

Resource Stewardship in your training and future practice

Facilitator's Guide

The Royal College of Physicians and Surgeons of Canada would like to thank the following contributors in the development of this resource:

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This workshop is based on the work of the developers of the original "Foundations Toolkit" and "Communication Toolkit" (see Appendix A).

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About the workshop

This Resource Stewardship workshop consists of an online module to be completed by participants prior to the workshop, as well as a series of case studies designed for reflection and small or large group discussion during the workshop.

All materials that you will need to run the workshop are provided. While there is no slide deck, you may build your own based on this facilitator guide.

The workshop can be run at any time and has been designed to fit into an academic half day (AHD). The content is appropriate for residents of any stage; however, if your institution has stage specific half days, it is best suited for more senior residents (Core stage). The workshop can be run with groups of any size.

The following is a suggested guide for how you may choose to run the workshop.

Prior to the workshop

One week before the workshop, send participants a link to the online module with instructions to complete prior to the workshop. The short online module provides participants with all the required background knowledge on resource stewardship that they will need to participate in the experiential components of the workshop.

Online module link:

<https://www.royalcollege.ca/mssites/leaderresource/resourcestewardship/index.html>

Workshop preparation

Materials Needed for IN-PERSON DELIVERY:

1. Facilitators – ideally 1 person for every 6-8 participants (minimum 2) depending on if wish to have groups interact with table facilitator
2. Facilitator's guide
3. PPT slide deck (if you choose to create one)

Additional Materials Needed for VIRTUAL DELIVERY:

1. Access to a video conferencing platform that can create breakout rooms (i.e., Zoom). Depending on the platform, you might want to recommend that participation be on a computer to ensure full technological capabilities.
2. Follow best practice for virtual delivery (e.g., camera at eye level; no rustling papers).
3. Practical tips
 - a. sign on to test system ahead of session including audio visual capabilities
 - b. consider leaving time to educate audience about tech education tools
 - c. ensure that the video conference platform is up to date.
4. Minimum 2 facilitators (second person can help with tech e.g., breakout rooms and moderate chat)
5. Pull out chat onto the second screen or consider using 2 devices (ensure the second device has sound off and a pair of headset inserted to prevent echo).
6. Figure out how to get the worksheet to participants ahead of time or during the workshop. Having on Google Drive/Dropbox and then sharing the link is a good option.

Note: See [11 Tips for Virtual Teaching](#) for additional tips and tricks.

During the workshop (lesson plan)

Introduction (15 mins)	
COI disclosure	
Roundtable intros	e.g., Each resident shares one thing they hope to learn from the workshop.
Land Acknowledgement	<p>Please edit to your own territory/message regarding your personal commitment</p> <p>An example:</p> <p>“We acknowledge that we are meeting on land that has been inhabited by Indigenous Peoples from the beginning. We are grateful for the opportunity to meet here and we thank all the generations of people who have taken care of this land for thousands of years, and continue to do so.</p> <p>The Royal College is located on the traditional unceded territory of the Algonquin Anishnaabe Peoples. I thank them for sharing their traditional territory with us.</p> <p>We recognize and deeply appreciate their historic connection to this place. We also recognize the contributions of the Métis, Inuit, and other Indigenous Peoples have made in shaping and strengthening this community, province, and country.”</p>
CanMEDS Leader Role milestones	<p>Reminder that Resource Stewardship is part of the CanMEDS Leader Role:</p> <p>KC2: Engage in the stewardship of health care resources</p> <ul style="list-style-type: none"> • 2.1 Allocate health care resources for optimal patient care • 2.2 Apply evidence and management processes to achieve cost-appropriate care

<p>Goal and Learning objectives</p>	<p>Goal: to provide you with a foundational knowledge of resource stewardship principles, as well as the ability to recognize opportunities in daily practice to apply resource stewardship concepts through clinical care, teaching and assessment.</p> <p>Learning objectives:</p> <ol style="list-style-type: none"> 1. Define common terminology in resource stewardship (waste, overuse, misuse, underuse) 2. Differentiate between rationing and resource stewardship 3. Discuss ethical aspects of resource stewardship 4. Recognize the harm associated with overuse 5. Identify drivers of overuse 6. Discuss strategies to improve resource stewardship 7. Describe barriers to resource stewardship and how to overcome them 8. Identify examples of overuse in your specialty and opportunities for improved resource stewardship
<p>Agenda</p>	<ul style="list-style-type: none"> ● Burning questions/key learning points from online module ● Review of key concepts ● Resource stewardship case studies ● Applying the communication framework ● Conclusion

<p>Recap of online module (5-10 mins)</p>	
<p>Burning questions and key concepts</p>	<p>e.g., What were your key learning points from the online module? What burning questions do you still have?</p>

Resource stewardship case studies (30-90 mins)	
Small group work	See Resource Stewardship Case Instructions below for instructions on individual cases.

