTIONS

Mr. Black: “Hey, Doc, do I need a hearing aid?”

Doctor: “I suspect you will not need a hearing aid. However, I’d like to clear up this ear infection first, and then see you again to recheck your hearing.”

GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Symptoms: Elicit symptoms of both earache and hearing loss, establish as unilateral</td>
<td></td>
</tr>
<tr>
<td>☑ Intensity: Pain scale, keeps him from sleeping</td>
<td></td>
</tr>
<tr>
<td>☑ Onset: 3 days. Obtaining history that this started after URI is important</td>
<td></td>
</tr>
<tr>
<td>☑ Medication: Ask about ototoxicity</td>
<td></td>
</tr>
<tr>
<td>☑ Aggravating factors: Ask about noise exposure</td>
<td></td>
</tr>
<tr>
<td>☑ HEENT: Test hearing</td>
<td></td>
</tr>
<tr>
<td>☑ HEENT: Do Rinne and Weber</td>
<td></td>
</tr>
<tr>
<td>☑ HEENT: Inspect ear</td>
<td></td>
</tr>
<tr>
<td>☑ HEENT: Palpate ear and surrounding structures</td>
<td></td>
</tr>
<tr>
<td>☑ HEENT: Check for lymphadenopathy</td>
<td></td>
</tr>
<tr>
<td>☑ HEENT: Check TMJ and pharynx in case this is referred pain</td>
<td></td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: 3 days of pain and difficulty hearing out of R ear

HPI: 4/10 achy pain, keeps him from sleeping
   No exposure to loud noises or ototoxic drugs
   Had a “cold” with runny nose immediately prior to pain and hearing loss

PMH: Has not had earache since childhood, had “wax” in ears several years ago.
   Knee replacement 8 years ago. No recent trauma.
   HTN x 10 years

Allergies: None

Meds: Norvasc

SH: Works as a publisher

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: T 37.0, BP 130/80, HR 76, RR 12

GA: Head/external ears without deformity, redness, or swelling

HEENT:
   Hearing decreased on R—cannot hear fingers rubbing together
   R Rinne bc>ac, L Rinne ac>bc. Weber—louder on right
   Ear canal—no wax, clear B/L
   TM—right red, bulging. Left appears normal
   No perforation B/L
   No pre/post-auricular adenopathy, no mastoid tenderness
   TMJ—NL ROM
   Pharynx clear
**SAMPLE PATIENT NOTE**

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

<table>
<thead>
<tr>
<th>Diagnosis #1: Otitis media</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
<tr>
<td>Recent hearing loss after cold</td>
</tr>
<tr>
<td>Achy pain in ear</td>
</tr>
<tr>
<td>No mastoid tenderness</td>
</tr>
<tr>
<td>No wax in ear</td>
</tr>
<tr>
<td>Red, bulging tympanic membrane</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis #2:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
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<tr>
<th>Diagnosis #3:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differential diagnosis and diagnostic reasoning</strong></td>
</tr>
<tr>
<td><strong>History Finding(s)</strong></td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

*No tests indicated*
CASE DISCUSSION

Notes about the History-Taking
Finding out early that the hearing loss is unilateral makes ototoxicity from drugs much less likely. The fact that the symptoms have occurred only for a few days also makes tumor a remote possibility. The history of wax in the ears in the past makes this a higher probability.

If the patient is leaning forward or says he can't hear you when you are standing to his right, make an effort to stand on the patient's left side. If an SP is hard of hearing, you can speak a little louder to see if that aids in communication.

Notes about the Physical Exam
Here the physical exam is useful in excluding wax in the ears as the cause. The Weber and Rinne tests definitively prove this is a conductive hearing loss; this interpretation is given in the Diagnostic Reasoning section.

Be especially careful not to scratch the SP's ear canal or insert into it deeply.

Comments about the Patient Note
The fact that the patient had an upper respiratory infection prior to the earache is suggestive of an infectious cause. Documenting the absence of mastoid tenderness helps show you are thinking about complications of otitis media, namely mastoiditis. (Though this is unlikely after just 3 days, do think of this complication in a chronic otitis case.)

Observe that the heart and lungs were not even on the physical exam checklist. The Weber and Rinne tests are on the checklist wherever there is hearing loss as part of the case.

This case is somewhat artificial in that the SP cannot actually have a red, bulging tympanic membrane. For some simulated physical findings, the SP could give you the finding verbally when you look—for instance, the SP could tell you that he just had the ear examined and that the examination showed a red, swollen TM. Certainly the SP could insert a waxy substance in the ear to simulate hearing loss caused by wax blockage.

In a case as straightforward as this one, you can write just one diagnosis and note “No tests indicated.” If the hearing loss is more chronic in nature, or if the cause is not so clear-cut, an audiogram may be indicated.
Case 41: Hip Pain

DOORWAY INFORMATION

Opening Scenario
Mrs. Pearl White is an 80 y/o female who fell and hurt her hip.

Vital Signs
1. Temp: 37.0°C (98.6°F)
2. BP: 150/90 mm Hg
3. HR: 92/min
4. RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Consider the differential diagnosis of hip pain. Arthritis may be the most common cause, but also consider bursitis, tendinitis, and avascular necrosis. Pain can also be referred to the hip, as in a herniated disk, spinal stenosis, or meralgia paresthetica. Fracture may be either the pelvis (often the acetabulum) or the femur or both.

You can already begin narrowing down the diagnosis based on the Doorway Information: Septic arthritis is excluded, as there is no fever. Slipped capital femoral epiphysis occurs in adolescents, not octogenarians, and is likewise excluded.
FROM THE STANDARDIZED PATIENT

History

**HPI:** Mrs. White says she slipped and fell getting out of the shower. She did not faint or hit her head. This happened 1 hour ago, and she was brought to the hospital by ambulance. She cannot walk because of the severe pain when she tries to move her left leg. The pain is at her lateral hip and all around her groin. Keeping her leg perfectly still makes it better; any movement of the leg makes the pain 10/10, so bad that she thinks she will pass out.

