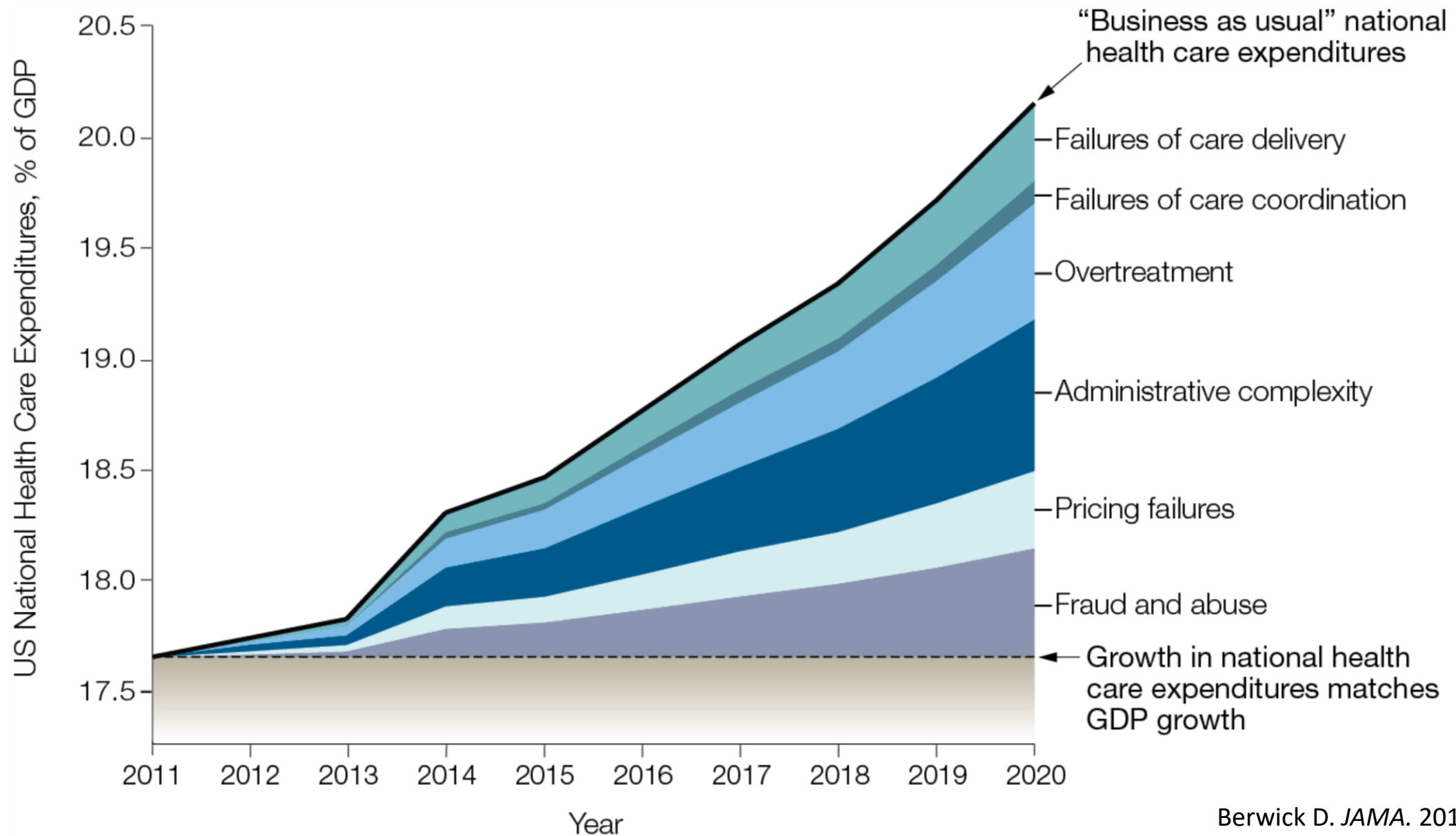




Choosing wisely—the implications for students and physicians in training

Wendy Levinson, MD, OC
Professor of Medicine, University of Toronto
Chair, Choosing Wisely Canada & International

Wedges of Waste





Unnecessary Care in Canada

April 2017

Choosing
Wisely
Canada

 Canadian Institute
for Health Information
Institut canadien
d'information sur la santé

The report found that up to 30% of the tests, treatments and procedures associated with the 8 selected CWC recommendations are potentially unnecessary.



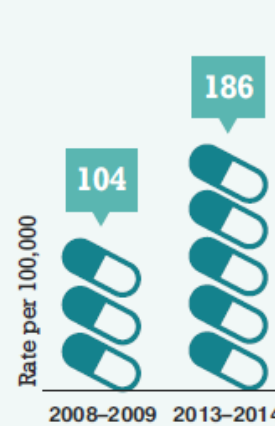
Key findings



In Alberta,
30%

of patients with lower-back
pain without red flags

**had at least one unnecessary
X-ray, CT or MRI.**



In Manitoba, Saskatchewan and B.C.,
**rates of low-dose
quetiapine**

(commonly used to treat insomnia)
increased among children and
young adults age 5 to 24,
even though this is not
recommended by experts.



**1 in 10 seniors in Canada uses a
benzodiazepine (sedative-hypnotic)
on a regular basis,** even though this is not
recommended by experts.



In Ontario, Saskatchewan and Alberta,

18% to 35%

of patients who had a low-risk procedure
had a preoperative test.

Key findings



30% of emergency department patients in Ontario and Alberta with low-risk minor head trauma **received a CT head scan.**



22% of Canadian women age 40 to 49 **received a screening mammogram,** despite being of average risk.

