

Appendices:

Box A- Mock patient script

Box B- Student handout of patient's health record, student roles

Box C- Professor's role/ script

Box D - Results table

Box A: SCRIPT for MOCK PATIENT

Geriatric Assessment

Ms. or Mr. M.P., a 75-year old person

Retired high school teacher

Widowed last December (had been married for 52 years.)

Lives in an apartment in the city. Has not been for medical care for ~6 months. Has felt generally poorly and very tired this week so comes to the primary care clinic for evaluation.

*The students take a history; let them ask questions instead of just offering the information.***Chief complaint:** Fatigue**History of Present Illness:**

It is hard for you to say when it started because you have felt less energetic for the past year since your spouse died, but you have felt acutely fatigued in past week.

You have no energy to do your usual activities. You did not attend your usual social event such as book club yesterday.

You did not make the bed this morning as usual and did not get dressed until after breakfast. You Put off your weekly shopping trip a couple of days ago thinking you would feel better but you have not.

Your appetite has diminished a lot in the past few days. Had a can of soup for dinner last night and have not eaten breakfast today. You are not hungry at all for past few days.

You are not having any nausea or vomiting; you have not moved bowels in 2 days.

Usually eat plenty of fruit and fiber to “stay regular” and have BM every 1-2 days.

Nothing else to report – no fever or chills. No chest pain. Have a slight chronic cough from post nasal drip and GERD. You slept 8 hours last night- usually sleep 7. Somewhat more short of breath with exertion, but too tired to exert yourself lately. Regarding your diabetes, you used to check blood sugar a few times a week, but forgot about it lately, usually was ~100-140 before breakfast. Not aware of any low blood sugar.

Past medical history:

1. Hypertension x 10 yrs
2. Arthritis of back, hips, knees
3. Type 2 diabetes x 8 yrs
4. GERD
5. Lumbar back pain
6. Allergic rhinitis (dust allergy)
7. Occasional insomnia

Medications: (Regular medications in bold)

1. **Lisinopril/HCT- 20/25 one in am**
2. **“OTC Arthritis Pain relief”** – 2 tabs AM & PM
3. **Glyburide 10 mg in am and 5mg @supper**
4. **Omeprazole (Prilosec) 20 mg daily**
5. **Metformin 850 mg BID**
6. “CVS sinus/allergy formula” if severe nasal congestion*
7. “Tylenol PM” 2 tablets as needed for a “sleep aid”
8. Cyclobenzaprine (Flexeril)10 mg prn back pain

(*Note you take this over the counter drug as needed, but it is not on your medication list on your chart- the NP student should ask you if you take other meds; report then that you take this frequently for allergy symptoms.)

Surgeries- none**Health Care Maintenance: Immunizations:** Flu shot last September, Pneumovax age 65, Zostavax age 70.**Screening:** Last colonoscopy 9 years ago- negative (ad lib other screenings if student asks)**Family History-**

Father died of colon cancer age 72; had DM. Mother died CVA age 74.

Has two brothers – age 78 and 80- both have HTN, one has CAD, DM

Has two sons, ages 50 and 52- alive and well- one lives in NYC, one in LA; No grandchildren

Social History- College educated. You live on pension from public schools.*Religion – whatever your usual religion is.**Hobbies- whatever you want to say. Discuss your social life and interests ad lib.**Answer however you want regarding driving, smoking & alcohol***Review of systems** unremarkable for further contributing information to today’s fatigue. Weight has been stable as far as you are aware. You try to “avoid sweets” for diabetic menu plan but recent poor appetite noted. You have not had night sweats, change in usual post- nasal drip type cough. You **Fell twice in the past 6 months-** once over a curb and another time when entering the house with a large bag. Deny chest pain, palpitations, swelling in feet. **You note more frequent urination and you leak sometimes with the urge if you cannot get to the bathroom**

quickly. You get up usually 1-2x/night to urinate, sometimes some dribbling with the urge, but no pain with urination, nor blood in urine. You wear glasses for reading. Hearing has been gradually declining in recent years, especially for higher pitched tones. Get teeth cleaned every 6-8 months.

