

SAMPLE CASE
Boston University School of Medicine Clinical Skills Center

OUTLINE FOR FOCUSED PROBLEMS

Short Case Title: Woman with Headaches

(Students: Note this is the patient's "script". You would only see the "Opening Scenario" on page four, and the write-up form on page 10.)

Laura Jackson, a 39-year-old woman, presents to a primary care center for evaluation of headaches

Ms. Jackson, who works as an accountant, has been noticing worsening headaches over the past month. At first she only noticed them late in the day after she had been working on the computer for many hours. Now she has difficulty seeing the computer screen earlier in her work day, and often has a headache late in the day. Distancing herself from the screen seems to help the blurriness somewhat, but then the numbers seem very small.

In general the headache is felt as a pressure across her forehead. Tylenol usually helps resolve it. The typical pain is described as a 4-5/10 on the pain scale, lasts an hour, and occurs 2-3 days/week. Yesterday she had a more severe headache after work that went up to 7/10 and lasted for several hours. She felt nauseated but did not vomit. The only thing that helped was going to bed. Now she has a mild headache.

She has good energy and denies change in weight, polyuria, polydypsia, vomiting, muscle weakness or numbness. She felt a little warm yesterday during the headache, but does not own a thermometer and did not take her temperature. Some colleagues at work have had colds and she is starting to get a stuffy nose and her neck feels sore. She has not been to see an eye doctor in about 8 years, and never wore glasses. She has been drinking more coffee than usual. She denies floaters or visual scotomata. She has had very heavy periods for the past six months.

Social History:

Ms. Jackson has been under some stress at work recently. She was promoted one year ago and has had to work longer hours. The company has been downsizing and several colleagues have been laid off. While she doubts her job is in jeopardy it has been upsetting, and has increased everyone's work load. She never married, and is not involved with a sexual partner. She is involved in a local theater company and enjoys

doing community productions. She lives with her elderly parents. Her mother suffers from arthritis and diabetes.

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Woman with Headaches

Ms. Jackson does not smoke, has a rare glass of wine (CAGE -) and never used drugs. She drinks three cups of coffee per day (increased over baseline).

The patient's concern, if asked, of a brain aneurysm. Her aunt died of a ruptured brain aneurysm.

PHx:

Menorrhagia- pelvic ultrasound showed uterine fibroid last year

Medication – OCP (for menorrhagia)

Allergies – Keflex causes rash

Habits:

Non-smoker

Rare glass of wine

CAGE –

No recreational drugs

Psychosocial:

Single, without sexual partner. Works full time as an accountant. Does community theater.

FHx:

Father – alive and well

Mother, age 75, DM

Maternal aunt died of a ruptured brain aneurysm

DESCRIPTION OF PATIENT, PATIENT BEHAVIOR, AFFECT, MANNERISMS

Attitude: Actively seeking help, appears worried about her symptoms though it is not apparent why. Will not openly state her concern (of brain aneurysm) unless asked. If the student tries to reassure her without knowing what her concern is, she will say: “But how do you know it is not something serious?”

Appearance: Well dressed, obviously concerned.

PATIENT DEMOGRAPHICS

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Woman with Headaches

- 1) Age range: 30-50
- 2) Gender: female
- 3) Race: any
- 4) Socioeconomic level: middle class
- 5) Educational level: two-year college degree

**ANY QUESTIONS PATIENT WILL CONSISTENTLY ASK OR
CHALLENGES THAT PATIENT WILL PRESENT TO EXAMINER**

“I have to do something about these headaches.”

“Can you figure out what is wrong?”

PROPS NEEDED FOR CASE

Visual acuity testing card

OPENING SCENARIO

Name: Laura Jackson
Age: 39
CC: headache

You are working with a primary care doctor at a neighborhood health center. Your next patient is a 39-year-old woman who presents for evaluation of headache.