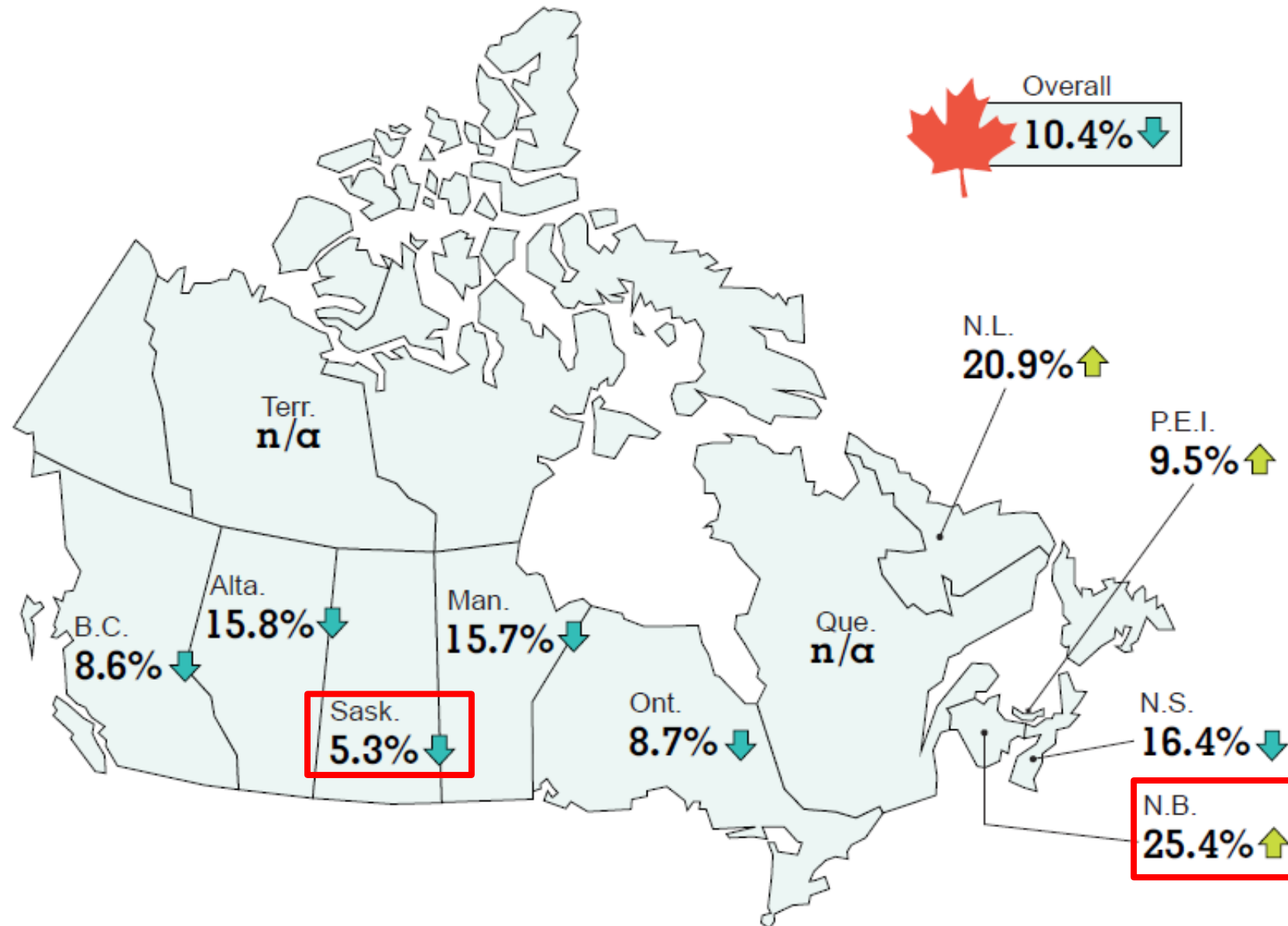


In Ontario, **23%** of inpatients with delirium **had a potentially unnecessary head CT scan.**