Conclusion (10 mins)	
Summary of key points	<p>Generic conclusion points – we encourage you to develop your own depending on the depth of your session.</p> <ul style="list-style-type: none">• Resource stewardship is a professional and ethical obligation.• Overuse is common in clinical learning environments and can harm patients.• Individual and system factors contribute to overuse.• Residents are uniquely positioned to decrease overuse and demonstrate resource stewardship.
Questions?	Give participants an opportunity to ask questions.
Evaluation	<p>Send participants the link to the post-workshop questionnaire: https://survey.alchemer-ca.com/s3/50144915/Resource-Stewardship-Workshop-Evaluation</p> <p>Note: Should you wish to receive a copy of the results, please email us at canmeds@royalcollege.ca</p>

Resource Stewardship Case Instructions

Case 1 – Mr. Akay Aye

Mr. Akay Aye is an 80-year-old man with **known benign prostatic hyperplasia** who arrives to the ED with **oliguria**.

He is found to have acute kidney injury (creatinine 370, urea 25) and a firm abdomen on exam, but with no other significant physical exam abnormalities or laboratory derangements.

A urine analysis is ordered which shows some WBCs and later grows E. Coli. The patient is admitted, has blood cultures and receives a 7-day course of antibiotics for UTI.

At a follow-up with his family physician, the patient suffers debilitating diarrhea and undergoes a workup for this problem.

Indications for urine analysis and culture, management of asymptomatic bacteriuria (internal medicine/ER).

1. Has the patient received *appropriate care*?

Not exactly. This will be explained in the following questions.

2. Is there any *waste in the care that was received*?

- What investigations, if any, would you have **not** ordered? Why?

The urine analysis and urine culture are not indicated as the patient does not have typical symptoms of a urinary tract infection (UTI). Due to lack of fever or irritative urinary tract symptoms, the pre-test probability that this test will be useful is low. (Choosing Wisely recommendation: **Don't collect urine specimens for culture from adults who lack symptoms localizing to the urinary tract or fever unless they are pregnant or undergoing genitourinary instrumentation where mucosal bleeding is expected.**) (1)(2)

Blood cultures are not indicated as the patient does not have signs or symptoms of sepsis from the information we are given in the stem.

- What treatments, if any, would you have **not** prescribed? Why?

Antibiotics are not indicated in patients with asymptomatic bacteriuria. (Choosing Wisely recommendation: **Don't prescribe antimicrobials to treat asymptomatic bacteriuria in adults unless patient is pregnant.**) (3) (4) (5)

3. Are there any tests or treatments that this patient *should have received, but did not (i.e., Was there any underuse)*?

Based on this clinical history and presentation, a reasonable, low-cost (both monetary and to the patient) and high-yield first investigation would have been a bladder scan to assess for urinary retention and bladder distension.

To help you answer the question: “should I order this test”, consider these 5 questions:

1. *Will the test help me make a diagnosis?*
2. *Will the test potentially result in a change in management?*
3. *Is this test redundant with existing information?*
4. *Is there a reasonable pre-test probability for this test to be useful?*
5. *Does the benefit of the test outweigh the risk to the patient?*

4. How can you optimize the health outcomes achieved per dollar spent (i.e., value)?

- *Which outcomes are important to the patient? How can you enable these outcomes?*
- *How can you improve the patient experience?*
- *What are the direct costs to the patient and the system? How can you minimize these costs?*
- *What are downstream costs to the patient and the system? How can you minimize these costs?*
- *What are the opportunity costs? How can you minimize these costs?*

PATIENT VALUES

- Most likely this patient wants to feel better and go home to normal life. He also likely does not want this to happen again, so finding and treating the underlying primary cause of the problem is going to be important.
- Our diagnostic efforts should therefore be aimed at diagnosing the most likely cause of the patient’s symptoms and proposing a management plan that will treat his current discomfort and prevent further decompensation.

