A Guide to Case Presentations

Print-out document to accompany doc.com module 37: The Oral Presentation
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1. General Description – Giving an oral presentation on ward rounds is an important skill for medical student to learn. It is medical reporting which is terse and rapidly moving. After collecting the data, you must then be able both to document it in a written format and transmit it clearly to other health care providers. In order to do this successfully, you need to understand the patient’s medical illnesses, the psychosocial contributions to their HPI and their physical diagnosis findings. You then need to compress them into a concise, organized recitation of the most essential facts. The listener needs to be given all of the relevant information without the extraneous details and should be able to construct his/her own differential diagnosis as the story unfolds. Consider yourself an advocate who is attempting to persuade an informed, interested judge the merits of your argument, without distorting any of the facts.

Depending on the purpose of the presentation, different parts of the database are included. The same patient will be presented very differently to the cardiology consultant who is asked to give advice on the optimal treatment for their CHF, the surgeon who is considering aortic valve replacement, the social worker who is helping obtain disability funding and the attending who needs to know who was admitted last night. As you progress in your training, you will become expert at adapting and editing the story to serve its various purposes. Last year you learned to collect and organize the complete database and do a complete writeup. In taking your history you have gathered more information than you will include in your write-up and likewise, your write-up contains more information than you will include in an oral presentation.

2. Basic principles

   a. An oral case presentation is NOT a simple recitation of your write-up. It is a concise, edited presentation of the most essential information.

   b. A case presentation should be memorized as much as possible by your 3rd year rotations. You can refer to notes, but should not read your presentation.

   c. Length – this will vary depending on your service. A full medicine presentation in attending rounds should be under 5 minutes. A presentation in the hallway on walk rounds on medicine should take no more than 3 minutes.

3. Similarities and differences between written and oral presentations

   a. Both are an organized reconstruction of the patient’s narrative into a coherent HPI, not a random assortment of facts.

   b. Both follow the same organizational format (see #4 below)

   c. Separation of subjective data – derived from the patient, family and medical record and objective data which includes your physical exam and today’s lab/radiographic data

4. Basic structure for oral case presentations – the order parallels that of the write-up.

   a. Identifying information/chief complaint (ID/CC)

   b. History of present illness (HPI) including relevant ROS only

   c. Other active medical problems

   d. Medications/allergies/substance use (note:

   e. The complete ROS should not be presented in oral presentations

   f. Brief social history (current situation and major issues only)

   g. Physical examination (pertinent findings only)

   h. One line summary

   i. Assessment and plan
4. Organization and Content of Case Presentation

1. Identifying Information/Chief Complaint (II/CC) – you want flesh out the bare bones enough to make your presentation engage the listener and give them a feel for the patient as a person.
   a. Structure: “Mr./Mrs./Ms. ___ is a ___ year-old man/woman who presents with a chief complaint of ___ (or who was electively admitted for evaluation of ___, or who comes in to clinic for follow up of _____)”.
   b. Only include the race or ethnicity of the patient if it is relevant and will make your listener weigh diagnostic possibilities differently.
   c. To orient your listener, the identifying information should include the patient’s relevant active medical problems, of which there are usually no more than four. You will list these problems here by diagnosis only, and will elaborate on them later in the “HPI” or “other medical problems.” Your small group facilitator should help you identify which problems are relevant when this is not obvious.

   Good Examples:

   Mr. Smith is a 55 year-old man with a long history of diabetes mellitus, cirrhosis, and chronic obstructive lung disease, who presents with a chief complaint of fever and productive cough…

   Mrs. Jones is a 39 year-old woman who was electively admitted for evaluation of exertional dyspnea. Her active problems include rheumatoid arthritis and hypertension. She was in her normal state of health until…

   c. Avoid presentation of distracting information, such as an overly detailed discussion of the patient’s medical problems in your introductory remarks:

   Examples:

   BAD #1: …his problem list includes coronary artery disease – myocardial infarction x 2, the last in 1996, multiple negative rule-outs since, ejection fraction equaled 35% in 1994; diabetes mellitus x 10 years, insulin requiring for five years, complicated by retinopathy; chronic obstructive lung disease – with a FEV1* of 1.2 liters and steroid dependence…

   GOOD #2: …his active problems include coronary artery disease, diabetes mellitus, and chronic obstructive lung disease….