Mrs. White denies chest pain, shortness of breath, palpitations, or weakness prior to falling. Her medications are supplemental calcium and vitamin D.

**PMI:** Mrs. White had a DEXA scan in the past and was told she has osteoporosis. She has had some back pain in past years from compression of the bones in her spine. She states she is getting shorter with age.

Mrs. White had a hysterectomy 40 years ago and has had no other surgery. She lives alone.

Physical Exam

As you walk into the room, Mrs. White is lying on her back with the head of the bed up about 30 degrees. She is not covered with a blanket. Her left foot is externally rotated and left femur is externally rotated as well, with the leg in a frog-leg position. It looks shorter overall compared with the normal side. She is whimpering in pain. Her head is without bruises or deformity, and her neck is not painful under palpation. Palpation of chest, spine, abdomen, arms, and right leg are also without pain unless you simultaneously jiggle the injured left extremity.

The distal pulses in the feet are equal bilaterally. The motor of the right side is somewhat diminished if her left hip moves at all. On the left leg, she can wiggle her toes, and flex and extend her ankle. Any movement of the left hip or knee is prevented by pain. The patient also has pain to palpation of the pelvis.

Her lungs are clear to auscultation bilaterally, and her heart has a normal S1/S2 and is regular, without any murmur.

THE CLOSING

The closing is relatively straightforward. There is no need to mention hospitalization even on those cases where it seems obvious.

Stand where the patient can see you. In general, the sicker or more in pain the patient is, the closer you can stand as a show of support. Be sure not to rest your hands or clipboard on the bed. Remember—every time you shake the bed even a millimeter, the patient experiences a sharp pain.

**Doctor:** "I’ve finished examining you. To review, you have told me that you felt fine until you slipped in the bathroom, and since then you have had severe pain in your hip and have been unable to stand up. Is that correct?" (Pause for response, get the correct history if patient says you are mistaken)

"With the amount of pain you are having, I suspect you have broken your hip. Another possibility is that it is dislocated. I’m going to take an x-ray and a few other tests to check your health in general, and I will plan treatment to get you walking as soon as possible. Do you have any questions?"

**Mrs. White:** "Is it fractured?"

**Doctor:** "Yes, I believe so. I can tell you more in a few minutes when I see the x-ray."

The public does not always understand that a “fractured” bone and a “broken” bone are synonymous.
CHALLENGING QUESTIONS

The challenge of this case is at the introduction phase, to verbalize that you see the patient is in great pain. Be sure to place yourself where the patient does not have to turn to make eye contact. Offer comfort. You can use the drape and protect the patient’s modesty at the same time.

**Doctor:** "I can see you are in a lot of pain. Please let me gently cover your legs so you stay warm.”

**Mrs. White:** “Thank you.”

There may be all the usual questions as well. For instance, how would you handle the situation of a pet at home alone?

**Mrs. White:** “My parrot is home alone. Who will feed him tomorrow?”

**Doctor:** “If you have a number of a neighbor, I can call for you.”

**Mrs. White:** “Thank you.”

This just shows you are willing to go the extra mile to help the patient with all her concerns.

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### GRADING CHECKLISTS

**History Checklist**
- Site of pain
- Intensity of pain
- Onset of pain
- What were you doing when fall occurred?
- Alleviating factors
- Aggravating factors
- Associated symptoms before and after the fall
- Medications
- PMH: Obtain history of osteoporosis
- SH: Who does patient live with?

**Physical Exam Checklist**
- HEENT: Inspection and palpation for injury
- Neck: Palpation for injury
- Chest: Inspection and palpation for injury
- Auscultation of lungs anterior
- Auscultation of heart
- Abd: Palpation of abdomen
- Pelvis: Check for pelvic stability
- Ext: Describe resting state of lower extremities
- Check pulses in feet bilaterally, check distal motor without moving hip bilaterally
- Inspection and palpation of hip bilaterally
SAMPLE PATIENT NOTE

**History:** Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

**CC:** 80-y/o female slipped and fell in shower 1 hr ago.

**HPI:** 10/10 left hip pain since. Unable to walk, arrived by ambulance. No syncope. Did not hit head. No complaints of pain in thorax or abdomen. No SOB, chest pain, or palpitations prior to slip and fall. Minimally better if stays perfectly still, worse with movement.

**PMH:** Hx of osteoporosis, vertebra compression fx most likely, and had DEXA scan on calcium and vit D supplementation

**SH:** Lives alone

SAMPLE PATIENT NOTE

**Physical Examination:** Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

**VS:** T 37.0, BP 150/90, HR 92, RR 16

**GA:** Patient in distress secondary to pain. Patient is supine, with left leg abducted and externally rotated.

**HEENT:** Head and neck nontender to palpation

**Chest:** No deformity and nontender rib cage to palpation. Clear to A B/L. S1, S2 without murmur.

**ABD:** Soft and nontender. Pelvis tender with palpation and compression of the iliac crest

**Ext:** Pt, DP, pulse equal 2/4 B/L. Able to flex and extend at ankle against resistance bilaterally. Pt able to bend R knee but not the L knee secondary to pain.
# SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient's complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

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**Diagnosis #1: Fracture of left hip**

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slip and fall—pain in hip</td>
<td>Shortened externally rotated left leg</td>
</tr>
<tr>
<td>Increased pain with movement</td>
<td>Hip tender to palpation</td>
</tr>
<tr>
<td>Cannot bend hip</td>
<td></td>
</tr>
<tr>
<td>No previous hip surgery</td>
<td></td>
</tr>
</tbody>
</table>

**Diagnosis #2: Dislocation of left hip**

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slip and fall—pain in hip</td>
<td>Shortened externally rotated left leg</td>
</tr>
<tr>
<td>Increased pain with movement</td>
<td>Hip tender to palpation</td>
</tr>
<tr>
<td>Cannot bend hip</td>
<td></td>
</tr>
</tbody>
</table>

**Diagnosis #3: Fracture of left acetabulum**

**Differential diagnosis and diagnostic reasoning**

<table>
<thead>
<tr>
<th>History Finding(s)</th>
<th>Physical Exam Finding(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slip fall—pain in pelvis</td>
<td>Tender hip region</td>
</tr>
<tr>
<td>Pain to palpation over pelvis</td>
<td>Pain with palpation of iliac crest</td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- Left hip and pelvis x-ray
- CXR
- CBC, type and screen, PT, PTT
- ECG
CASE DISCUSSION

Notes about the History-Taking
The patient is unable to turn to look at you. For the introduction, it is important to place yourself in the patient’s line of sight.

