Communicating with patients and families about unnecessary tests and treatments

Resource Stewardship and Communication OSCE Sample Scenario – Unnecessary MRI for lower back pain

Part of the CanMEDS Resource Stewardship Curriculum Toolkit Series

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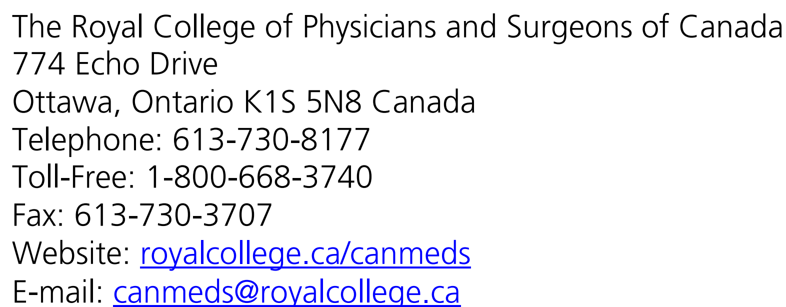
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Resource Stewardship and Communication OSCE Sample Scenario – Unnecessary MRI for lower back pain

Outlined below is a family medicine/emergency medicine focused OSCE on resource stewardship and patient communication, focused around imaging for lower back pain. Following the outline of the station is a set of suggestions for ways to modify the station for other specialties based on the Choosing Wisely Canada (CWC) recommendations.

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INSTRUCTIONS TO RESIDENT

John/Jane Lee is a 47-year-old patient that you are seeing in the emergency room (ER) for a five-day history of intermittent lower back pain.

During the history, you found out the pain hasn't changed over the past five days, and is dull and located midline at the lumbar spine. There is no radiation and no neurological symptoms. John/Jane does not have any fever, recent trauma, weight loss, night-time pain, or morning stiffness. Their pain improves with forward flexion.

John/Jane is otherwise healthy and has not taken any medication for this. They only take vitamin D and fish oil pills daily. They have never smoked, drank, or used any street drugs. They continue to work at their job as a manager in the human resources department, which they enjoy. They exercise most days and are trying to continue this despite the pain.

On physical exam, their HR is 64 and BP is 124/81. The complete neurological exam is normal. Passive straight leg raise is negative. John/Jane has palpable, tender muscle tension in their lower back. Their pain is worse with lower back extension. The remainder of their physical exam is normal.

The nurse in the ER informs you that the patient has mentioned that they think they need an MRI to assess their back pain.

You are re-entering the room after consulting with the CORE back pain tool, which indicates John/Jane has Pattern 2: Facet Joint Pain that would be best managed with acetaminophen/NSAID treatment, forward flexion repeatedly during the day, and physiotherapy.

John/Jane is now waiting to see you to discuss the management plan. You are aware that an MRI is not indicated.

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INSTRUCTIONS FOR THE STANDARDIZED PATIENT

Overview:

- Your name is John/Jane Lee.
- You are 47 years old.
- You live at home with your spouse and one son (10 years old).
- You work in an office as a manager of the human resources department and you really like your job.
- You do not have a family doctor (your previous family doctor retired and you have not looked for a new one as of yet).
- You presented to the emergency department today because of lower back pain, which you have never experienced before.

Background medical history:

- You are in good health
- No previous hospitalizations (except if female, you have had one uncomplicated vaginal delivery)
- You take vitamin D and fish oil pills daily
- You do not have any allergies
- You exercise four times a week, and do not smoke, drink alcohol or use illicit drugs

Medical history related to current visit:

- You have been in pain for five days.
- The pain is in the middle of your lower back, doesn't radiate down your legs and is intermittent.
- It improves with bending forward and is worse with bending backwards.
- You do not have any neurological symptoms (specifically your urination and bowel movements have been normal and your sensation everywhere is normal), fever, recent trauma, weight loss, pain that wakes you from sleep, or morning stiffness.
- You haven't taken anything since you try to avoid medications, but would be willing to try.
- You also are willing to try physiotherapy.
- You are continuing to work and are not looking for time off work.