Vital Signs:

BP 110/80
Heart Rate 72 bpm
Temperature 99.1°F

You have 15 minutes to:

- Obtain a focused and relevant history.
- Perform a focused and relevant physical examination (**DO NOT REPEAT VITAL SIGNS**).
- Counsel the patient where appropriate.
- Discuss your findings and your diagnostic impressions with the patient.
- Discuss your initial management plans with the patient.

You have 10 minutes to:

After seeing the patient, complete the related paperwork.

You have 8 minutes to:

Return to the room to receive feedback from the patient.

HISTORY CONTENT CHECKLIST

| | |
|-----|---|
| 1. | Examiner introduces self and explains his/her role or position. |
| 2. | Examiner asks or uses patient's name. |
| 3. | Chief complaint: headache |
| 4. | Onset – 1 month |
| 5. | Pattern: worsening |
| 6. | Setting: late in the day |
| 7. | Associated symptoms: blurry vision |
| 8. | Quality: frontal pressure |
| 9. | Yesterday 7/10 |
| 10. | Duration |
| 11. | Pertinent positive: felt feverish yesterday |
| 12. | Pertinent positive: neck soreness |
| 13. | Pertinent positive: nausea |
| 14. | Pertinent positives: increased coffee consumption |
| 15. | Pertinent positives: job stress |
| 16. | Pertinent negatives: no visual aura |
| 17. | Alleviating factors: Tylenol |
| 18. | Alleviating factors: rest |
| 19. | PHx – menorrhagia |
| 20. | Medication – OCP |
| 21. | Allergies: Keflex - rash |
| 22. | Not sexually active |
| 23. | Occupational history – accountant |
| 24. | FHx |
| 25. | Diagnostic impression discussed with patient |
| 26. | Elicited concern: aneurysm |
| 27. | Initial management plans discussed with patient |

Excerpted from the MASTER INTERVIEW RATING SCALE
UMass Medical School Standardized Patient Program

ITEM 1 - ORGANIZATION

| [5] | [4] | [3] | [2] | [1] |
|---|-----|--|-----|---|
| The interviewer structures the interview with a clear beginning, a middle, and end. In the opening, the interviewer identifies himself and his role and determines the agenda for the interview. The body of the interview consists of a series of topics (chief complaint, past history, etc.) pursued systematically. The interview is closed (quality of closure is judged later). | | The interviewer seems to follow systematically a series of topics or agenda items most of the time. However, parts of the interview might be better organized. | | The interview seems disjointed and unorganized. |
| | | OR | | |
| | | The body of the interview is organized but there is no clear opening or no closure. | | |

ITEM 3 - TRANSITIONAL STATEMENTS

| [5] | [4] | [3] | [2] | [1] |
|---|-----|---|-----|--|
| The interviewer utilizes transitional statements when progressing from one subsection to another which assure the patient that the information being sought is necessary and relevant, e.g. "Now I'm going to ask you some questions about your family because we find that there are certain diseases that occur among blood relatives, and it will help us to know what health risks are in your family." | | The interviewer sometimes introduces subsections with effective transitional statements, but fails to do so at other times. Some of the transitional statements used are lacking in quality, e.g., "Now I'm going to ask you some questions about your family." | | The interviewer progresses from one subsection to another in such a manner that the patient is left with a feeling of uncertainty as to the purpose of the questions. (No transitional statements are made.) |

ITEM 4 - QUESTIONING SKILLS - TYPE OF QUESTION

| [5] | [4] | [3] | [2] | [1] |
|---|-----|--|-----|---|
| The interviewer begins information gathering with an open-ended question. This is followed up by more specific or direct questions which allow him to focus in on the pertinent positive and negative points that need further elaboration. major line of questioning is begun with an open-ended question. No poor questions are used. | | The interviewer often fails to begin a line of inquiry with open-ended questions but rather only employs specific or direct questions to gather information. | | The interviewer asks many why questions, multiple questions, or leading questions, e.g., "Your child has had diarrhea, hasn't he?". "You want your child to have a tetanus shot, each don't you?" |
| | | OR | | |
| | | The interviewer uses a few leading, why, or multiple questions. | | |