   In example 1 the listener will forget the chief complaint by the time you reach the history of present illness. Example 2 is concise and does not interrupt the listener’s train of thought between the chief complaint and the history of present illness; relevant information about each of these problems should be introduced when appropriate in the “HPI” or “other medical problems.”

2. History of Present Illness (HPI)
   a. Introductory sentence:

   Mr./Mrs./Ms.____ was in his/her usual state of ____ (e.g., excellent health/poor health) until ____(e.g., three days prior to admission) when he/she developed the ___ (acute/gradual) onset of _____.

   The introductory sentence may include details of past medical history if the patient’s illness directly relates to an ongoing chronic disease.

   b. Don’t mention that an event occurred “on Saturday”, rather refer to the time relative to the day of admission, e.g. 3 days prior to admission.

   Examples:

   Mr. Smith has a long history of chronic obstructive lung disease characterized by two block dyspnea on exertion, FEV1 of 1.0 liter, and home oxygen therapy. He was in this usual state of health until three days prior to admission when he developed the gradual worsening of his shortness of breath, associated with a cough productive of yellow sputum and a fever of 102_…..

   Mr. White has a long history of coronary artery disease characterized by three myocardial infarctions, the most recent in 1995, ventricular tachycardia treated with amiodarone, and congestive heart failure. He was in his usual state of health, with angina occurring once per week, until the night of admission when, while watching a football game, he developed the acute onset of severe substernal chest heaviness…
b. Content of history of present illness - specifically characterize the major presenting symptoms including patient attributions (what the patient thinks is causing the symptoms), any prior episodes, and complications and the relevant ROS questions (these include sx related to the major and adjacent organ systems, constitutional complaints such as fever and weight loss and epidemiological risk factors or exposures. If there was any evaluation of the chief complaint prior to hospital admission, this should be included.

The following is a useful mnemonic to make sure all those bases are covered:

C  character, circumstances
L location – deep or superficial, well or poorly localized
E  exacerbating factors
A  alleviating factors
R  radiation of pain
A  associated sx
S  severity on a 1-10 scale
T  temporal features - timing (intermittent/constant), duration, frequency, changes over time (progressive, stable or improving)

Examples:
A poorly characterized and too brief history of present illness:
…admitted for evaluation of chest pain. He was well until three weeks prior to admission when he began to feel chest heaviness whenever he exerted himself. He saw his local doctor who prescribed antacids with little benefit. The pain woke him last night so he came into the emergency room for evaluation. His other problems include…….

A more complete example:
…admitted for evaluation of chest pain. He was in his usual state of excellent health until three weeks prior to admission when he developed the gradual onset of intermittent chest pain, characterized as poorly localized deep substernal heaviness which radiated to his left shoulder, lasting about five minutes per episode, occurring several times a day, aggravated by exertion and relieved by rest. Associated with the pain were shortness of breath and nausea. One week prior to admission he was seen by a local doctor who, without other testing, diagnosed gastritis and prescribed antacids without benefit. The chest pain was stable until two hours prior to admission, when the patient awoke with a more severe version of the same pain that lasted until he came to the emergency room. He was quickly transferred to the coronary care unit. There was no history of cough, heartburn, weight loss, or fever, chills or sweats. The patient’s risk factors for coronary artery disease include a positive family history and a cholesterol of 310 in 1998. He has no history of high blood pressure or diabetes and has never smoked cigarettes.