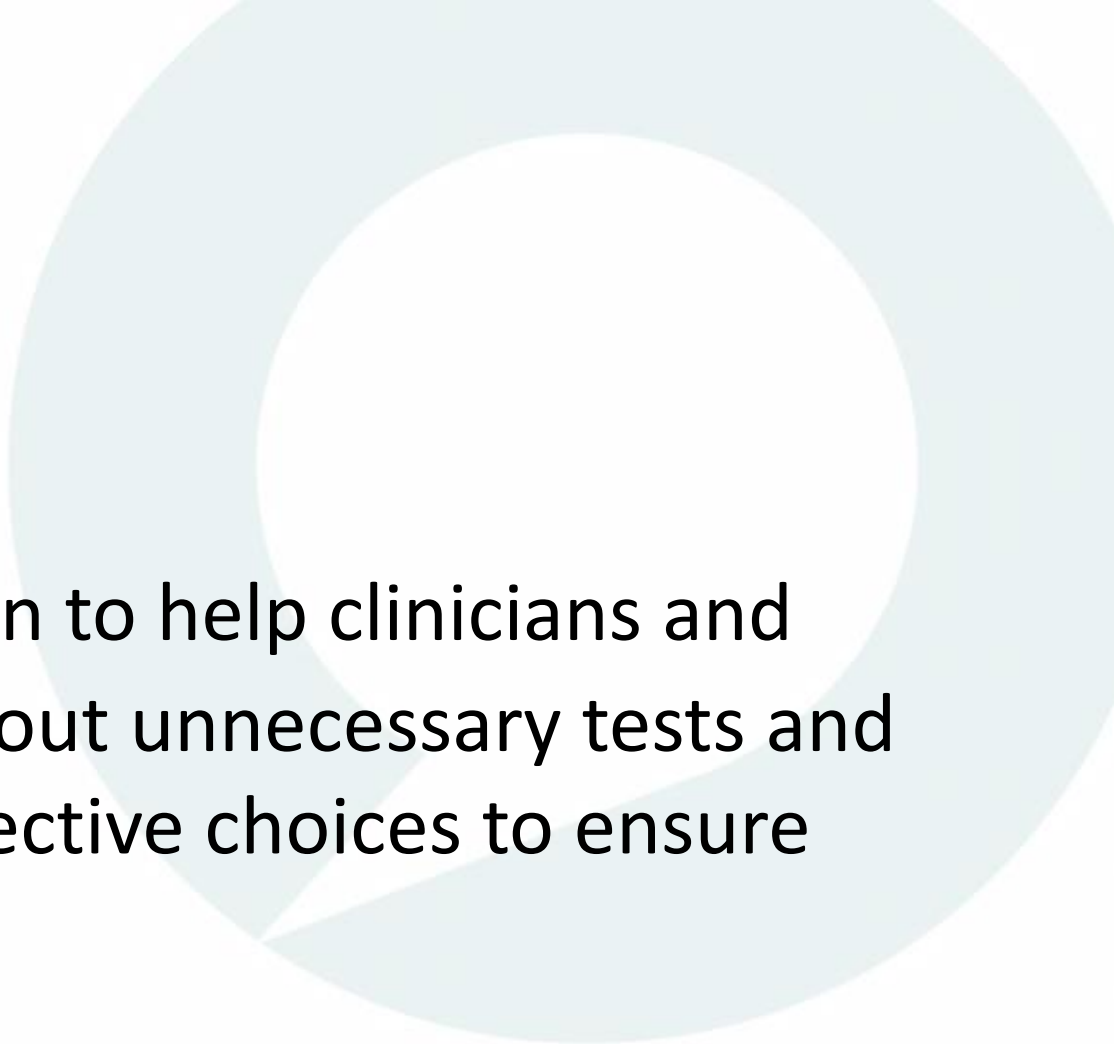


Red blood cell transfusions for elective hip (12%) and knee (8%) replacements **have decreased but continue to be done across Canada,** even though blood is a precious resource.

Rate of Chronic Benzodiazepine use Among Seniors



2014-2015



Choosing Wisely is a campaign to help clinicians and patients engage in conversations about unnecessary tests and treatments and make smart and effective choices to ensure high-quality care.

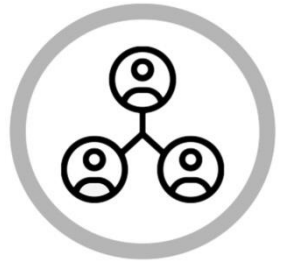
Facts

- Choosing Wisely® 2012 in US; 75 medical societies; 450 recommendations
- Choosing Wisely Canada 2014; 60 societies; 250 recommendations
- Now over 20 countries

What is unique about CWC?



Clinician led



Bottom up approach



Focused on common clinical conditions



Simple

Eleven Things Physicians and Patients Should Question

1 Don't do imaging for lower-back pain unless red flags are present.

Red flags include, but are not limited to, severe or progressive neurological deficits or when serious underlying conditions such as osteomyelitis are suspected. Imaging of the lower spine before six weeks does not improve outcomes.

infections of less than seven days of duration.

Bacterial infections of the respiratory tract, when they do occur, are generally a secondary problem caused by complications from viral infections such as influenza. While it is often difficult to distinguish bacterial from viral sinusitis, nearly all cases are viral. Though cases of bacterial sinusitis can benefit from antibiotics, evidence of such cases does not typically surface until after at least seven days of illness. Not only are antibiotics rarely indicated for upper respiratory illnesses, but some patients experience adverse effects from such medications.

3 Don't order screening chest X-rays and ECGs for asymptomatic or low risk outpatients.

There is little evidence that detection of coronary artery stenosis in asymptomatic patients at low risk for coronary heart disease improves health outcomes. False positive tests are likely to lead to harm through unnecessary invasive procedures, over-treatment and misdiagnosis. Chest X-rays for asymptomatic patients with no specific indications for the imaging have a trivial diagnostic yield, but a significant number of false positive reports. Potential harms of such routine screening exceed the potential benefit.

4 Don't screen women with Pap smears if under 21 years of age or over 69 years of age.

- Don't do screening Pap smears annually in women with previously normal results
- Don't do Pap smears in women who have had a hysterectomy for non-malignant disease

The potential harm from screening women younger than 21 years of age outweighs the benefits and there is little evidence to suggest the necessity of conducting this test annually when previous test results were normal. Women who have had a full hysterectomy for benign disorders no longer require this screening. Screening should stop at age 70 if three previous test results were normal.

5 Don't do annual screening blood tests unless directly indicated by the risk profile of the patient.

There is little evidence to indicate there is value in routine blood tests in asymptomatic patients; instead, this practice is more likely to produce false positive results that may lead to additional unnecessary testing. The decision to perform screening tests, and the selection of which tests to perform, should be done with careful consideration of the patient's age, sex and any possible risk factors.

is not necessary because routine supplementation with vitamin D is appropriate for the general population. An exception is made for measuring Vitamin D levels in patients with significant renal or metabolic disease.



MORE IS
NOT
ALWAYS
BETTER



Choosing Wisely Canada is a campaign to help clinicians and patients engage in conversations about unnecessary tests and treatments and make smart and effective choices to ensure high-quality care.

For more information on Choosing Wisely Canada or to see other patient materials, visit www.ChoosingWisely.ca.
Join the conversation on Twitter @ChooseWiselyCA

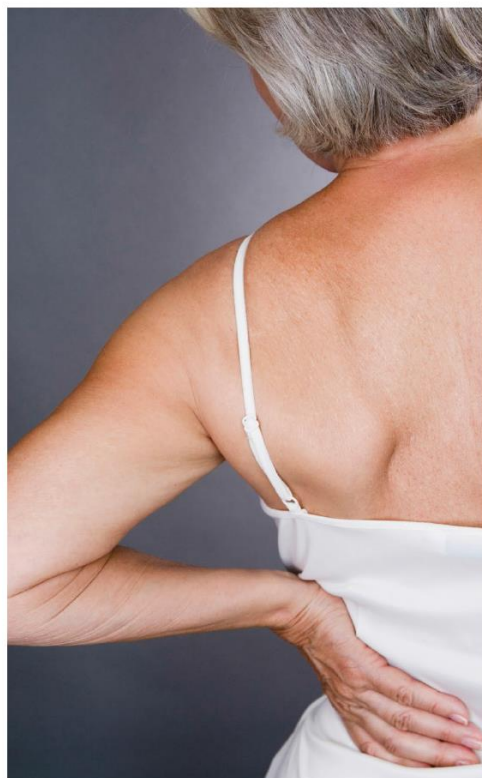
Imaging tests for lower back pain

When you need them—and when you don't

Back pain can be excruciating. So it seems that getting an X-ray, CT scan, or MRI to find the cause would be a good idea. But that's usually not the case, at least at first. Here's why:

They don't help you get better faster.

Most people with lower back pain feel better in about a month whether they get an imaging test or not. In fact, those tests can lead to additional procedures that complicate recovery. For example, one large study of people with back pain found that those who had imaging tests soon after reporting the problem fared no better and sometimes did worse than people who took simple steps like applying heat, staying active, and taking an over-the-counter (OTC) pain reliever. Another study found that back pain sufferers who had an MRI in the first month were eight times more likely to have surgery, but didn't recover faster.