ITEM 7 - QUESTIONING SKILLS - SUMMARIZING

| | | | | |
|---|-----|--|-----|--|
| [5] | [4] | [3] | [2] | [1] |
| The interviewer summarizes the data obtained at the end of <u>each</u> major line of inquiry or subsection (i.e., History of Present Illness, Past Medical History), in an effort to verify &/or clarify the information or as a precaution to assure that no important data are omitted. | | The interviewer sometimes summarizes the data at the end of some lines of inquiry but fails to do it consistently or completely. | | The interviewer fails to summarize any of the data obtained. |

ITEM 8 - QUESTIONING SKILLS - LACK OF JARGON

| | | | | |
|---|-----|---|-----|---|
| [5] | [4] | [3] | [2] | [1] |
| The interviewer asks questions and provides information in language which is easily understood; content is free of difficult medical terms and jargon. If jargon is used, the words are <u>immediately defined</u> for the patient. Language is used that is appropriate to the patient's level of education. | | The interviewer occasionally uses medical jargon during the interview, failing to define the medical terms for the patient unless specifically requested to do so by the patient. | | The interviewer uses difficult medical terms and jargon throughout the interview. |

ITEM 10 - RAPPORT-FACILITATIVE BEHAVIOR

| | | | | |
|---|-----|--|-----|---|
| [5] | [4] | [3] | [2] | [1] |
| The interviewer puts the patient at ease and facilitates communication by using primarily non-verbal techniques including good eye contact, relaxed, open body language, an appropriate facial expression and tone of voice, and by eliminating physical barriers (such as sitting behind the desk or standing over a patient's bed). Verbal cueing (uh-huh, yes, go on..) or echoing a few words of the patient's last sentence is also used. When appropriate, physical contact is made with the patient. | | The interviewer makes some use of facilitative techniques but could be more consistent. One or two techniques are not used effectively, e.g., frequency of eye contact could be increased or some physical barrier may be present. | | The interviewer makes no attempt at putting the patient at ease. Body language is negative or closed or an annoying mannerism (foot or pencil tapping) intrudes on the interview. Eye contact is not attempted. |

ITEM 12 - PATIENT'S PERSPECTIVE

| | | | | |
|--|-----|---|-----|--|
| [5] | [4] | [3] | [2] | [1] |
| The interviewer elicits the patient's perspective on his illness, including his beliefs and concerns about its etiology and his understanding about its treatment and prognosis. The interviewer specifically questions for hidden concerns. | | The interviewer elicits only some of the patient's perspective on his illness or his hidden concerns. | | The interviewer fails to elicit the patient's perspective, or to elicit any hidden concerns. |

ITEM 19 - RAPPORT - ENCOURAGEMENT OF QUESTIONS

| | | | | |
|--|-----|--|-----|---|
| [5] | [4] | [3] | [2] | [1] |
| The interviewer encourages the patient to ask questions about the topics discussed. He also gives the patient the opportunity to bring up additional topics or points not covered in the interview, e.g., "We've discussed many things. Are there any questions you might like to ask concerning your problem? Is there anything else at all that you would like to bring up?" This is usually done at the end of the interview. | | The interviewer provides the patient with the opportunity to discuss any additional points or ask any additional questions but neither encourages nor discourages him, e.g., "Do you have any questions?". This is usually done at the end of the interview. | | The interviewer fails to provide the patient with the opportunity to ask questions or discuss additional points. The interviewer may discourage the patient's questions, e.g., "We're out of time." |

PHYSICAL EXAMINATION CHECKLIST

| | | |
|--|-----|--|
| | 1. | Wash hands |
| | 2. | Visual acuity – near testing |
| | 3. | Visual acuity – proper technique |
| | 4. | Examine external eyes (must use light source) |
| | 5. | Extraocular movements |
| | 6. | Funduscopy exam: performed |
| | 7. | Funduscopy exam: proper technique |
| | 8. | Assess for sinus tenderness by palpation or percussion |
| | 9. | Examine nasal mucosae (must use light source and ear speculum) |
| | 10. | Examine teeth |
| | 11. | Examine posterior pharynx (say “ahhh”) |
| | 12. | Neck – palpation (mild diffuse tenderness) |
| | 13. | Neck – ROM (supple) |

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Woman with Headaches

You now have ten minutes to complete the write-up.