COSTS

- *Costs to the Patient:*
 - Underwent uncomfortable, unnecessary blood and urine testing.
 - Inconvenient hospital admission.
 - Developed a side effect of antibiotic use (diarrhea, possibly C. difficile infection) requiring another series of investigations and potentially treatment.

- Costs to the System:
 - Multiple monetary costs related to hospital admission and IV antibiotic therapy; laboratory costs of processing multiple lab tests.
- Opportunity Costs:
 - Patient occupied a hospital bed possibly unnecessarily, while someone else could have benefited from earlier admission.
 - Patient potentially experienced a delay in definitive diagnosis and management of benign prostatic hyperplasia (BPH) causing urinary obstruction.

Resources:

- Association of Medical Microbiology and Infectious Diseases
- Long-term care Medical Directors Association of Canada (<https://choosingwiselycanada.org/long-term-care/> (2021))
- Canadian Society of Hospital Medicine (<https://choosingwiselycanada.org/hospital-medicine/> (2020))
- Canadian Geriatrics Society (<https://choosingwiselycanada.org/antibiotics-urinary-tract-infections/> (2020))
- Canadian Urological Association

Case 2 – Baby Reeve Flux

A 4-month-old breastfed male infant is assessed at a primary care clinic for his **routine vaccinations**.

Recent onset of diarrhea is incidentally brought up as a concern. Several weeks prior, he was investigated for **gastrointestinal reflux (GERD)** with an upper GI contrast study, and subsequently initiated on Lansoprazole due to his parents' persistent concerns that the infant was spitting up.

He is gaining weight and otherwise well. Due to the lack of improvement in symptoms and new diarrhea, he is referred to GI clinic where further workup is done (stool cultures, serum albumin and blood gas).

In this case, overuse is evident because the infant was subjected to diagnostic work-up for GERD. Despite being clinically well, he was unnecessarily treated with Lansoprazole, which contributed to the medication side-effect of diarrhea.

1. Has the patient received appropriate care?

Not exactly. This will be explained in the following questions.

2. Is there any waste in the care that was received?

- What investigations, if any, would you have **not** ordered? Why?

The initial investigations for GERD (upper GI study) were not necessary, as GERD in this age group is a clinical diagnosis. If there had been worrisome features such as bilious vomiting, an UGI may have been warranted. **(1)**

Stool culture, albumin and blood gas. In the second part of the case, the baby undergoes diagnostic testing for diarrhea, to rule-out bacterial enteritis and malabsorption. Both diagnoses are virtually impossible in a breastfed baby who has been growing well.

- What treatments, if any, would you have **not** prescribed? Why?

Lansoprazole. Proton-pump inhibitors and H₂-blockers are not first-line therapies for infants with gastroesophageal reflux, as they are unlikely to decrease spitting up and crying related to reflux **(1)**. Furthermore, it is not clear that this baby had bothersome GER “disease” in the first place, and so perhaps no intervention was required. If a diagnosis of GERD is suspected, the first steps are: conservative management (small, frequent feeds, positioning, etc.), followed by a time-limited trial of a cow-protein free diet. (Choosing Wisely recommendation: **Don't routinely use acid blockers or motility agents for the treatment of gastroesophageal reflux in infants.****(2)**)

3. Are there any tests or treatments that this patient *should have received, but did not* (i.e. was there any underuse)?

No. GERD is a clinical diagnosis, and no investigations are necessary in most uncomplicated cases.

To help you answer the question: “should I order this test”, consider these 5 questions:

- *Will the test help me make a diagnosis?*
- *Will the test potentially result in a change in management?*
- *Is this test redundant with existing information?*
- *Is there a reasonable pre-test probability for this test to be useful?*
- *Does the benefit of the test outweigh the risk to the patient?*

4. How can you optimize the health outcomes achieved per dollar spent (i.e. *value*)?

- *Which outcomes are important to the patient? How can you enable these outcomes?*
- *How can you improve the patient experience?*
- *What are the direct costs to the patient and the system? How can you minimize these costs?*
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PATIENT VALUES

- Parents are concerned about baby’s constant spitting up, would like a solution.
- In this case, the best way to enable parents to feel reassured would be via education and adjusting expectations. It is important for them to know that reflux in a thriving child is generally physiologic and does not warrant investigations or treatment, as most will resolve on its own. Communication therefore plays an important role in this regard.