They can pose risks.

X-rays and CT scans expose you to radiation, which can increase cancer risk. While back x-rays deliver less radiation, they still can give 75 times more radiation than a chest x-ray. That's especially worrisome to men and women of childbearing age, because x-rays and CT scans of the lower back can expose testicles and ovaries to radiation. Furthermore, the tests often reveal spinal abnormalities that could be completely unrelated to the pain. Those findings can cause needless worry and lead to unnecessary follow-up tests and procedures such as injections or sometimes even surgery.

When do imaging tests make sense?

It can be a good idea to get an imaging test right away if you have signs of severe or worsening nerve damage, or a serious underlying problem such as cancer or a spinal infection. "Red flags" that can alert your doctor that imaging may be worthwhile include:

- A history of cancer.
- Unexplained weight loss.
- Fever.
- Recent infection.
- Loss of bowel or bladder control.
- Abnormal reflexes, or loss of muscle power or feeling in the legs.

If none of these additional symptoms is present, you probably don't need an imaging test for at least several weeks after the onset of your back pain, and only after you've tried the self-care measures described at right.

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How should you treat lower back pain?

Your doctor can advise you on how best to treat your lower back pain. Most people get over back pain in a few weeks, and these simple steps might help:

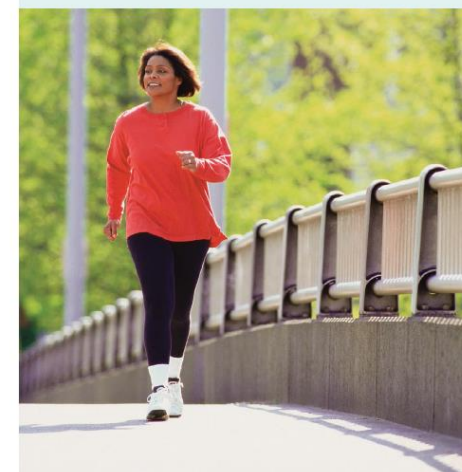
Stay active. Resting in bed for more than a day or so can cause stiffness, weakness, depression, and slow recovery.

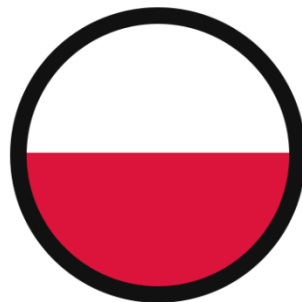
Apply heat. A heating pad, electric blanket, or warm bath or shower relaxes muscles.

Consider over-the-counter medicines. Good options include pain relievers such as acetaminophen (Tylenol and generic) or anti-inflammatory drugs such as ibuprofen (Advil and generic) and naproxen (Aleve and generic).

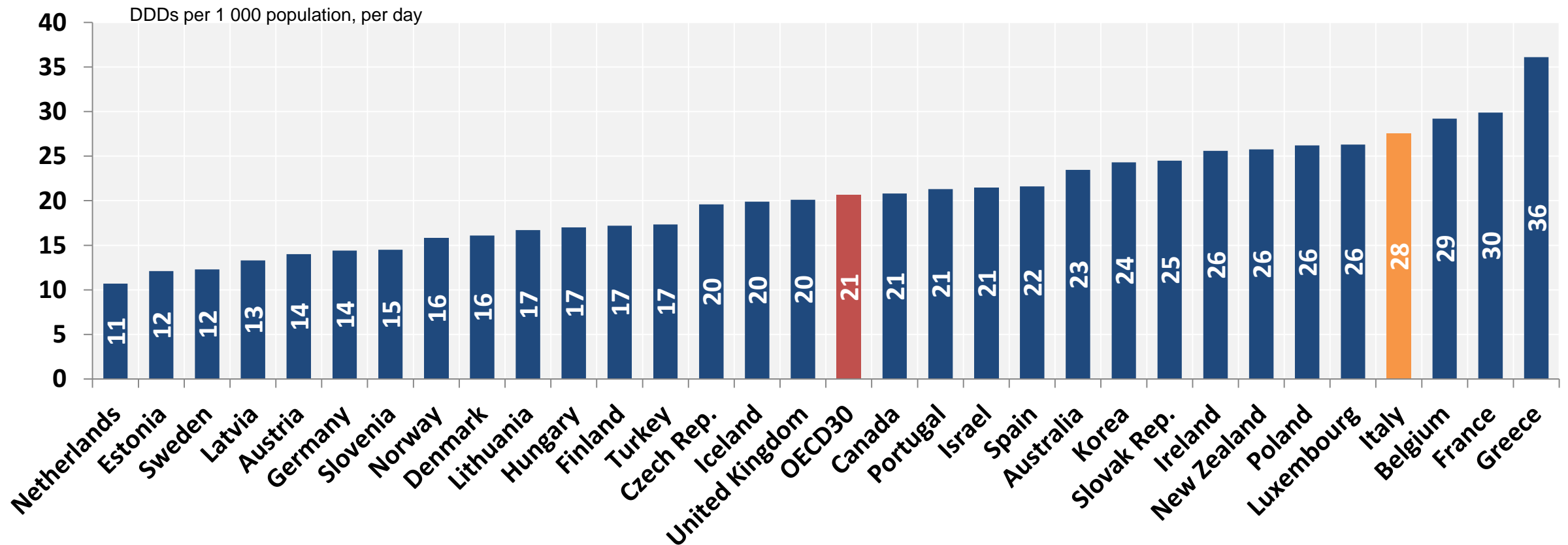
Sleep comfortably. Lying on your side with a pillow between your knees or lying on your back with a few pillows beneath your knees might help.

Talk with your doctor. If symptoms don't improve after a few days, consider seeing a doctor to make sure that the problem doesn't stem from a serious underlying health problem. If the pain is severe, ask about prescription pain relievers.