Further history:

Student # will ask questions about your activities of daily living

Student # will ask questions about mood- deny that you are feeling down or have lost interest in your usual activities

Student # - Nutritional assessment: Your mock history should be in keeping with recent loss of about ten pounds (part of this is you are dehydrated from your illness)

Student # Will ask you questions about your urinary incontinence- see HPI

Student # will review your code status, health proxy, and end of life wishes

Exam: Vital signs: BP 100/ 60, HR 90, RR 24, Temp 98° F, O2 sat 89% RA, Pain 0/10.

Weight _____ (down ten pounds from baseline)

Point of Care tests: glucose 240 mg/dL, A1C – 8.5%. UA clear amber urine, specific gravity 1.025, 2+ glucose, trace protein; no blood, WBC, or nitrites.

Labs 6 mos ago: Normal CBC, chemistry panel and TSH, A1c of 7%, Lipids ok

More exam: The students will practice their exam skills

Student # will check your thinking: State three items, draw a clock, and recall 3 items

Student # will assess your hearing with a whisper test in both ears

Student # will assess your vision. Students will take turns assessing your:

General appearance: ___ Skin: ___ Mouth: ___ Lungs: ___ Heart: ___ abdomen ___

Hands: ___ Shoulders ___ Neck ___ Hips, legs, feet ___ strength ___ DTRs ___ Neuro check of your ability to reach, walk on tiptoes/heels, tandem walk, Romberg.

Timed Up and Go -- You will rise from the chair, walk 10 ft, turn around, and return to chair. (The professor will have a chair set up with a tape on the floor at the 10 foot range.)

[After the exam is completed, all groups will reconvene together as at the start.]

Box B: Mock Patient's "chart" Geriatric Primary Care Visit- Health Record, student roles

Ms. or Mr. MP, a 75-year-old retired teacher comes for sick visit for "fatigue"

Has not been for medical care for ~6 mos

Student #1 to elicit info on current complaint, HPI:

All students may clarify other history-

Past medical history:

1. Hypertension x 10 yrs
2. Arthritis of back, hips, knees
3. Type 2 diabetes x 10 yrs
4. GERD
5. Low Back Pain
6. Allergic rhinitis (dust allergy)
7. Occasional insomnia

Medications: (Regular medications in bold)

1. **Lisinopril/HCT- 20/25 one/day**
2. **"Arthritis Pain relief"** – 2 tabs AM & PM
3. **Glyburide 10 mg in am, 5 mg at supper**
4. **Omeprazole (Prilosec) 20 mg daily**
5. **Metformin 850 mg BID**
6. Cyclobenzaprine (Flexeril) 10 mg prn back pain
7. "Tylenol PM" 2 tablets prn insomnia

Surgeries- none; **Psychiatric history-** None

HCM: Immunizations: Flu shot last fall, Pneumonia vaccine age 65, Zoster age 70.

Screening: Last colonoscopy 6 years ago- negative; lipid levels are acceptable

Family History- Father died of colon cancer age 72; had DM. Mother died CVA age 74.

2 brothers – age 78 and 80- both have HTN, one has CAD, DM

2 sons, ages 50 and 52- alive and well- one lives in NYC, one in LA

No grandchildren

Social History- College educated, lives in city in an apt on pension

Student # ____: ask about Habits/ substance use, and review of systems:

Exam: Weight _____ (down ten pounds from baseline)

Exam: Vital signs: BP 104/ 60, HR 90, RR 24, Temp 98° F, O2 sat 88% RA, Pain 0/10, **Point of Care tests:**

glucose 240 mg/dL, A1C – 8.5%. UA clear amber urine, specific gravity 1.025, 2+ glucose, trace protein; no blood, WBC, or nitrites.