COSTS

- *Costs to the Patient:*
 - Underwent uncomfortable, unnecessary investigations (UGI study, blood tests)

- Immediate side effect of Lansoprazole (diarrhea)
- Long-term side-effects of Lansoprazole (increased risk of GI and respiratory infections)
- Increased worry to family about new/ ongoing symptoms.
- Costs to the System:
 - Multiple monetary costs related to excess resource use (investigations, medications).

Resources:

- NASPGHAN Guidelines: Pediatric Gastroesophageal Reflux. (2018).
https://naspghan.org/files/Pediatric_Gastroesophageal_Reflux_Clinical.33.pdf
- Canadian Pediatrics society (2020)
<https://choosingwiselycanada.org/paediatrics/>

Case 3 – Ms. Hannah Fall

73-year-old female patient presents with a fall, resulting in a **hip fracture**. Two weeks prior, she was started on Lorazepam qHS for insomnia. She requires surgical repair, and undergoes an extensive pre-operative assessment including bloodwork, CXR and ECG. Later, she requires extended-duration rehabilitation prior to returning home.

1. **Has the patient received *appropriate* care?**
2. **Is there any *waste* in the care that was received?**
 - What investigations, if any, would you have **not** ordered? Why?
 - What treatments, if any, would you have **not** prescribed? Why?
3. **Are there any tests or treatments that this patient *should have received*, but did not? (i.e. was there any underuse)**
4. **How can you optimize the health outcomes achieved per dollar spent (i.e. *value*)?**
 - *Which outcomes are important to the patient? How can you enable these outcomes?*
 - *How can you improve the patient experience?*
 - *What are the direct costs to the patient and the system? How can you minimize these costs?*
 - *What are downstream costs to the patient and the system? How can you minimize these costs?*
 - *What are the opportunity costs? How can you minimize these costs?*

Resources:

- Choosing Wisely Canada: Hospital Medicine:
<https://choosingwiselycanada.org/recommendation/hospital-medicine/>
- Choosing Wisely Canada: Insomnia and Anxiety in Older People:
<http://www.choosingwiselycanada.org/materials/insomnia-and-anxiety-in-older-people-sleeping-pills-are-usually-not-the-best-solution/>

Case 4 – Mr. Ernie Ah

An 80-year-old male is assessed at a primary care clinic regarding a new right **groin lump**. The lump is asymptomatic and thought to be an inguinal hernia on exam. However, the patient is sent for ultrasonography to confirm the presence of the hernia and is referred to General Surgery for consideration of surgical management.

The patient has the surgery. Subsequently, the patient experiences ongoing post-operative pain requiring repeated visits to the general surgeon and the family physician for follow-up.

Two Recommendations:

1. Don't use ultrasound routinely to evaluate clinically evident inguinal hernias
2. Consider a watchful waiting approach in patients with asymptomatic or minimally symptomatic inguinal hernias

1. Has the patient received appropriate care?

2. Is there any waste in the care that was received?

- What investigations, if any, would you have **not** ordered? Why?
- What treatments, if any, would you have **not** prescribed? Why?

3. Are there any tests or treatments that this patient should have received, but did not? (i.e., was there any underuse)

4. How can you optimize the health outcomes achieved per dollar spent (i.e., value)?

- Which outcomes are important to the patient? How can you enable these outcomes?
- How can you improve the patient experience?
- What are the direct costs to the patient and the system? How can you minimize these costs?
- What are downstream costs to the patient and the system? How can you minimize these costs?
- What are the opportunity costs? How can you minimize these costs?

Resource: Choosing Wisely Canada: General Surgery:

<https://choosingwiselycanada.org/general-surgery/>

Case 5 – Mrs. Alda Ritis

A 65-year-old female is advised to undergo an elective orthopedic procedure to manage **knee osteoarthritis**. She is otherwise healthy and is a low-risk surgical candidate.

However, during the routine pre-operative assessment, a CXR was ordered, and incidentally, a lung nodule was detected.

The patient is referred to Respiriology and ultimately has a CT scan and CT-guided lung biopsy. Her orthopedic procedure is delayed by several months.

The case highlights unnecessary preoperative testing that sometimes occurs as part of “routine work-up” in low-risk surgical procedures.

1. Has each patient received appropriate care?

Discussion should focus in on role of pre-operative test ordering, when is it appropriate and when is it not (link to CWC toolkit).