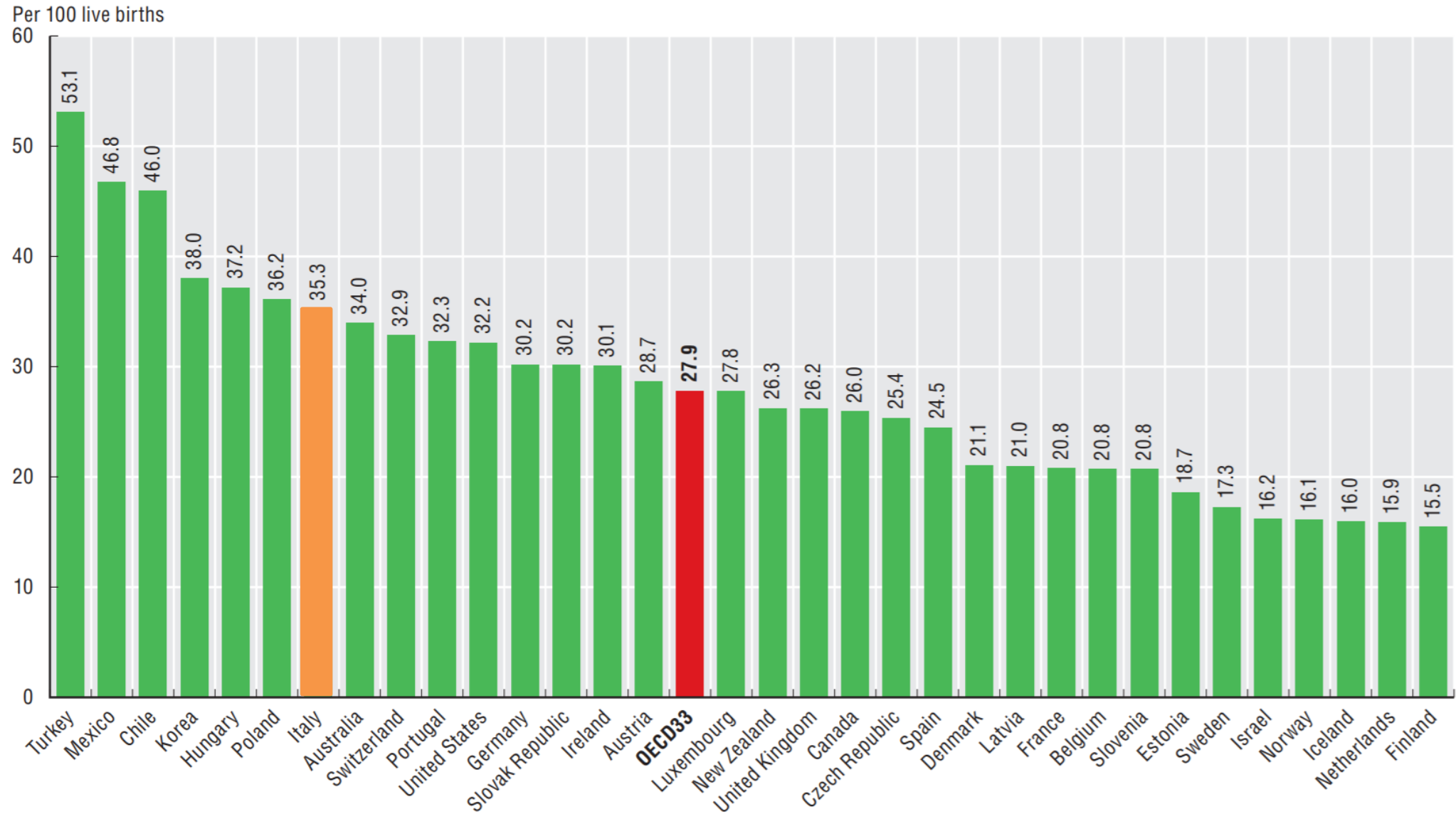




Antibiotic consumption across OECD countries



9.20. Caesarean section rates, 2015 (or nearest year)



Source: OECD Health Statistics 2017.