1. Succinctly summarize the patient's history including pertinent positives and negatives relating to the chief complaint as well as all the past history (PMH, PSH, Meds, Allergies, FH, SH).

2. Summarize your PHYSICAL EXAM findings including pertinent positives and negatives relating to the presenting complaint.

3. Write a problem representation in the standard format.

4. Create a DIFFERENTIAL DIAGNOSIS of three items (points will be deducted if you list more than 3). For each disease on your differential diagnosis, list **only positive findings** from the history **AND** physical examination that increase the probability of your diagnoses.
REMEMBER: Positive findings can come from HPI, PMH, PSH, Medications, Allergies, FH, and SH.

1. Diagnosis A
 - a. Supportive historical evidence:
 - b. Supportive physical exam evidence:
2. Diagnosis B
 - a. Supportive historical evidence:
 - b. Supportive physical exam evidence:
3. Diagnosis C
 - a. Supportive historical evidence:
 - b. Supportive physical exam evidence:

5. What would you do next to **DIAGNOSE/EVALUATE** this patient? List up to, but not more than, five recommendations that would be **MOST USEFUL** in diagnosing the patient. These

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Woman with Headaches

may include diagnostic screening questionnaires, laboratory studies, imaging, or procedures. **DO NOT INCLUDE TREATMENT** (you will not receive any credit for those).

1 _____

2 _____

3 _____

4 _____

5 _____

LAURA JACKSON: PEP SCORESHEET

| | <i>History</i> | <i>Points</i> |
|-----|---|---------------|
| 1. | CC: frontal headache | 1 |
| 2. | Onset: 1 month | 1 |
| 3. | Progression: worsening | 1 |
| 4. | Location: frontal | 1 |
| 5. | Associated symptom: nausea | 1 |
| 6. | Associated symptom: blurry vision | 1 |
| 7. | Associated symptom: neck soreness | 1 |
| 8. | Associated symptom: low grade fever | 1 |
| 9. | Alleviating factor: Tylenol | 1 |
| 10. | Pertinent positives: cold symptoms | 1 |
| 11. | Pertinent positives: job stress | 1 |
| 12. | Pertinent positives: increased coffee consumption | 1 |
| 13. | Pertinent negatives: no neurological or visual symptoms | 1 |
| 14. | PHx: Menorrhagia | 1 |
| 15. | Allergies – Keflex causes rash | 1 |
| 16. | Meds – OCP | 1 |
| 17. | FHx – brain aneurysm | 1 |
| | <i>PE findings:</i> | |
| 18. | General description | 1 |
| 19. | Visual acuity | 1 |
| 20. | Pupillary exam | 1 |
| 21. | Funduscopy exam | 2 |
| 22. | No sinus tenderness | 1 |
| 23. | Dental exam | 1 |
| 24. | Neck supple (no neck stiffness) | 2 |
| | <i>Differential Diagnosis</i> | |
| 25. | Tension headache (3 points) | 3 |
| 26. | History- worse late in day | 1 |
| 27. | History- work stress | 1 |
| 28. | History- frontal | 1 |
| 29. | PE- normal funduscopy exam | 1 |
| 30. | PE- no neck stiffness | 1 |
| 31. | Caffeine withdrawal headache (3 points) | 3 |
| 32. | History- coffee | 1 |
| 33. | Eye strain (2 points) | 2 |
| 34. | History- worse after working on computer | 1 |
| 35. | History- worse late in day | 1 |
| 36. | PE- visual acuity | 1 |
| 37. | Migraine (2 points) | 2 |
| 38. | History- associated nausea | 1 |
| 39. | Sinus (2 points) | 2 |
| 40. | History- stuffy nose | 1 |
| 41. | Brain tumor (1 points) | 1 |