Trainees will likely raise concern about not doing a CXR with the knowledge that there is an abnormality – discuss role of CXR in lung cancer screening (not advised even in clinical situations appropriate for cancer screening) and the role of CXR in pre-op clinic (what is the clinical question that the ordering physician was asking. E.g., baseline)

Depending on audience may consider appropriateness of screening tests more broadly (e.g., looking for an abnormality when no specific symptom or clinical question is raised) vs appropriate screening based on evidence (e.g. pap smears)

2. What investigations, if any, would you have ordered? Why?

Depending on the audience you may wish to omit this question. The first question may address conceptually what appropriate pre-operative care is - what is the role of pre-op consultation (risk stratification, identifying comorbidities that may pose risk to patient if not properly managed prior to surgery).

For anesthesia / medicine / primary care specialties – this case may result in a more in-depth discussion about the actual tests that should be ordered in pre-op clinic (see: [https://www.mayoclinicproceedings.org/article/S0025-6196\(19\)30413-6/fulltext#tbl3](https://www.mayoclinicproceedings.org/article/S0025-6196(19)30413-6/fulltext#tbl3))

3. What harms did the patient experience?

Your group will likely discuss many (as well as potential harms e.g., biopsy complications) but should be sure to discuss:

- Anxiety – delayed surgery, possible cancer diagnosis

- Financial – time off work, parking, lost productivity related to ongoing impairment

Resource: Choosing Wisely Canada: Anesthesiology

<https://choosingwiselycanada.org/anesthesiology/>

Case 6 – Mrs. Pen Allergia

A healthy G2P1 woman at **39 weeks' gestation** was admitted for a C-section. A penicillin allergy was noted in her EMR, but details were not available at the time and no one questioned the patient. She was given pre-op Clindamycin (instead of Cefazolin, the recommended antibiotic).

Two weeks after delivery, she returned with C difficile diarrhea and was treated with oral Vancomycin for 14 days.

Don't order non-beta lactam antibiotics in patients with a history of penicillin allergy, without an appropriate evaluation.

1. Did the patient receive appropriate care? Why or Why not?

No - While about 10 percent of the population reports a history of penicillin allergy, studies show that 90 percent or more of these patients are not allergic to penicillin and are able to take these antibiotics safely. The main reason for this observation is that penicillin allergy is often misdiagnosed and when present wanes over time in most (but not all) individuals. Patients labeled penicillin-allergic are more likely to be treated with alternative antibiotics (such as vancomycin and quinolones), have higher medical costs, experience longer hospital stays, and are more likely to develop complications such as infections with vancomycin-resistant enterococcus (VRE) and Clostridium difficile.

Source: <https://www.choosingwisely.org/clinician-lists/american-academy-allergy-asthma-immunology-non-beta-lactam-antibiotics-penicillin-allergy/>

2. How would you change what happened in the scenario?

Inquire about the exact nature of the allergy. PNC allergy and reaction is often misdiagnosed and most (90%) of patients can receive PNC for antimicrobial prophylaxis.

Evaluation for specific IgE to penicillin can also be carried out by skin testing. Ideally, penicillin skin testing should be performed with both major and minor determinants. The negative predictive value of penicillin skin testing for immediate reactions approaches 100 percent, whereas the positive predictive value is between 40 and 100 percent.

3. What outcomes are important to the patient? How can you enable these outcomes?

Minimize additional morbidity such as a wound infection

Most patients can in fact receive PNC, if not they may still be eligible for another beta-lactam abx such as cefazolin

Patients with penicillin allergies might be less likely to have reactions to cefazolin in particular, because it does not have the specific molecular structure that some other cephalosporins share with penicillin. In this meta-analysis, researchers evaluated the frequency of dual allergies to cefazolin and penicillin in 77 studies (>6000 patients).

The frequency of cefazolin allergy in patients with self-reported penicillin allergy was 0.6%, and the frequency in patients with confirmed allergy (verified by skin, in vitro, or in vivo testing) was 3%. In studies of the converse relation — penicillin allergy in patients with cefazolin allergy — the frequency of dual allergy was 3.7%.