I've always
done this

The patient
wants it

\$\$

New tests
are good

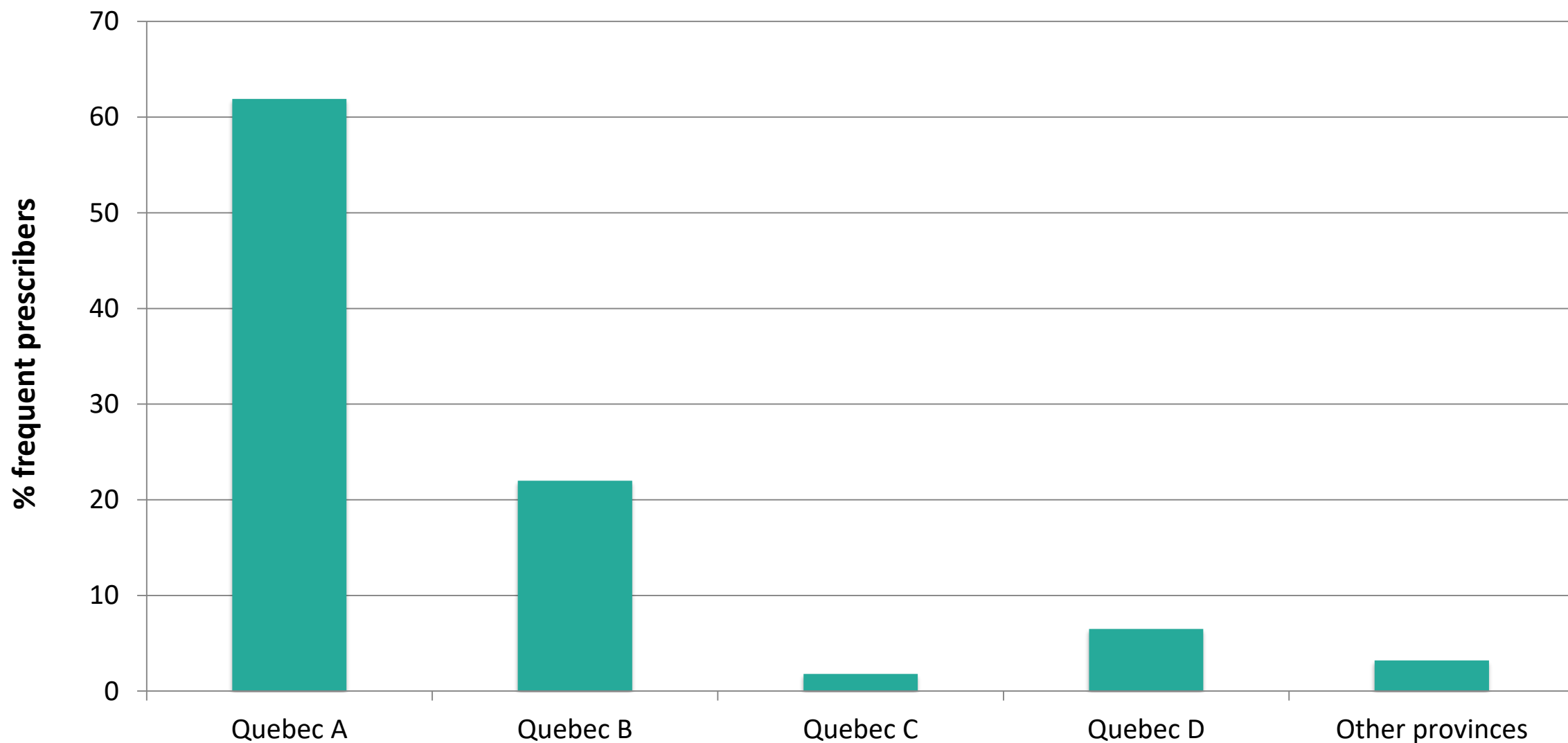
I don't want
to get sued

Better to do
something than
do nothing

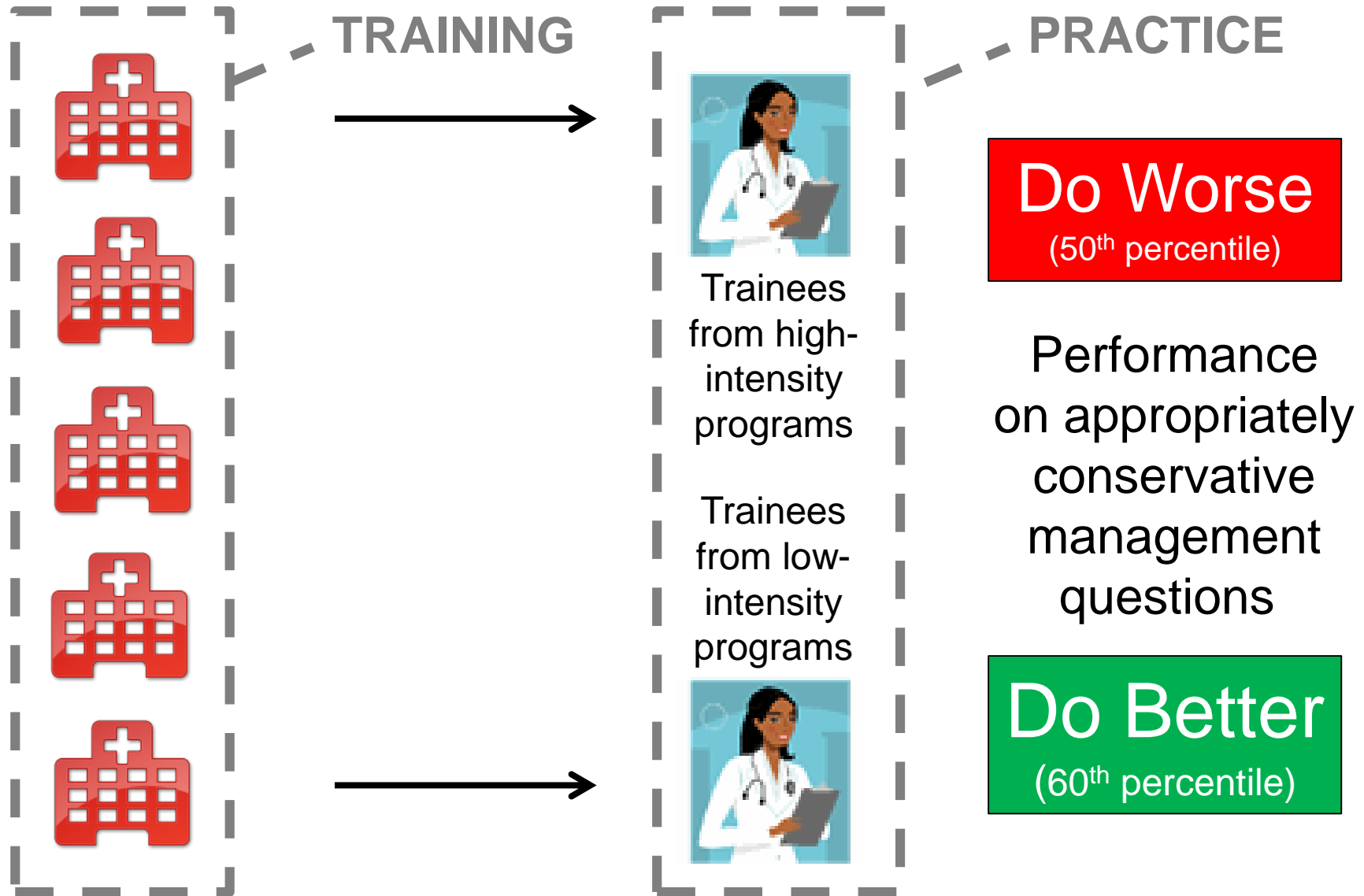
Referring doctor
wants it



Training environment & future practice



Healthcare Resource Utilization



Clinical Experience

Patients seen in the ED by residents vs. directly by attending MDs:



Higher
admission rates

(21% vs 14%)



More use of
advanced imaging

(28% vs 21%)



Longer median ED
stay

(226 mins vs 153 mins)

Faculty Role Modeling

3,395 students at US medical schools surveyed:



90% agree physicians have a responsibility to promote high-value care



48% thought ordering test easier than explaining why unnecessary



Students who train in environments with high-resource utilization report worse faculty role modeling behaviours

Choosing Wisely Canada

STARS

Students & Trainees Advocating
for Resource Stewardship



Students
initiating a
conversation on
“Choosing
Wisely” to learn
how to practice
high value care

Six Things Medical Students and Trainees Should Question

- 1** Don't suggest ordering the most invasive test or treatment before considering other less invasive options.
- 2** Don't suggest a test, treatment, or procedure that will not change the patient's clinical course
- 3** Don't miss the opportunity to initiate conversations with patients about whether a test, treatment or procedure is necessary.
- 4** Don't hesitate to ask for clarification on tests, treatments, or procedures that you believe are unnecessary.
- 5** Don't suggest ordering tests or performing procedures for the sole purpose of gaining personal clinical experience.
- 6** Don't suggest ordering tests or treatments pre-emptively for the sole purpose of anticipating what your supervisor would want.