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| | | | |
|--|-----|--|---|
| | 42. | Brain aneurysm (1 points) | 1 |
| | 43. | History- family history | 1 |
| | 44. | Pseudotumor cerebri (2 point) | 2 |
| | 45. | History- OCP | 1 |
| | 46. | Meningitis (1 point) | 1 |
| | 47. | History- reported stiff neck | 1 |
| | 48. | PE- low grade fever | 1 |
| | 49. | Anemia (1 point) | 1 |
| | 50. | History- menorrhagia | 1 |
| | | <i>Diagnostic Work-up</i> | |
| | 51. | Formal Ophthalmology evaluation (accept DFE) | 1 |
| | 52. | CBC | 1 |
| | 53. | Head CT | 0 |
| | 54. | MRI brain | 0 |
| | 55. | Lumbar puncture | 0 |
| | 56. | Glucose | 0 |

Laura Jackson- EOTYA Sample Case Write-up
By Anna Lee

1. Succinctly summarize the patient's HISTORY including pertinent positives and negatives relating to the presenting complaint.

39 year old woman c/o headache
HPI: Intermittent pressure type headache worsening over two months, 2-3x/ week, 4-5/10 on pain scale, lasting an hour. Most severe HA yesterday assoc with nausea, and mild pain persists today. +nausea +blurry vision –fever Pt concern: aneurysm.
PHx: Menorrhagia, Meds: OCP
Allergies: Keflex-> rash, Habits: no cigs, CAGE-
FHx: maternal aunt with hx cerebral aneurysm
Psychosocial: single, not sexually active, works as accountant

2. Summarize your PHYSICAL EXAM findings including pertinent positives and negatives relating to the presenting complaint.

Well dressed, in mild distress from headache
Eyes: Visual acuity 20/20 at 18 inches OU, PERRL, no scleral injection
funduscopic exam with normal venous pulsations notes, no AV nicking
Nose: no sinus tenderness, no discharge noted
Oropharynx: post pharynx without erythema
Neck: supple

3. Write a problem representation in the standard format.

[Name] [age] [gender] with a history significant for [relevant PMH, PSH, Meds, All, FH, SH] who presents with [relevant symptoms, signs, labs, and imaging] suggestive of [most likely diagnosis].

Laura Jackson is a 39 yo cisgender woman with a history of menorrhagia* who presents with worsening, 5/10, intermittent pressure-like headache associated with blurry vision and nausea with a normal examination most suggestive of a migraine.

*The menorrhagia is relevant here because migraines can be associated with menstruation.

4. Create a DIFFERENTIAL DIAGNOSIS of three items (points will be deducted if you list more than 3). For each disease on your differential diagnosis, list **only positive findings** from the history **AND** physical examination that increase the probability of your diagnoses. **REMEMBER:** Positive findings can come from HPI, PMH, PSH, Medications, Allergies, FH, and SH.

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EOTYA Sample Case

Woman with Headaches

1. Migraine
 - a. History- She has associated nausea, seems progressive
 - b. Physical-
2. Tension-type HA
 - a. History- seems to be worse late in the day, helped by Tylenol
 - b. Physical- normal funduscopic exam, no neck stiffness
3. Brain Tumor
 - a. History- Headache up to 7/10 in intensity
 - b. Physical- I can't think of anything as her exam is normal

5. What would you do next to **DIAGNOSE/EVALUATE** this patient? List up to, but not more than, five recommendations that would be **MOST USEFUL** in diagnosing/evaluating the patient. These may include diagnostic laboratory studies, imaging, or procedures. **DO NOT INCLUDE TREATMENT** (you will not receive any credit for those answers).

1. Hemoglobin/hematocrit
2. Head CT
3. Lumbar Puncture
4. LP to measure CSF pressure
5. Formal visual acuity testing