The purpose of your ER visit:

- You are worried because your pain hasn't gotten any better yet.
- You think that you should have an MRI to make sure nothing is majorly wrong.
- You looked up causes of back pain online and you found out that similar back pain to what you are experiencing can be caused by a spinal cord tumour.

∗ In this scenario, the resident should be able to diagnose acute lower back pain with no red flag symptoms that would indicate you need further imaging. The resident should communicate a treatment plan to you that does NOT include an MRI at this point.

∗ The goal of the scenario is for the resident to appropriately communicate with you why this MRI of the spine is not necessary, and will not be ordered at this visit. You are not

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aware that the MRI is not clinically indicated, and feel that is a reasonable request to have an MRI to rule out a tumour.

The resident's performance should be assessed based on the resource stewardship conversations rating scale. Your interaction should be guided by how the resident is doing in the scenario.

If the resident explains why the test is not necessary, describes the benefits and potential risks of the test, asks about your concerns, is empathic, and has good general communication skills, then you can remain calm. If they do all of the above, calmly ask one more time, "So you are sure I don't need an MRI of my back today?" After any further explanation, accept that the test will not be performed.

If the resident is not clear in their explanation, does not talk about the risks and benefits, and does not convey why having the test is not appropriate, then you can get more anxious and upset in the manner in which you ask for the test.

PROMPTS: Used to standardize the scenario and give all candidates an opportunity to discuss relevant issues.

- If the resident does not volunteer any downside to having an MRI, the following prompt can be used:
  - Is there any downside to having an MRI?
- If the resident does not elicit your concerns about why you are so eager to have the test, you can volunteer this line:
  - I have heard of other people, my work friend's friend, who found out he had a spinal cord tumour after he had back pain.
- This can be used as a prompt for all residents, even those that have explained the risks and benefits well:
  - Are you not giving me the test just to save the system money?

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Modifications for different specialties based on Choosing Wisely and Choosing Wisely Canada (CWC) recommendations

These suggestions may also work for other specialties, and are categorized based on the CWC society lists.

Specialty	Recommendation and scenario
Family Medicine	• "Don't do imaging for lower back pain unless red flags are present." • Scenario changes to: Scenario does not change. The location changes to family physician's office.
Anesthesia	• "Don't order a baseline electrocardiogram for asymptomatic patients undergoing low-risk non-cardiac surgery." • Scenario changes to: Otherwise healthy patient with upcoming ventral hernia repair. The patient is asking for an ECG because he/she is worried about the anesthetic but is asymptomatic and has no family history of problems with surgery.
Internal Medicine	• "Don't routinely obtain neuro-imaging studies (CT, MRI, or carotid dopplers) in the evaluation of simple syncope in patients with a normal neurological examination." • Scenario changes to: Otherwise healthy patient with a single episode of syncope and no neurological symptoms or findings. The patient is asking for a CT because he/she is worried Their/her brain caused the syncope.
Orthopedics	• "Avoid performing routine post-operative deep vein thrombosis ultrasonography screening in patients who undergo elective hip or knee arthroplasty." • Scenario changes to: Otherwise healthy patient day two after right knee replacement with no symptoms or signs of DVT or pulmonary embolism and no family history of clots. The patient is asking for an ultrasound to check for DVT because he/she is worried about developing a clot.
Pediatrics	• "Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure." • Scenario changes to: Otherwise healthy child with a febrile seizure. The parent is requesting an MRI before the child is discharged home.

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Urology/General Surgery	• "Don't order a routine ultrasound for children with undescended testes." • Scenario changes to: Otherwise healthy 4-month-old boy who is being investigated for cryptorchidism. The parent wants an ultrasound as part of the workup because he/she is worried about whether they are present or not.
Psychiatry	• "Don't routinely order brain neuroimaging (CT or MRI) in first episode psychoses in the absence of signs or symptoms suggestive of intracranial pathology." • Scenario changes to: Otherwise healthy 25-year-old presents with a first episode psychosis and no signs of intracranial pathology (headaches, nausea, seizure, etc.). The patient's partner wants a CT scan to check and make sure Their/her brain is normal.
Pediatrics	• "Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure." • Scenario changes to: Otherwise healthy child with a febrile seizure. The parent is requesting an MRI before the child is discharged home.

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