3. Other Medical Problems
   a. Include here details of those problems that are active and you feel are relevant to the present illness. These are usually the same problems you mentioned in “identifying information”. For example, diabetes mellitus is relevant to a patient admitted with angina. Consider each condition separately, recounting the details in a chronological fashion. In other words, first explain the patient’s h/o coronary disease, telling the story from the beginning to the present. Then discuss their peptic ulcer, and than his/her COPD. In general, discuss the most important problem first, and then present the others from next most important to least important.

Example:
…his other medical problems include insulin-requiring diabetes for 12 years, complicated by retinopathy, polyneuropathy, and nephropathy. His recent creatinine was 1.7…….

b. Key words and phrases summarize an ongoing chronic illness and are discussed in this section (or may be included with the HPI if they are related to the current problem as discussed above). The key words vary with the nature of the problem. You will learn these as you gain clinical experience and by listening to others summarize and present cases. In general, key words emphasize date of diagnosis, its treatment, current symptoms, complications, and any recent objective tests.
Examples (key words underlined):

….long history of **chronic obstructive lung disease** with **steroid dependence** and the requirement for **home oxygen therapy**, a 1994 FEV1 of 0.8L, and **three hospital admissions** for exacerbations in the last year. He has never been intubated…

….two year history of **congestive heart failure**, felt to be **secondary to alcoholic cardiomyopathy**, characterized by chronic two block dyspnea on exertion, **three pillow orthopnea**, and **ankle edema**. In addition to his long term **therapy with furosemide and enalapril, digoxin** was added six months ago. An **echocardiogram** four months prior to admission showed four chamber enlargement and global hypokinesis……

c. In the case presentation you avoid presentation of irrelevant diagnoses. What is irrelevant is not always obvious to you at your level of training and also improves with your clinical experience. Consultation with your facilitator and preceptor will help you make this determination. “gonorrhea in 1945, malaria in 1940, cataract extraction in 1972, and tinea pedis” are probably not relevant during presentation of the diabetic with crescendo angina.

You must know all of the patient’s problems and include them in your write-up, but presentation of problems which are not relevant to the current active problems only distracts your listener.

4. Medications, Allergies, Substance Use
   a. Provide a list of all prescribed medications and a list of any relevant non-prescription medications. Unless you have the chance to review the patient’s chart, you will only be able to give as much detail about medications as the patient can give you.
   b. Report any relevant drug allergies and the type of reaction (for example, “the patient developed a skin rash approximately 20 years ago after receiving penicillin and carries the diagnosis of penicillin allergy”).
   c. Summarize substance use not already mentioned in HPI. However, if it has been mentioned in the HPI, do not repeat it.

5. Social History (brief) – we are more than our habits and marital status. Please don’t try and reduce patients to these facts alone. Summarize their social history into a brief (2-3 sentences) paragraph commenting on their current life situation including work, living situation, and support systems, and any ongoing social issues of note. It is often the social history that explains why the patient has fallen ill now, as opposed to some other time or not at all: patients may have chaotic lives and little social support so don’t have the help they need to follow therapeutic recommendations, few financial resources and can’t afford their meds, depression and feelings of hopelessness about their conditions, etc. These factors, if not addressed, will tend to lead to rehospitalizations. If appropriate, include information about the patient’s personal wishes for health such as advance directives (their living will and durable power of attorney) including discussion concerning these issues.

6. Physical Examination
   a. General description – be colorful, allow the listener to visualize the patient. “The patient was short of breath” is inferior to “the patient was sitting on the edge of the bed, leaning forward and gasping for breath.”
   b. Vital signs should always be mentioned, including postural changes if relevant.
   c. Mention only the relevant positive findings and relevant negative findings. An example of the latter includes (in the dyspneic patient) “the exam is remarkable for clear lungs bilaterally.” Use concise but complete descriptions of positive findings.