STARS program <i>elements</i>	STARS program <i>enablers</i>
<ul style="list-style-type: none"> • Leadership Summit & National Meeting 	<ul style="list-style-type: none"> • Faculty mentor
<ul style="list-style-type: none"> • Bi-monthly calls 	<ul style="list-style-type: none"> • Other students
<ul style="list-style-type: none"> • Facebook group 	<ul style="list-style-type: none"> • Related interest groups
<ul style="list-style-type: none"> • Google document 	<ul style="list-style-type: none"> • National student organizations
<ul style="list-style-type: none"> • National student network 	

Impact on STARS Students

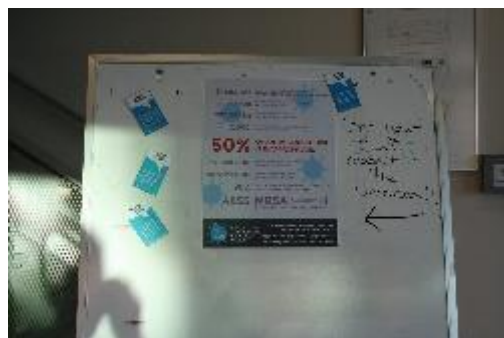
“The program...has led to a serious reflection [among faculty] about the role of stewardship programs in the overall educational effort at my school”.

- Medical School Dean

“It has motivated me to be a leader throughout the medical school. Definitely the program was motivating and just makes me think of how I want to be as a physician and how I can kind of get this idea of Choosing Wisely to other people.”

- STARS/ESPOIRS Student

Choosing Wisely Awareness Week



NOSM, University of Toronto

Student-run events



University of Ottawa, Université de Sherbrooke

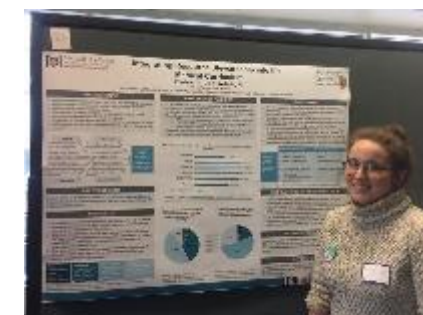
Interest Groups



Dalhousie, UBC, Laval

Curricular Change

M0	• Introductory lecture on resource stewardship
M1	• ABC's of resource stewardship • Ethics of resource stewardship slides
M2	• 100+ Choosing Wisely Canada recommendations • Online antimicrobial resource stewardship links
M3	• MedU Modules • Lecture: Antimicrobial Resource Stewardship • Lecture: Team Based Learning on practical applications of resource stewardship • Costs of clinically relevant tests in Manitoba
M4	• Choosing Wisely Canada Recommendations for Medical Students • Online module from Institute for Healthcare Improvement



University of Manitoba, McMaster University

Exemplary Example



uOttawa

- Integrated 12 case-based modules
- Surveyed 120 students to assess knowledge
- Published in 'University of Ottawa Journal of Medicine'
- Initiated Choosing Wisely interest group
- Hosted Interprofessional conference



Less is More: Integration of Resource Stewardship in Medical Education

Anand Lakhani (University of Toronto)

Elliot Lass (University of Toronto)

William Silverstein (University of Toronto)

Approved: Date

Revised: Date(s)



CFMS
Canadian Federation
of Medical Students

FEMC
Fédération des étudiants et des
étudiantes en médecine du Canada

The Medical Post

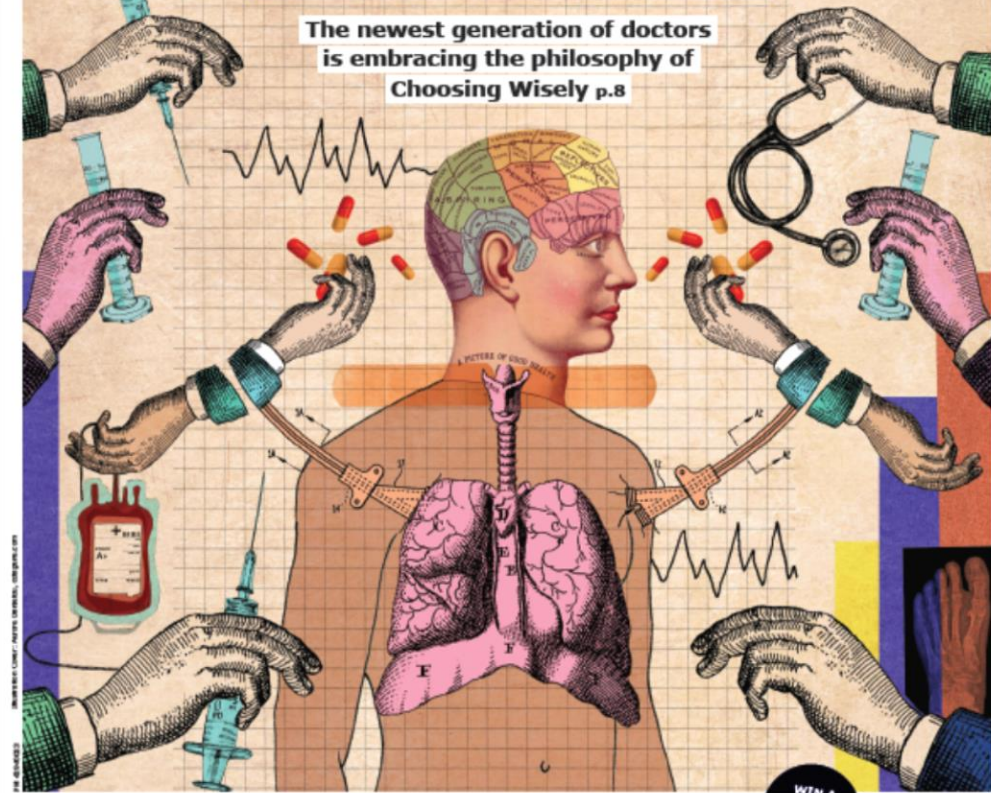
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• THE INDEPENDENT VOICE FOR CANADA'S DOCTORS •