It is your responsibility to find out why she fell. Did she faint, or was this a simple trip and fall? It is also important to establish her baseline wellness prior to the fall. Getting the history that there is no previous surgery (i.e., no previous hip replacement) makes an isolated dislocation with this mechanism of injury less likely.

Notes about the Physical Exam
As with any trauma patient, the key here is to inspect and palpate other parts of the body to look for associated injuries. In this patient, it is critically important not to touch or move the broken femur while trying to determine if anything else hurts. The clinical phrase “hip fracture” usually refers to the very proximal femur, but in reality a fracture of the acetabulum is a fracture of the hip joint as well.

Comments about the Patient Note
It is customary to write down the side of the fracture on the Diagnosis line. The most likely diagnosis goes on line 1; the order of diagnoses on lines 2 and 3 is not important.

The workup here primarily consists of plain x-rays of the suspected fractured bones. One could make a case to order only the hip and pelvis x-ray, which would confirm your strong clinical indication that this patient has a broken hip. Ordering a few simple tests to save time in anticipation of surgery would not be counted against you in the exam. Ordering something completely unrelated to the anticipated care of her broken hip would be counted against you.
Case 42: Seizure

DOORWAY INFORMATION

Opening Scenario
A 43 y/o man is brought to you who moments ago collapsed outside your clinic. Identification in his wallet says his name is John Spade.

Vital Signs
1. Temp: 37.1°C (98.8°F)
2. BP: 140/80 mm Hg
3. HR: 90/min
4. RR: 16/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Certainly it is anxiety-provoking to read Doorway Information about an acutely ill patient. But remember: In this exam, there is no treatment, so just stick to your script of introduction, relevant history, physical, and closing by speaking clearly and using excellent interpersonal skills throughout.

“Collapsed” is one of those lay terms that has no specific meaning but invokes someone who may have fallen, may have fainted, or remains unconscious. Immediately think of a differential diagnosis of syncope at the doorway.
FROM THE STANDARDIZED PATIENT

History

HPI: Mr. Spade says he doesn't remember what happened. The last thing he remembers is walking from the parking lot to keep his appointment with you; then there were a lot of people standing around him. Mr. Spade is very embarrassed that he "wet his pants." The only thing that hurts after his fall is his tongue, and he tastes a little blood in his mouth. He guesses he fainted, which has not happened since he was best man at a wedding at age 20.

He says he was coming to see you because he just has not felt well the last 4 months. He has had a little nausea and a diffuse, mild headache (2/10, barely noticeable at times) that is worse in the mornings, and also his family tells him he has been forgetful lately. (His wife has been teasing him that he must be pregnant.) He has not had any vomiting. This has never happened before.

PMH: Mr. Spade takes no medicine and has no allergies. He has been smelling a lavender sachet to alleviate the nausea. He has had no surgeries. He does not have a history of diabetes, hypertension, or high cholesterol. He has never had a seizure or trauma. No one in his family has had a seizure.

Social Hx: Mr. Spade lives in the suburbs, commutes to work on the train each day, and works as a systems analyst. He does not smoke or use recreational drugs. He is on no special diet. He drinks 2 martinis a day and is CAGE-negative.

Physical Exam

When you enter, Mr. Spade's eyes are closed and he is resting comfortably, lying down. He opens his eyes to commands and answers any closed-ended question appropriately but does not volunteer any additional information in the first 5 minutes. After that, he keeps his eyes open, sits up, and appears without distress except for his sore tongue.

His head is without injury (except for a little blood on the tip of his tongue). His pupils are equal, round, and reactive to light. His extraocular movements are normal. Pharynx is clear. Upon your request his tongue protrudes straight out. There is no facial asymmetry. His lungs are clear to auscultation. There is no tenderness to palpation to the neck, chest wall, abdomen, or extremities.

Mr. Spade is alert and oriented to person, place, and time. He moves all 4 extremities equally, and finger-to-nose exam is normal. He can spell "world" backwards and remembers 3 objects.

THE CLOSING

Mr. Spade: “What happened?”

Doctor: “I’d like to finish talking with you and examining you. Then I will be able to answer that question.”

(Doctor finishes his history and physical and then starts the closing)

Doctor: “Now I’d like to tell you what I think happened.”

Mr. Spade: “Good.”
Doctor: “You told me you have had a headache for months and feel forgetful at times. Is that correct?”
(Pause for response)

Mr. Spade: “Yes.”

Doctor: “I see that you bit your tongue when you fainted in the parking lot. The most likely explanation is that you had a seizure today.”

Mr. Spade: “Oh my.”

Doctor: “I’m going to have the nurse take a blood sample. In addition, we need to do a CT scan of your brain.”

CHALLENGING QUESTIONS

Mr. Spade: “Can I have some clean clothes. I’m uncomfortable with wet pants.”

Doctor: “Yes, I’ll ask for some clean scrubs right away.”

This is an artificial situation. You will not be leaving the room until you are ready to write your note or until the 15 minutes have elapsed. The key to all challenging questions is to pay attention to the patient’s concerns and address them.