Source: Sousa-Pinto B et al. Assessment of the frequency of dual allergy to penicillins and cefazolin: A systematic review and meta-analysis. *JAMA Surg* 2021 Mar 17; e210021. (<https://doi.org/10.1001/jamasurg.2021.0021>)

4. What are the costs to the patient and the system? How can you minimize these costs?

In addition to the financial cost of a new medication, the patient suffered an adverse reaction. They required an additional 14 days of another antibiotic. The system also incurred other costs due to re-admission to the ED and increased resource utilization as a result of this complication.

Consider using cefazolin preoperatively and in many other common situations in patients with self-reported penicillin allergy, unless previous reactions were systemic and severe.

Resource:

- Clarifying a “Penicillin” Allergy: A Teachable Moment: <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2594806>
- Choosing Wisely Canada: <https://choosingwiselycanada.org/allergy-clinical-immunology/>

Case 7 – Ms. Sarah Narcos

A healthy 25-year-old female is admitted with **acute uncomplicated appendicitis**. She undergoes an uncomplicated laparoscopic appendectomy and is deemed fit for discharge on post-operative day 1. She does not require any opioids in hospital but is given 15 tablets of hydromorphone on an as needed basis for post-operative pain.

Two weeks after discharge, her elderly mother accidentally takes one of these pills.

Recommendations:

- *Prolonged use of opioids beyond the immediate postoperative period and for chronic non-cancer pain is not recommended*
- *Consider alternative therapies, such as non-opioid pharmacologic therapy or non-pharmacologic therapies.*
- *If opioid analgesia is required, the lowest effective dose, potency, and number of doses required to address the acute pain episode should be prescribed.*

1. Did the patient receive appropriate care? Is there any waste in the care that was delivered?

No – this is an example of overuse. The patient did not require the prescribed number of opioid medications. Please see below for a guide on how to prescribe opioids at discharge after common surgical procedures.

2. What outcomes are important to the patient? How can you enable these outcomes?

Pain control and quality of recovery are important patient centered outcomes. These outcomes however, can be enabled by multimodal analgesia (extra strength Tylenol, NSAIDs) including significantly lower doses of opioid medications.

Assess their pain at discharge and review whether they are requiring opioids in hospital. If not, consider non-opioid alternatives

Ideally, opioid prescriptions after surgery should balance adequate pain management against the duration of treatment. In practice, the optimal length of opioid prescriptions lies between the observed median prescription length and the early nadir, or 4 to 9 days for general surgery procedures, 4 to 13 days for women's health procedures, and 6 to 15 days for musculoskeletal procedures.

If a patient is requiring opioids and they have mild pain: Continue current analgesic regimen if no side effects. Prescribe short-acting opioid at 10-20% of long-acting dose every 2 to 4 hours as needed.

If a patient is taking opioids and they have moderate to severe pain: Consider increasing scheduled opioid dose by 30-50%; calculate short-acting opioid dose as 10-20% of prior 24-hour opioid dose

Source: Scully RE, et al. Defining Optimal Length of Opioid Pain Medication Prescription After Common Surgical Procedures. JAMA Surg. 2018 Jan 1. [PMID: 28973092](#).

<https://www.mdanderson.org/documents/for-physicians/algorithms/clinical-management/clin-management-post-op-pain-web-algorithm.pdf>

3. What are the costs to the patient and the system? How can you minimize these costs?

In addition to the financial cost of acquiring medications, the patient may experience side effects from taking unnecessary opioids (nausea, pruritis, constipation, dependence).

See above for considerations when prescribing opioids at discharge

4. What are the opportunity costs in this scenario?

Cost of a family member inadvertently taking this medication

Opioids have a stronger impact on older adults because bodily processes slow as people age. Older adults also tend to be using multiple medications, which can interact with opioids and cause serious side effects. For example, older adults who use opioids and take an anti-anxiety medication, such as a benzodiazepine, can experience slow respiration to the point of death, depending on dosage levels. Complicating this situation is that older adults with a substance use disorder, such as an opioid use disorder, may have symptoms similar to those of depression, delirium or dementia

Source: https://theconsumervoicework.org/uploads/files/general/ACL_Issue_Brief_-_Opioid_Abuse_and_Older_Adults_-_Dec2017.pdf

Resource: Scully RE, et al. Defining Optimal Length of Opioid Pain Medication Prescription After Common Surgical Procedures. JAMA Surg. 2018 Jan 1. [PMID: 28973092](#).

Case 8 – Mrs. Mammo Monet

Mrs. Monet, a 55-year-old female, visits her general practitioner for her **annual check up**.