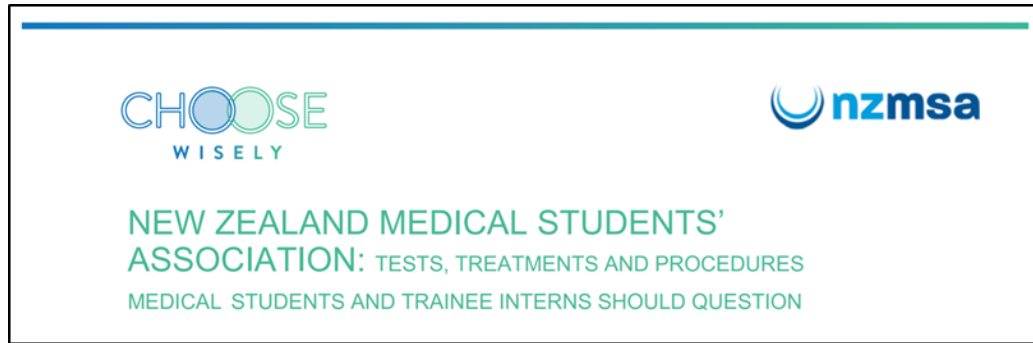
NOVEMBER 21, 2017

A FUTURE WITH FEWER TESTS

The newest generation of doctors
is embracing the philosophy of
Choosing Wisely p.8

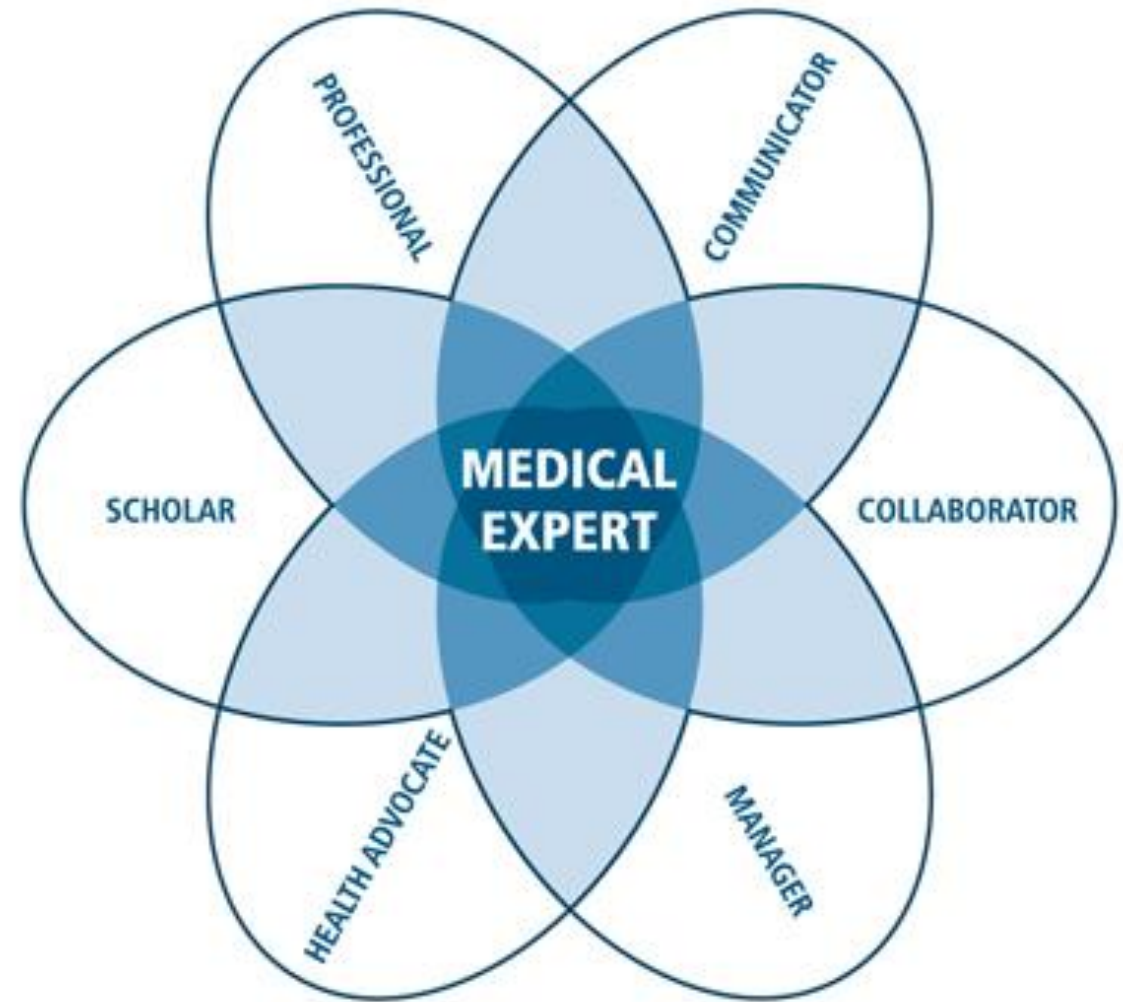


International Leadership & Collaboration



CanMEDS 2015

LEADER



2. Engage in the stewardship of health care resources

- 2.1 Allocate health care resources for optimal patient care
 - 2.2 Apply evidence and management processes to achieve cost-appropriate care
-

Toolkits to Teach Resource Stewardship

Real  case examples



<http://www.royalcollege.ca/rcsite/canmeds/resource-stewardship-e>

Five Things Medical Residents and Patients Should Question

- 1 Don't order investigations that will not change your patient's management plan.**
- 2 Don't order repeat laboratory investigations on inpatients who are clinically stable.**
- 3 Don't order intravenous (IV) when an oral (PO) option is appropriate and tolerated.**
- 4 Don't order non-urgent investigations or procedures that will delay discharge of hospital inpatients.**
- 5 Don't order invasive studies if less invasive options are available and as effective**