Labs 6 mos ago: Normal CBC, chemistry panel and TSH, A1c of 7%, Lipids ok

Now move through students in alphabetical order, doing geriatric assessment:

#__ Functional Assessment, #__: Depression screen #__: Nutrition assessment; #__ Vision & hearing screening ,

#__: Cognitive impairment screening,

__#: Incontinence questions; #__: ENT and cardiopulmonary exam #__: Neuro/MSK exam. #__ Timed up and

Go. **All students:** review meds, clarify end-of-life wishes

Concluding discussion: What is the differential dx for the patient's fatigue? What other labs and tests are needed to further identify the cause? Discuss the importance of the status of his diabetes and renal function in his current health? What medications might be problematic and needed changing per Beer's List? What other questions do you have?

Box C: The Professor's Role/ Script

BEFORE the CLASS

1. PROVIDE A SCRIPT TO EACH MOCK PATIENT. Talk to the patient actors well before the simulation exercise. Describe the process and the patient's story to the patient actors. Explain the importance of the students asking questions to get the information, and that the patient had been relatively healthy up until the loss of their spouse; they are a bit depressed and not taking care of themselves as well as they used to – not eating as healthy food, not checking their blood sugar as well as they used to when their spouse was alive. And now the patient is ill- severe fatigue and breathless with exertion. The patient always has a cough from post nasal drip- maybe a little worse. (the student needs to figure out that the “patient” has pneumonia, but, being somewhat dehydrated, and given that older adults present atypically, the patient does not have abnormal breath sounds, and has taken an arthritis pain formula so there is no evidence of fever.) The “patient” does not realize their blood sugar has crept up and their weight has dropped quite a bit. The actors otherwise can ad lib answers that are not in the script, such as about their hobbies.
2. Ensure there is adequate space for the group of students to work with the mock patient. Set up the 10-foot tape or string on the floor from the foot of a good chair so the students can practice the timed up and go test.
3. Have made enough copies of the “patient chart” and the geriatric mini toolkit for each student

AT THE START OF THE CLASS:

Have the patient actors – the volunteer retirees - first be themselves (not acting) as a panel before the students for ~10 minutes. Each one says a little about themselves, what they enjoy about this stage of life and the challenges they have faced. Talk about wellness and aging here. Allow students to ask questions. Encourage the volunteers to share stories they may have about bad or good experiences being patients.

Explain to the students that each student handout has student roles in alphabetical order so that the students move through the list in alphabetical order to share the role of the provider, and access “tools” for the assessment in the geriatric mini-tool kit as needed. Go over the geriatric mini tool kit with them so they see that the following tools can be accessed:

- a. Rapid Geriatric Screener of ADLs- If positive do Katz ADL and Lawton IADL
- b. Hearing inventory if the patient reports hearing trouble or fails the whisper test
- c. Use 10-gram monofilament to check sensation on soles of feet, check vibratory sense at great toes, and look at shoes for wear, protection
- d. PHQ2 – If positive do PHQ9
- e. Mini-cog- if score is 3 or less, do the Montreal Cognitive Assessment
- f. Nutritional Health Checklist
- g. Urinary Incontinence questionnaire (3QI)
- h. STEADI falls risk screen and info about the TUG test

DURING THE CLASS:

Circulate in the lab and answer questions, watch technique, look for variations from the script, help all groups come to a close 20 minutes before the end.

WRAP UP: LEAD THE CONCLUDING DISCUSSION:

1. What is the differential dx for the patient's fatigue?
 - a. Depression? However, this would not cause shortness of breath with exertion, and should have been ruled out with the screening
 - b. Blood glucose fluctuations may be contributing? Yet would be more periodic and not causing persistently severe fatigue of the past few days; most older adults with diabetes do not note significant fatigue with a blood glucose of 240
 - c. Anemia? An underlying heart disease (for which patient has risk factors) could be acutely worse with anemia, but what would have caused this patient to be anemic? What signs of anemia might you look for on exam? (Conjunctival pallor, palmer crease pallor, fecal occult blood if in clinic)
 - d. Hypothyroidism? What other symptoms would you look for?
 - e. An infectious process? This patient has no evidence of UTI with POC UA. What about a lung infection? Can an older adult have pneumonia without fever or severe cough? YES
 - f. Did or would any of you check the lungs for transmitted voice sounds?