GRADING CHECKLISTS

<table>
<thead>
<tr>
<th>History Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Symptoms: Need to find out symptoms that happened in the parking lot and the symptoms he originally came to see you about</td>
</tr>
<tr>
<td>✔ Intensity</td>
</tr>
<tr>
<td>✔ Onset</td>
</tr>
<tr>
<td>✔ Aggravating factors</td>
</tr>
<tr>
<td>✔ Alleviating factors</td>
</tr>
<tr>
<td>✔ Associated symptoms</td>
</tr>
<tr>
<td>✔ Previous episodes</td>
</tr>
<tr>
<td>✔ Medications</td>
</tr>
<tr>
<td>✔ Past hospitalizations</td>
</tr>
<tr>
<td>✔ Past trauma</td>
</tr>
<tr>
<td>✔ Family history</td>
</tr>
<tr>
<td>✔ Social history</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Exam Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ HEENT: Inspect the tongue</td>
</tr>
<tr>
<td>✔ HEENT: Palpate head for tenderness</td>
</tr>
<tr>
<td>✔ Neck: Check for tenderness</td>
</tr>
<tr>
<td>✔ Chest: Inspect and palpate for injury</td>
</tr>
<tr>
<td>✔ Chest: Auscultate lungs and heart</td>
</tr>
<tr>
<td>✔ Neuro: Check mini-mental status</td>
</tr>
<tr>
<td>✔ Neuro: Check pupils and cranial nerves</td>
</tr>
<tr>
<td>✔ Neuro: Check motor all 4 extremities</td>
</tr>
<tr>
<td>✔ Neuro: Check finger-to-nose or gait if patient is awake enough</td>
</tr>
</tbody>
</table>
SAMPLE PATIENT NOTE

History: Describe the history you just obtained from this patient. Include only information (pertinent positives and negatives) relevant to this patient's problem(s).

CC: Pt had sudden LOC in parking lot, bit tongue, and was incontinent of urine.

HPI: Pt with 4 mo of 2/10 headache, mild constant diffuse, worse in mornings

Positive: Nausea, feels forgetful lately

Negative: Vomiting

Headaches are worse in the morning

No medications. NKDA

PMH: No hospitalizations, surgery, or trauma. No history of a seizure. Fainted once at a wedding 20 years ago is only prior episode.

Family Hx: No history of similar illness.

SH: No recreational drug use, 2 drinks/day, CAGE-neg

SAMPLE PATIENT NOTE

Physical Examination: Describe any positive and negative findings relevant to this patient's problem(s). Be careful to include only those parts of examination you performed in this encounter.

VS: T 37.1, BP 140/80, HR 90, RR 16

GA: Pt appears sleepy at beginning of interview with eyes closed, however answered all questions appropriately. By end of visit, pt sitting up with eyes open and NAD.

HEENT: Bite mark on tongue. No tenderness to head otherwise.

Neck: Nontender

Chest: No deformity or tenderness. Lungs clear to A. Heart regular.

Neuro: A + O x 3. FERRL EOMI. No facial asymmetry. Motor 5/5 all 4 extremities.

### SAMPLE PATIENT NOTE

**Data Interpretation:** Based on what you have learned from the history and physical examination, list up to 3 diagnoses that might explain this patient’s complaint(s). List your diagnoses from most to least likely. For some cases, fewer than 3 diagnoses will be appropriate. Then, enter the positive or negative findings from the history and the physical examination (if present) that support each diagnosis. Lastly, list initial diagnostic studies (if any) you would order for this patient (e.g., restricted physical exam maneuvers, laboratory tests, imaging, ECG, etc.).

#### Diagnosis #1: Seizure

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
</tr>
<tr>
<td>Seizure today</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

#### Diagnosis #2: Headache from CNS lesion

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
</tr>
<tr>
<td>Headache 4 months</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

#### Diagnosis #3:

<table>
<thead>
<tr>
<th>Differential diagnosis and diagnostic reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Diagnostic Study/Studies**

- CT head
- Electrolytes, BUN, Cr, glucose, calcium
- ECG
- EEG
CASE DISCUSSION

Notes about the History-Taking
This is a case that all the SPs who work for USMLE will want to play. The patient is resting quietly with eyes closed, answers slowly but completely at first, and appears sleepy, but is in a completely normal mental state by the end of the encounter. This patient will not give much information with the open-ended questions. A challenge will be to change your interview style and ask more closed-ended questions. This case is complex: Not only must you ask about what just happened in the parking lot, but you must also remember to ask why the patient was coming to see you in the first place. More than likely the two histories together will yield one unifying diagnosis.

It is unlikely the USMLE will have a second person pretending to be a bystander. However, if there were a bystander available, you should talk to him. This observer would tell you that the patient's head was turned to the side and his extremities were stiff and thrashed around for a minute.

Notes about the Physical Exam
The physical exam includes assessing the mental status, both formally and by observation. The fact that in this case the patient starts sleepy and perks up during the course of the encounter is typical for the post-ictal period immediately following a grand mal seizure. Usually SPs will not be getting worse or better before your eyes during the 15 minutes of a case. But if they are, make a note of it, as it may be an important clue to the diagnosis.

Comments about the Patient Note
It is perfectly fine to ask the patient and record in your note if the patient ever had the diagnosis you are considering. This doctor simply asked Mr. Spade if he ever had a seizure, as this was the main diagnosis he was considering.

The order in which you write the vital signs on the note does not matter.
Case 43: Herpes Zoster (Shingles)

DOORWAY INFORMATION

Opening Scenario
Mr. Evan Larry is a 61 y/o man who complains of chest pain.

Vital Signs
1. Temp: 37.0°C (98.6°F)
2. BP: 134/84 mm Hg
3. HR: 80/min
4. RR: 12/min

Examinee Tasks
1. Obtain a focused history.
2. Perform a relevant physical examination. Do not perform rectal, pelvic, genitourinary, inguinal hernia, female breast, or corneal reflex examinations.
3. Discuss your initial diagnostic impression and your workup plan with the patient.
4. After leaving the room, complete your patient note on the given form.

BEFORE ENTERING THE ROOM

Clinical Reasoning: Chest pain has a broad differential diagnosis and is high risk to the patient if misdiagnosed. In the history, try to determine which intrathoracic structure is responsible. Heart, great vessel, lung, and esophagus are all possibilities, so ask questions for each possibility. Each also has a different pattern of SIQORAAA P. Another possibility is that the pain is coming from outside the chest cavity.