She asks her doctor if it's time to start having annual mammograms – her doctor replies that her exam is normal and annual mammogram for a woman with no family history and normal exam is not necessary.

1. Did the patient receive **appropriate care**? Is there any **waste** in the care that was delivered?

No, the patient did not receive appropriate care. This is a case of **underuse**. The following study showed that **only one in 20 women** are consistently getting an annual breast cancer screening mammogram, despite the fact that regular mammograms are clearly associated with reduced risk of death from breast cancer.

The authors reveal a low level of screening use associated with potentially negative health-related consequences, among women across categories defined by racial, ethnic, socioeconomic, and geographic characteristics; insurance status; language; age; medical history; and previous screening use. An increase in screening appears to have the potential to reduce deaths caused by breast carcinoma.

Karen Blanchard et al. "Mammographic Screening: Patterns of Use and Estimated Impact on Breast Carcinoma Survival," *CANCER*; Vol 11/Issue 3, 495-507. (August 1, 2004).

2. What **outcomes** are important to the patient? How can you enable these **outcomes**?

Outcomes that are important to patients are diagnosis of breast cancer and death. It is important to explore this with patients.

3. What are the **costs** to the patient and the system?

The cost to the patient is advanced disease and treatment plan associated. The cost to the system is a more intensive treatment plan that could have otherwise been avoided.

Case 9 – Ms. Tomuch Radiation

Ms. Tomuch Radiation, a 30-year-old woman with cerebral palsy, is admitted to the ICU with respiratory failure due to aspiration requiring intubation.

On admission, daily CXRs were ordered in the EMR. One routine daily CXR revealed a pneumothorax, though the patient's ventilator settings had improved, clinical status was unchanged and no thoracic procedures had occurred.

Two repeat CXRs were performed. Given the technical / positional challenges of a single view CXR in an intubated patient, a CT was requested by the interpreting radiologist of the second and third CXRs. It revealed no abnormality.

1. Is there any waste in the care that was received?

With the benefit of the full case, it is clear that the multiple CXRs and the CT were wasteful. If time permits this case can be presented in sequence giving the residents options of how to proceed. This can help raise discussion points related to *cascading of tests*, *limited utility of daily investigations* in most clinical scenarios, and the *specific recommendations against daily screening CXR* in the ICU. Critical care areas can be highlighted as areas particularly prone to overuse and the reasons for this can be brainstormed (e.g., arterial line / central line access, severity of illness, multiple ordersets and pathways, numerous teams and professionals involved, tests repeated on transfer).

2. Should they have ordered the daily CXR? Why/why not?

To help you answer the question: "should I order this test", consider these 5 questions:

- Will the test help me make a diagnosis? **What question was the team asking with a daily CXR? What can a CXR diagnose that cannot be diagnosed on clinical exam or by other means?**
- Will the test potentially result in a change in management? **If a patient is improving clinically what would a CXR contribute to?**
- Is this test redundant with existing information? **E.g., the multiple previous CXR.**
- Is there a reasonable pre-test probability for this test to be useful?
- Does the benefit of the test outweigh the risk to the patient? **This is important – the risks in this case may not be apparent to the trainees. Discuss the anxiety for caregivers, need for positioning patient to have**

multiple CXRs with possible injury, risks of transfer to CT, and need for further sedation to conduct CT and the potential complications.

3. What if the trainee's preceptor insisted on them ordering the daily CXRs?

If it has not come up in the workshop so far you should be prepared to address this question based on your institution's context and culture. Trainees will share a need to impress their supervisors but also state their supervisors will have varied expectations related to ordering practices. This is a good opportunity to crowd source solutions. Trainees should be discouraged from demonstrating knowledge by ordering overly comprehensive workups and testing panels and should be encouraged to document and present their differential diagnoses and suggested workups. Directly questioning the rationale of the preceptor can be done in most cases in the spirit of inquisitiveness and not conflict. If the learners share that they always defer to what the "preceptor wants" you may wish to discuss when you should not do that, how you might address these situations (e.g., when patient safety is considered).

Case 10 – Ms. Sarah Davis Corona

Sarah Davis is a 25-year-old patient that you are seeing in the emergency department. She is presenting with a **cough, runny nose and a subjective fever** for the past 2 days.

Sarah is waiting to see you to discuss the management plan for her symptoms. She is demanding she gets a **prescription for steroids and hydroxychloroquine** for COVID-19 infection.