2. What other labs and tests are needed?

CBC with differential? Complete metabolic panel? TSH? CXR? Other? Provide rationale

Given that after the patient had a chest x-ray confirming pneumonia in the lingula, emergency room providers could employ the CURB-65. The CURB 65 is a useful tool for decision making regarding whether older adults with pneumonia can be managed at home or should be admitted.

Lets say for the sake of this exercise, that your patient, MP, goes home on oral antibiotics. You will need to reassess them in a few days and reconsider their health status.

3. Discuss the importance of the status of his diabetes in his current health?
 - a. Weight loss could be from poor control of blood sugar
 - b. Older adults may not have any symptoms of thirst or hunger with hyperglycemia
 - c. Polyuria can be masked by urinary incontinence or make incontinence worse
 - d. Older adults with Type 2 diabetes and an occult infection or other stressful event can develop hyperglycemic hyperosmolar state where they get profoundly hyperglycemia and hyperosmolar over days to weeks – if this person were sicker and POC glucose was higher, you should consider that and admit them for IV insulin and electrolyte correction
 - e. Hyperglycemia is dehydrating and the patient needs to be better hydrated
4. What medication changes are needed (deletions/additions)?
 - a. Change from glyburide (on the Beer's list because makes the older adult too prone to hypoglycemia) to glipizide, or consider a safer alternative such as a DPP4 inhibitor or SGLT2 antagonist; know the renal function with metformin
 - b. Acetaminophen (APAP) for arthritis pain okay, but avoid multiple sources of APAP (such as Tylenol PM), and follow renal liver function; avoid muscle relaxants (cause confusion)
 - c. Be aware that long term use of PPIs can lead to altered immunity (Inc C diff)
5. What other team members need to be consulted?
 - a. Social worker- if needed to Connect to community resources
 - b. Dietitian – for updated menu plan to control glucose
 - c. Dentist – overdue for teeth cleaning if history so revealed
 - d. Ophthalmologist- if has not seen eye doctor for over a year
 - e. Consider podiatrist for nail trimming; may need extra depth shoes or orthotics
 - f. Consider referring for geriatric team consultation

Box D- Table of results where results were the highest and the lowest:

| Survey Question- How well did the case example demonstrate/ highlight ... (this concept in geriatrics?) | Average score (%) on 5 pt Likert scale with 1= not at all, 5= extremely |
|---|--|
| 1 – the richness of experience among older adults? | 4.55 (91%) |
| 2 – that the patient’s fatigue was not age-related? | 4.09 (81.8%) |
| 3 – that the fatigue was an atypical presentation of the underlying disorder? | 4.3 (86%) |
| 4 – that acute illness can lead to rapid decline in an older adult with multiple chronic conditions | 4.26 (85.2%) |
| 5 – that geriatric screening instruments can help guide the assessment to the critical problem areas | 4.36 (87.2%) |
| 6 – that geriatric assessment skills for assessing an older adult’s mood & cognition build on basic assessment skills | 4.38 (87.6%) |
| 7 – the importance of functional decline on quality of life | 4.51 (90.2%) |
| 8 – the application of the Beer’s Criteria in identifying medications that are potentially inappropriate? | 4.62 (92.4%) |
| 9 – the ease and value of doing the Timed Up and Go test? | 4.47 (89.4%) |
| 10 – that the incontinence questions led to a high probability of urge incontinence? | 4.23 (84.6%) |
| | 88.0% overall average |