This patient has a last name that is a common first name. It's important to keep the patient's last name straight.
FROM THE STANDARDIZED PATIENT

History
HPI: Mr. Larry states he has had left-sided chest pain for most of the last week. He feels it in his back over the scapula, as well as under the armpit and substernally. It is there most of the time. Sometimes it feels almost like he needs to scratch or it feels like pins and needles. It is just a 3/10 pain but very annoying, and at night he has found he prefers not to wear a shirt. He has never had this before. Mr. Larry is taking acetaminophen, which makes the pain a little better for a few hours. He denies any heavy or tearing feeling in the chest. He has no shortness of breath, nausea, or vomiting. The pain is not better or worse sitting forward or back. He has no cough, and pain does not change with respiration. He is not sweaty.

PMH: Mr. Larry has taken HCTZ for blood pressure for the last 3 years. He has no allergies, and his last immunization was 20 years ago for “lockjaw.” He had left shoulder rotator cuff surgery decades ago after he tore ligaments playing baseball as a minor league pitcher. He denies blood pressure, cancer, or cholesterol problems. He denies recent trauma. When asked, he says he thinks he had chicken pox as a child but does not really remember.

Social Hx: Mr. Larry is a housekeeper at the neonatal ICU at the hospital. He is grandfather of an 8-year-old who is undergoing chemotherapy and lives above him in a 3-family flat.

Physical Exam
Mr. Larry is sitting up and prefers not to move about a lot. His face appears jaundiced. He is not diaphoretic. His eyes are clear. There is no rash on the face. Neck is supple.

Inspection of the chest reveals a red vesicular rash extending from near the spinous process on the left all the way around to center of the sternum at about the T5 dermatome. The lesions are oozing, as demonstrated by a little dried serum on the gown where it had touched them. They are somewhat tender to touch.

His lungs are clear to auscultation on both sides. Heart is normal S1, S2 without rub, murmur, or gallop. Mr. Larry reports no CVA pain, and abdomen is soft and nontender. No other rash is visible on the body.
GRADING CHECKLISTS

**History Checklist**
- Site of pain
- Pain scale
- Quality of pain
- Onset of pain
- Radiation of pain
- Alleviating factors
- Aggravating factors
- Associated symptoms: Ask about SOB, diaphoresis, nausea and vomiting
- Previous episodes
- Medications
- Immunization history
- PMH: Ask about disease that causes immunocompromised status. Ask about chicken pox as a child
- SH: With infectious disease, find out who the patient is likely to expose

**Physical Exam Checklist**
- HEENT: Check for rash on face
- Neck: Be sure is supple
- Chest: Inspection is key
- Chest: Palpation
- Chest: Auscultation
- Heart: Auscultation
- Abd: Palpation
- Skin: Check rest of skin for additional rash

THE CLOSING

This is one of those times where the diagnosis is fairly certain and the exam's dictum that you do not give treatment seems very artificial.

**Doctor:** “Mr. Larry, I have finished your exam and have found this rash on the left side of your chest.”

**Mr. Larry:** “Doc, I swear that was not there this morning. What is it?”

**Doctor:** “This is called shingles. Have you heard of it?”

**Mr. Larry:** “Yes. Will it go away?”

**Doctor:** “Yes, we have medications for this.”

CHALLENGING QUESTIONS

**Mr. Larry:** “When will I be able to go to work and hug my granddaughter again?”

**Doctor:** “When no new red blisters are appearing and they have all crusted over and dried. I’d like to see you in a week, and see if you are ready before seeing your grandchild or going back to work.”

**Mr. Larry:** “I feel like a leper.”

**Doctor:** “This is only temporary.”
Appendix A: Common Medical Abbreviations

The following list provided by the USMLE demonstrates the types of abbreviations that are commonly used on the Patient Note of the Step 2 CS exam. Use abbreviations sparingly. For clarity, it is always better to spell out the acronym or abbreviation.

**Units of Measure**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>kg</td>
<td>kilogram</td>
</tr>
<tr>
<td>g</td>
<td>gram</td>
</tr>
<tr>
<td>mcg</td>
<td>microgram</td>
</tr>
<tr>
<td>mg</td>
<td>milligram</td>
</tr>
<tr>
<td>lb</td>
<td>pound</td>
</tr>
<tr>
<td>oz</td>
<td>ounces</td>
</tr>
<tr>
<td>m</td>
<td>meter</td>
</tr>
<tr>
<td>cm</td>
<td>centimeter</td>
</tr>
<tr>
<td>min</td>
<td>minute</td>
</tr>
<tr>
<td>hr</td>
<td>hour</td>
</tr>
<tr>
<td>C</td>
<td>Celsius</td>
</tr>
<tr>
<td>F</td>
<td>Fahrenheit</td>
</tr>
</tbody>
</table>

**Vital Signs**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>blood pressure</td>
</tr>
<tr>
<td>HR</td>
<td>heart rate</td>
</tr>
<tr>
<td>R</td>
<td>respirations</td>
</tr>
<tr>
<td>T</td>
<td>temperature</td>
</tr>
</tbody>
</table>

**Other Common Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>yo, y/o</td>
<td>year-old</td>
</tr>
<tr>
<td>m</td>
<td>male</td>
</tr>
<tr>
<td>f</td>
<td>female</td>
</tr>
<tr>
<td>b</td>
<td>black</td>
</tr>
<tr>
<td>w</td>
<td>white</td>
</tr>
<tr>
<td>L</td>
<td>left</td>
</tr>
<tr>
<td>R</td>
<td>right</td>
</tr>
<tr>
<td>hx</td>
<td>history</td>
</tr>
<tr>
<td>h/o</td>
<td>history of</td>
</tr>
<tr>
<td>c/o</td>
<td>complaining of</td>
</tr>
</tbody>
</table>
### Asthma

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>recurrent attacks of dyspnea</td>
<td>wheezing</td>
</tr>
<tr>
<td>cough</td>
<td></td>
</tr>
<tr>
<td>wheezing</td>
<td></td>
</tr>
<tr>
<td>hx of asthma</td>
<td></td>
</tr>
</tbody>
</table>