1. Is the patient requesting appropriate care? Why or why not?

No. The patient is not requesting appropriate care. According to the latest recommendations, patients should not be presenting to the emergency department with mild symptoms such as runny nose and cough. Guidelines recommend against use of steroids and hydroxychloroquine in mild disease. Refer to the following articles for more information:

- COVID -19 choosing wisely recommendations:
 - https://choosingwiselycanada.org/wp-content/uploads/2020/04/COVID-19_Recommendations.pdf
 - <https://www.cmaj.ca/content/cmaj/early/2020/04/29/cmaj.200648.full.pdf>
- CMAJ: Treatment of Patients with Nonsevere and Severe Coronavirus Disease 2019: An Evidence-based Guideline Kalil A. JAMA. Treating COVID-19—Off-Label Drug Use, Compassionate Use, and Randomized Clinical Trials During Pandemics

2. What outcomes are important to the patient? How can you enable these outcomes?

Outcomes that are important to patients are severity of disease and spread of infection to family and friends. Please refer to 'Centers for Disease Control and Prevention: What To Do if You Are Sick' to help manage your symptoms at home and help prevent the spread of COVID-19 to friends, family and the community. There are also detailed recommendations on when to visit the emergency department.

3. What are the costs to the patient and the system? How can you minimize these costs?

Waiting in the emergency department for mild symptoms exposes others to COVID-19 infection unnecessarily. It also exposes the patient to other infectious diseases. The cost to the system is an overcrowding of the emergency departments with patients who do not need hospital care.

4. How would you handle the interaction if the patient continued to be more insistent?

It is important to get to the root of the patient's frustration and really understand their fears and concerns. Please refer to our section on communicating with patients for further detailed recommendations.

Case 11 – Mr. Alexander Payne

The video (<https://www.youtube.com/watch?v=cJLuxDbBs1w>) will demonstrate how the framework can be used in a real scenario with a patient.

This scenario is of a patient requesting an MRI for back pain in his family physician's office. While no video is perfect, this one is meant to highlight some of the elements discussed in the framework.

After showing the video, have a discussion with the group focused on some of the below questions:

1. What did the physician do well in the interaction with the patient?

The physician was sympathetic and heard the patient's concern. She explained why an MRI was not needed at this time, but she will consider if the patient is not better with "conservative" management. She also provided written information and backed up her comments with evidence.

The Physician also asked why exactly the patient wanted an MRI- which was more for the magnetic effect of MRI!

2. What could have been improved upon?

The physician could have explained her diagnosis before offering "conservative" treatment so that the patient was more receptive to the treatment plan. The word "conservative" might be interpreted as "traditional" or as if the provider is holding back. Conservative is usually not cutting edge. Most importantly, the physician has to make the discussion patient centered - what is important for this particular patient, why this patient should have an MRI or not. How her other patients do with "conservative" management may be meaningless for this particular patient.

The physician had a very worried look on her face at the beginning of the video. While that might be because she cared, this could also be interpreted as worried or managing a difficult diagnosis. Physicians should be conscious of their body language and facial expression.

3. How would you handle the interaction if the patient continued to be more insistent that the test/treatment was required?

Setting a tone at the beginning of the interaction is important. If the patient has the reassurance that his doctor will do what is best for him, this will help in a therapeutic relationship. Also, it is important to acknowledge that the patient had a physical discomfort which needed medical attention. Few things can help if patient continued to be more insistent:

- Giving a specific treatment plan and a clear timely follow-up. For example, instead of saying "come back if your pain is not better" saying "I will like to

follow up with you next week to make sure your pain is improving. Can you make an appointment on your way out?”.

- Offering a second opinion from another physician if the patient is not satisfied with the assessment.
- Explain how positioning for an MRI can worsen muscle spasm.
- Wait time for non urgent MRI could also be explained. For example, “You need pain management now. MRI will not be done for weeks. We should not wait that long to treat you since you are suffering quite a bit”.

Resources:

- Choosing Wisely. *Patient with Back Pain who requests an MRI*. Last retrieved August 31, 2017 from the ABIM Foundation’s YouTube page:
<https://www.youtube.com/watch?v=cjLuxDbBs1w>

The Royal College of Physicians appreciates the ABIM Foundation for granting permission to use this Choosing Wisely module as part of its work to educate clinicians across Canada.

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