7. Summary and Assessment (brief)
   a. This takes the following form: “…the patient’s major presenting problem is ____ (best positive statement you can make; say “chest pain” and avoid statements like “rule-out myocardial infarction”). The differential diagnosis includes ____, ______, and _____. The diagnosis of _____ appears to be the most likely of these because _____.

Example:
…..the patient’s main problem is chest pain, which could be due to a myocardial infarction, a dissecting aortic aneurysm, pericarditis, and a variety of other diagnoses such as pneumonia, pulmonary embolus, or esophageal disease. MI seems most likely, because his description of chest pain is classic for angina and because his ECG reveals a new injury current in the inferior leads.
5. Common Mistakes in Oral Presentation

1. **Slow labored rhythm** - a wandering, disorganized and desultory presentation is the most common problem encountered in early students. The ability to convert a written history and physical examination into a compressed presentation requires careful thought and practice. Ask your attending or facilitator how long a presentation they would like. You should maintain eye contact with your listener during the presentation, which means that you should refer to notes and not read your write-up. In order to keep it under 5 minutes, you will need to PRACTICE it two or three times in advance. This is helpful to do with a classmate who can give you feedback and then let you try again. It is also worth taping yourself and listening to the tape – you would often give yourself feedback.

2. **History of present illness too brief** - 90% of correct diagnoses come from the history alone; do not sabotage your listener’s understanding of the case by omitting important information. The HPI portion of the oral presentation, as a general rule, should take 1/3 to 1/2 of the presentation time. Common pitfalls include incomplete characterization of the major symptoms, omitting pertinent negatives or positive ROS questions, and omitting specific information about past history that relates to the present problem.

3. **Failure to use parallel reference points** - in both write-ups and oral presentation, relate time in “hours/days/weeks prior to admission”. Avoid “at 2:00 in the morning of last Wednesday” or “on May 25th; instead, say “three hours prior to admission”, or “at 2:00 am, three days prior to admission”.

4. **Editorializing in the middle of the presentation** - avoid comments like “do you even want to hear this?…” or “cardiac examination revealed a systolic murmur….well, I thought heard it, but the resident didn’t….so maybe it isn’t there….I don’t really know….”

5. **Use of negative statements instead of positive statements.** Positive statements add color and accuracy to your presentation. “Chest Xray shows normal heart size” is better than “chest X-ray shows no cardiomegaly”. “In summary, this patient’s problem is acute dyspnea” is better than “the patient’s problem is rule-out pneumonia”.

6. **Repetition** - vary your sentence structure. An overly repetitious presentation is monotonous for the listener. “On pulmonary exam, the lungs were normal…on cardiac exam, the heart sounds were…..on lymph node exam, there were no cervical nodes…etc” is difficult to listen to and unnecessary – your listener knows that S1 and S2 are part of the cardiac exam! Use brief descriptive sentences: “an S3 gallop was heard at the left lower sternal border.”

7. **Disorganization** - this problem is a result of lack of rehearsal. Stopping at the end of the HPI to say “Oh, I can’t believe I forgot to tell you this” will kill a presentation. Or “…in summary, this patient…wait, I forgot to tell you the most important thing…” You need to be aware that this can happens even with careful preparation. The best advice when you forget something crucial to your presentation, is to work it in as soon as possible and don’t make a big deal about it.

8. **Physical findings presented without proper terminology** - for example, “lymph node exam shows some small cervical nodes” is not as descriptive as “…there were three soft tender mobile nodes in the left anterior cervical chain which measure 1 x 1 x 2 cm each… “ Commitment to accuracy will improve your physical examination skills.

9. **Diagnoses used instead of descriptions in the physical examination** - diagnoses belong in the assessment, descriptions in the physical examination. For example, avoid “exam showed the murmur of mitral regurgitation” …instead say “a 2/6 holosystolic murmur was heard at the apex when radiated to the axilla”. Avoid “skin exam showed psoriatic lesions on the elbows…”: instead, say “there were several 2 cm. diameter round plaques with silver scale distributed on the extensor surface of the elbows…”

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