### Anemia

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>fatigue</td>
<td>pallor</td>
</tr>
<tr>
<td>generalized weakness</td>
<td></td>
</tr>
</tbody>
</table>

### Airway obstruction

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>sudden onset</td>
<td>stridor</td>
</tr>
<tr>
<td>change in voice</td>
<td>cyanosis</td>
</tr>
<tr>
<td>choked on food or denture</td>
<td></td>
</tr>
</tbody>
</table>

### Myocardial infarction

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>substernal chest pain</td>
<td>diaphoresis</td>
</tr>
<tr>
<td>dyspnea</td>
<td>(list any abnormal vital signs)</td>
</tr>
<tr>
<td>nausea</td>
<td></td>
</tr>
<tr>
<td>hx of smoking, HTN</td>
<td></td>
</tr>
</tbody>
</table>

### Anaphylaxis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>acute shortness of breath</td>
<td>hives</td>
</tr>
<tr>
<td>wheezing</td>
<td>hypotension</td>
</tr>
<tr>
<td>hx of exposure to allergen</td>
<td>tachypnea</td>
</tr>
<tr>
<td></td>
<td>tachycardia</td>
</tr>
</tbody>
</table>
## RIGHT UPPER ABDOMINAL PAIN

### Biliary colic

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUQ pain—intermittent</td>
<td>no fever</td>
</tr>
<tr>
<td>can last several hours</td>
<td>tender right upper quadrant</td>
</tr>
<tr>
<td>occurs after fatty meal</td>
<td></td>
</tr>
</tbody>
</table>

### Cholecystitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUQ pain</td>
<td>fever</td>
</tr>
<tr>
<td>radiates to R scapula</td>
<td>+ Murphy’s sign</td>
</tr>
<tr>
<td></td>
<td>tender right upper quadrant</td>
</tr>
</tbody>
</table>

### Peptic ulcer disease

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>epigastric RUQ pain</td>
<td>epigastric and RUQ tenderness</td>
</tr>
<tr>
<td>taking aspirin or NSAIDs</td>
<td></td>
</tr>
<tr>
<td>blood in stool</td>
<td></td>
</tr>
<tr>
<td>pain may radiate to back</td>
<td></td>
</tr>
</tbody>
</table>

### Pancreatitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>epigastric and RUQ pain</td>
<td>epigastric and RUQ tenderness</td>
</tr>
<tr>
<td>hx of alcoholism</td>
<td></td>
</tr>
<tr>
<td>hx of gallstone</td>
<td></td>
</tr>
</tbody>
</table>

### Hepatitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>fever</td>
<td>jaundice</td>
</tr>
<tr>
<td>jaundice</td>
<td>tender enlarged liver</td>
</tr>
<tr>
<td>RUQ pain</td>
<td>– Murphy</td>
</tr>
<tr>
<td>behavior that leads to Hep virus exposure</td>
<td>fever</td>
</tr>
</tbody>
</table>

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- **MEDICAL**

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- **DIFFERENTIALS AND COMMON SUPPORTING DOCUMENTATION**
## CHRONIC COUGH

### Asthma

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>recurrent attacks of dyspnea</td>
<td></td>
</tr>
<tr>
<td>cough</td>
<td>wheezing</td>
</tr>
<tr>
<td>wheezing</td>
<td></td>
</tr>
<tr>
<td>hx of asthma</td>
<td></td>
</tr>
</tbody>
</table>

### Allergic rhinitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>runny nose</td>
<td>rhinorrhea</td>
</tr>
<tr>
<td>itchy watery eyes</td>
<td>watery eyes</td>
</tr>
<tr>
<td>recurrent with season</td>
<td>allergic shiners</td>
</tr>
</tbody>
</table>

### Gastroesophageal reflux

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>heartburn</td>
<td>no fever</td>
</tr>
<tr>
<td>sour taste coming up to mouth</td>
<td>no pleuritic pain</td>
</tr>
<tr>
<td>pregnant</td>
<td>no abdominal pain</td>
</tr>
<tr>
<td>better with antacids</td>
<td></td>
</tr>
</tbody>
</table>

### Chronic obstructive pulmonary disease

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>dyspnea</td>
<td>tachypnea</td>
</tr>
<tr>
<td>cough</td>
<td>increased chest AP diameter</td>
</tr>
<tr>
<td>weight loss</td>
<td>clubbing of fingers</td>
</tr>
<tr>
<td>pursed lip breathing</td>
<td>decreased air entry</td>
</tr>
<tr>
<td>chronic condition, smoking hx</td>
<td>prolonged expiratory phase</td>
</tr>
</tbody>
</table>
### Pneumonia

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>pleuritic chest pain</td>
<td>fever</td>
</tr>
<tr>
<td>cough</td>
<td>dullness to percussion</td>
</tr>
<tr>
<td>sputum production</td>
<td>abnormal breath sounds</td>
</tr>
<tr>
<td></td>
<td>increased tactile fremitus</td>
</tr>
</tbody>
</table>

### ACE inhibitor

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>taking ACE inhibitor</td>
<td>no fever</td>
</tr>
<tr>
<td>dry, nonproductive cough</td>
<td>normal lung exam</td>
</tr>
</tbody>
</table>

### Tuberculosis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>chronic cough</td>
<td>fever</td>
</tr>
<tr>
<td>hemoptysis</td>
<td>lung findings</td>
</tr>
<tr>
<td>weight loss</td>
<td>low weight</td>
</tr>
<tr>
<td>exposure to TB</td>
<td></td>
</tr>
<tr>
<td>night sweats</td>
<td></td>
</tr>
</tbody>
</table>

### Pulmonary malignancy

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>hx of smoking</td>
<td>weight loss</td>
</tr>
<tr>
<td>cough</td>
<td>wheezing</td>
</tr>
<tr>
<td>chest pain</td>
<td></td>
</tr>
<tr>
<td>shortness of breath</td>
<td></td>
</tr>
<tr>
<td>hemoptysis</td>
<td></td>
</tr>
</tbody>
</table>
## ACUTE PELVIC PAIN

### Appendicitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>midabdominal pain migrating to RLQ</td>
<td>RLQ tenderness</td>
</tr>
<tr>
<td>anorexia</td>
<td>+ obturator sign</td>
</tr>
<tr>
<td>feverish</td>
<td>+ psoas sign</td>
</tr>
<tr>
<td>acute onset</td>
<td>fever</td>
</tr>
</tbody>
</table>

### Diverticulitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLQ pain</td>
<td>fever</td>
</tr>
<tr>
<td>fever</td>
<td>LLQ tenderness</td>
</tr>
<tr>
<td>diarrhea often</td>
<td></td>
</tr>
<tr>
<td>vomiting</td>
<td></td>
</tr>
</tbody>
</table>

### Pelvic inflammatory disease

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>fever</td>
<td>fever</td>
</tr>
<tr>
<td>lower abdominal pain</td>
<td>lower abdominal tenderness</td>
</tr>
<tr>
<td>vaginal discharge</td>
<td>+ pain with cervical motion tenderness</td>
</tr>
<tr>
<td>sexually active</td>
<td>shuffling gait</td>
</tr>
</tbody>
</table>

### Ectopic pregnancy

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>lower abdominal pain</td>
<td>lower abdominal tenderness</td>
</tr>
<tr>
<td>may radiate to top of shoulder</td>
<td></td>
</tr>
<tr>
<td>late period or known pregnant</td>
<td></td>
</tr>
</tbody>
</table>
Ovarian torsion

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>sudden onset</td>
<td>lower abdominal tenderness</td>
</tr>
<tr>
<td>unilateral lower pain</td>
<td></td>
</tr>
<tr>
<td>nausea and vomiting</td>
<td></td>
</tr>
<tr>
<td>can start with exercise</td>
<td></td>
</tr>
</tbody>
</table>

BLOOD IN STOOL

Hemorrhoid

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>bright red blood</td>
<td>no abdominal tenderness</td>
</tr>
<tr>
<td>streaks usually on stool or toilet paper</td>
<td>no fever</td>
</tr>
<tr>
<td>hx of patient able to palpate hemorrhoid</td>
<td></td>
</tr>
</tbody>
</table>

Anal fissure

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>pain with defecation</td>
<td>no fever</td>
</tr>
<tr>
<td>bright red blood with straining at stool</td>
<td>no abdominal tenderness</td>
</tr>
</tbody>
</table>

Diverticulosis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>abdominal cramps</td>
<td>age &gt; 40</td>
</tr>
<tr>
<td>blood mixed with stool</td>
<td>pallor</td>
</tr>
<tr>
<td>may be recurrent</td>
<td></td>
</tr>
</tbody>
</table>

Infectious diarrhea

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>diarrhea prominent</td>
<td>fever</td>
</tr>
<tr>
<td>bloody stool</td>
<td>diffuse abdominal tenderness</td>
</tr>
<tr>
<td>vomiting</td>
<td>no rebound</td>
</tr>
<tr>
<td>others with same illness</td>
<td></td>
</tr>
<tr>
<td>acute onset</td>
<td></td>
</tr>
</tbody>
</table>
**Inflammatory bowel disease**

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>fever</td>
<td>fever</td>
</tr>
<tr>
<td>diarrhea</td>
<td>diffuse abdominal tenderness</td>
</tr>
<tr>
<td>chronic onset</td>
<td></td>
</tr>
<tr>
<td>positive family history</td>
<td></td>
</tr>
</tbody>
</table>

**SYNCOPE**

**Vasovagal**

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>emotional, stressful situation</td>
<td>normal vital signs (when recovered)</td>
</tr>
<tr>
<td>quick recovery in minutes</td>
<td></td>
</tr>
<tr>
<td>no seizure activity</td>
<td></td>
</tr>
</tbody>
</table>

**Arrhythmia**

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>palpitations</td>
<td>abnormal heart rate</td>
</tr>
<tr>
<td>chest discomfort</td>
<td>irregular heartbeat</td>
</tr>
<tr>
<td>shortness of breath</td>
<td></td>
</tr>
<tr>
<td>medication history</td>
<td></td>
</tr>
</tbody>
</table>

**Orthostatic hypotension**

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>alcohol ingestion</td>
<td>tachycardia</td>
</tr>
<tr>
<td>medication as cause</td>
<td>hypotension when standing</td>
</tr>
<tr>
<td>dehydration</td>
<td>advanced age</td>
</tr>
</tbody>
</table>

**Aortic stenosis**

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>shortness of breath</td>
<td>age 60 and up</td>
</tr>
<tr>
<td>anginal chest discomfort</td>
<td>narrow pulse pressure</td>
</tr>
<tr>
<td>family history of same</td>
<td>displaced PMI</td>
</tr>
</tbody>
</table>
### Hypertrophic cardiomyopathy

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>palpitations</td>
<td>heart murmer</td>
</tr>
<tr>
<td>dizziness</td>
<td></td>
</tr>
<tr>
<td>shortness of breath</td>
<td></td>
</tr>
<tr>
<td>younger athlete</td>
<td></td>
</tr>
<tr>
<td>family history</td>
<td></td>
</tr>
<tr>
<td>occurs with exercise</td>
<td></td>
</tr>
</tbody>
</table>

### UNILATERAL SWOLLEN LEG

#### Baker cyst rupture

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>previous arthritis of knee</td>
<td>swelling and fullness behind knee</td>
</tr>
<tr>
<td>red, swollen, tender calf</td>
<td></td>
</tr>
</tbody>
</table>

#### Cellulitis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>red, swollen, tender calf</td>
<td>fever</td>
</tr>
<tr>
<td>distal break in skin of leg</td>
<td>inguinal adenopathy</td>
</tr>
</tbody>
</table>

#### Lymphatic obstruction

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>chronic leg swelling</td>
<td>no fever</td>
</tr>
<tr>
<td>chronic skin changes</td>
<td>inguinal adenopathy</td>
</tr>
<tr>
<td>not red or tender</td>
<td>lower abdominal mass</td>
</tr>
</tbody>
</table>

#### Deep vein thrombosis

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>pain and swelling recently in leg</td>
<td>lower leg red</td>
</tr>
<tr>
<td>risk factor for hypercoagulable state</td>
<td>lower leg warm</td>
</tr>
<tr>
<td></td>
<td>lower leg swollen</td>
</tr>
<tr>
<td></td>
<td>lower leg tender</td>
</tr>
</tbody>
</table>
## BILATERAL SWOLLEN LEGS

### Heart failure

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>dyspnea on exertion</td>
<td>rales in lungs</td>
</tr>
<tr>
<td>pedal edema</td>
<td>gallop heart rhythm</td>
</tr>
<tr>
<td>orthopnea</td>
<td>distended neck vein</td>
</tr>
<tr>
<td>hx of HTN, smoking, coronary disease</td>
<td>distended liver</td>
</tr>
</tbody>
</table>

### Nephrotic syndrome

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>foamy urine</td>
<td>edema bilaterally</td>
</tr>
<tr>
<td>weight gain</td>
<td></td>
</tr>
<tr>
<td>edema also around face</td>
<td></td>
</tr>
<tr>
<td>fatigue</td>
<td></td>
</tr>
</tbody>
</table>

### Liver failure

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>jaundice</td>
<td>jaundice</td>
</tr>
<tr>
<td>fatigue</td>
<td>ascites</td>
</tr>
<tr>
<td>right upper quadrant pain</td>
<td>right upper quadrant tenderness</td>
</tr>
<tr>
<td></td>
<td>mental status changes</td>
</tr>
<tr>
<td></td>
<td>edema bilaterally</td>
</tr>
</tbody>
</table>

### Obesity/venous insufficiency

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>pain, cramp, paresthesia in legs</td>
<td>red legs and ankles with skin changes</td>
</tr>
<tr>
<td>elevated body mass index</td>
<td>bilateral edema</td>
</tr>
</tbody>
</table>
**VOMITING**

*Note:* Be as specific as possible in selecting the diagnosis. For a symptom as general as vomiting it is helpful to think of possible causes based on organ system or other groupings as shown below. For the actual exam, be specific. For example, in the first section below, write “Vomiting from chemotherapy,” not “Vomiting from medication.”

### Medications (chemotherapy, general anesthesia, opioids)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>temporal history of medications followed by vomiting</td>
<td>no fever</td>
</tr>
<tr>
<td>no blood in emesis</td>
<td>abdomen soft, nontender</td>
</tr>
<tr>
<td>vomiting</td>
<td></td>
</tr>
</tbody>
</table>

### Gastrointestinal (rotavirus, norovirus, food poisoning, Campylobacter)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>may be other people also sick</td>
<td>possible fever</td>
</tr>
<tr>
<td>abdominal cramps and pain</td>
<td>abdominal tenderness</td>
</tr>
<tr>
<td>diarrhea possible</td>
<td></td>
</tr>
<tr>
<td>vomiting</td>
<td></td>
</tr>
</tbody>
</table>

### Vestibular system (motion sickness, benign paroxysmal vertigo)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>hx of occurring on boat, moving car</td>
<td>possible nystagmus</td>
</tr>
<tr>
<td>vertigo</td>
<td></td>
</tr>
<tr>
<td>vomiting</td>
<td></td>
</tr>
</tbody>
</table>

### Central nervous system (migraine, mass lesion, bleeding arteriovenous malformation, seizure, trauma, pseudotumor cerebri)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>headache</td>
<td>may have unilateral weakness</td>
</tr>
<tr>
<td>scotoma (for migraine)</td>
<td>mental status changes</td>
</tr>
<tr>
<td>vomiting</td>
<td></td>
</tr>
</tbody>
</table>
Vomiting from abdominal organs (appendicitis, cholecystitis, acute hepatitis, peptic ulcer, bowel obstruction, torsion of gonads)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>vomiting</td>
<td>fever</td>
</tr>
<tr>
<td>possible blood in emesis</td>
<td>abdominal tenderness</td>
</tr>
<tr>
<td>anorexia</td>
<td>possible rebound</td>
</tr>
</tbody>
</table>

Endocrine and toxins (alcohol, diabetic ketoacidosis)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>weakness, fatigue</td>
<td>dry mucous membranes</td>
</tr>
<tr>
<td>dehydration</td>
<td></td>
</tr>
<tr>
<td>darkening of skin</td>
<td></td>
</tr>
<tr>
<td>vomiting</td>
<td></td>
</tr>
</tbody>
</table>

Acute cardiovascular illness (myocardial infarction, pulmonary embolism, aortic dissection)

<table>
<thead>
<tr>
<th>History</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>vomiting</td>
<td>increased respiratory rate</td>
</tr>
<tr>
<td>chest pain</td>
<td>heart murmur</td>
</tr>
<tr>
<td>back pain</td>
<td>unequal pulse</td>
</tr>
<tr>
<td>SOB</td>
<td></td>
</tr>
</tbody>
</table>
Practical Tools to Help You Score Higher

Fully updated to the recent exam changes, Kaplan’s USMLE Step 2 CS Core Cases is the only guide to highlight challenging cases frequently seen on the Step 2 CS exam. With explicit, practical advice on communication, interpersonal skills, physical exam maneuvers, and more, Kaplan USMLE Step 2 CS Core Cases demystifies what standardized patients and test graders are looking for.

Features:

• Understand the logic behind each step—key for international medical graduates

• Health checkups, work physicals, telephone calls, end-of-life issues, diabetes checkups, domestic violence, and HIV-related issues

• Each case covers:
  › What to do before entering the room
  › Instruction on performing focused histories and physical exams
  › Advice on how to close properly with a patient
  › Challenging questions you might face
  › A thorough case discussion
  › Sample patient note—including the new differential diagnosis and diagnostic reasoning component

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