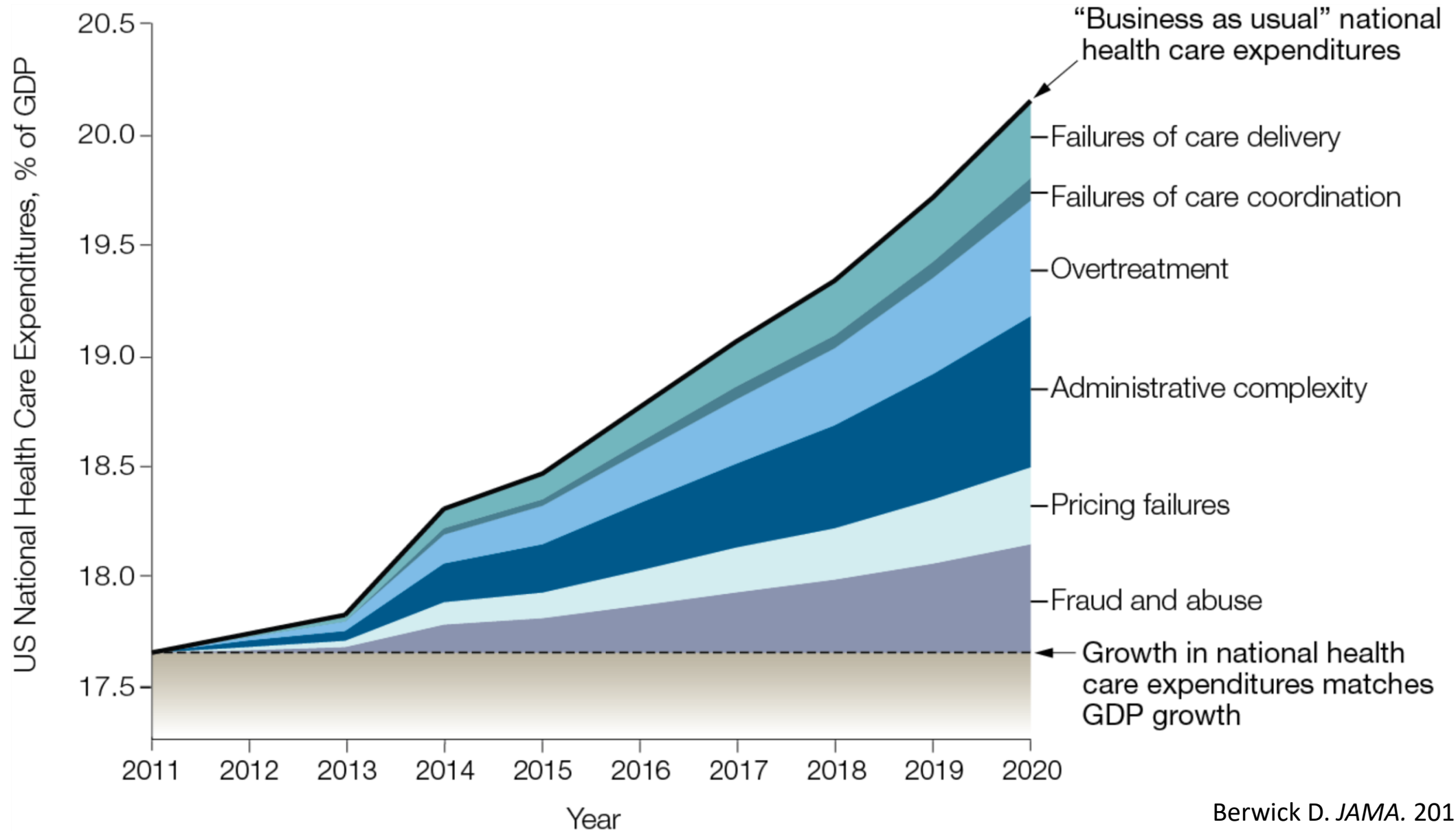


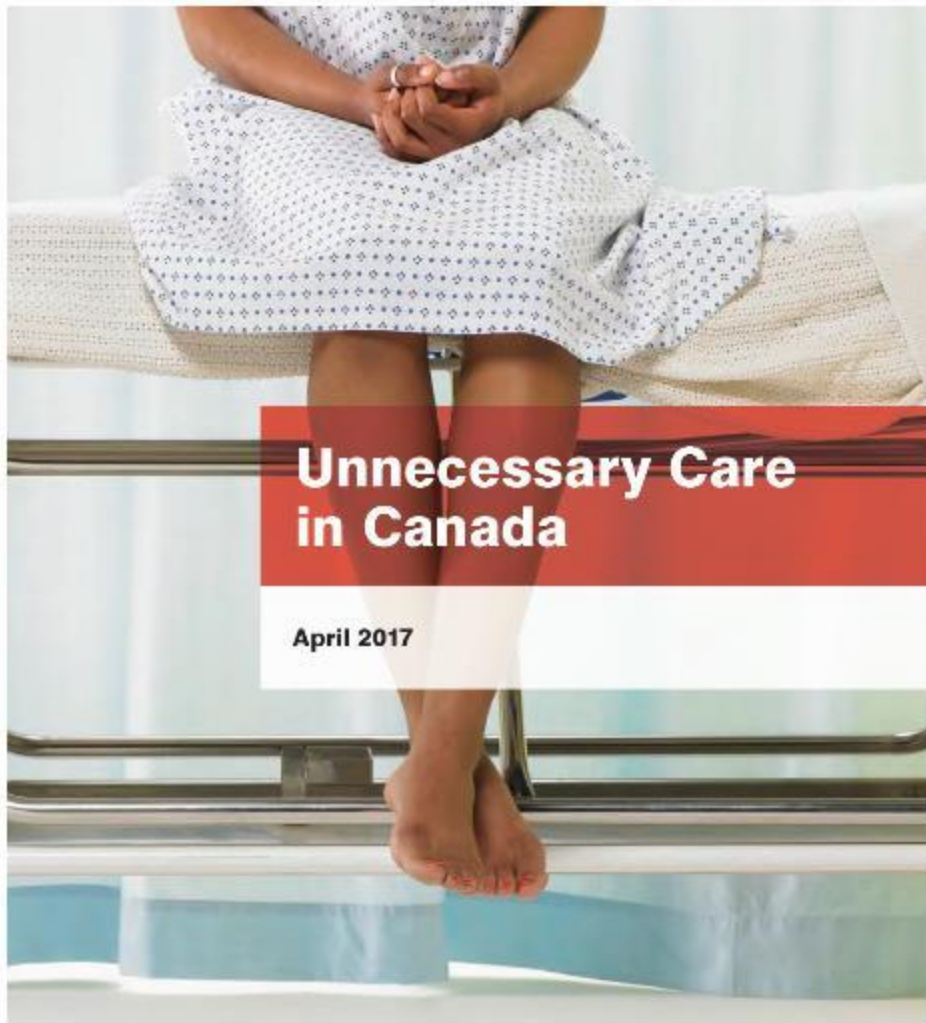


Choosing wisely—From an Idea to an International Movement

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

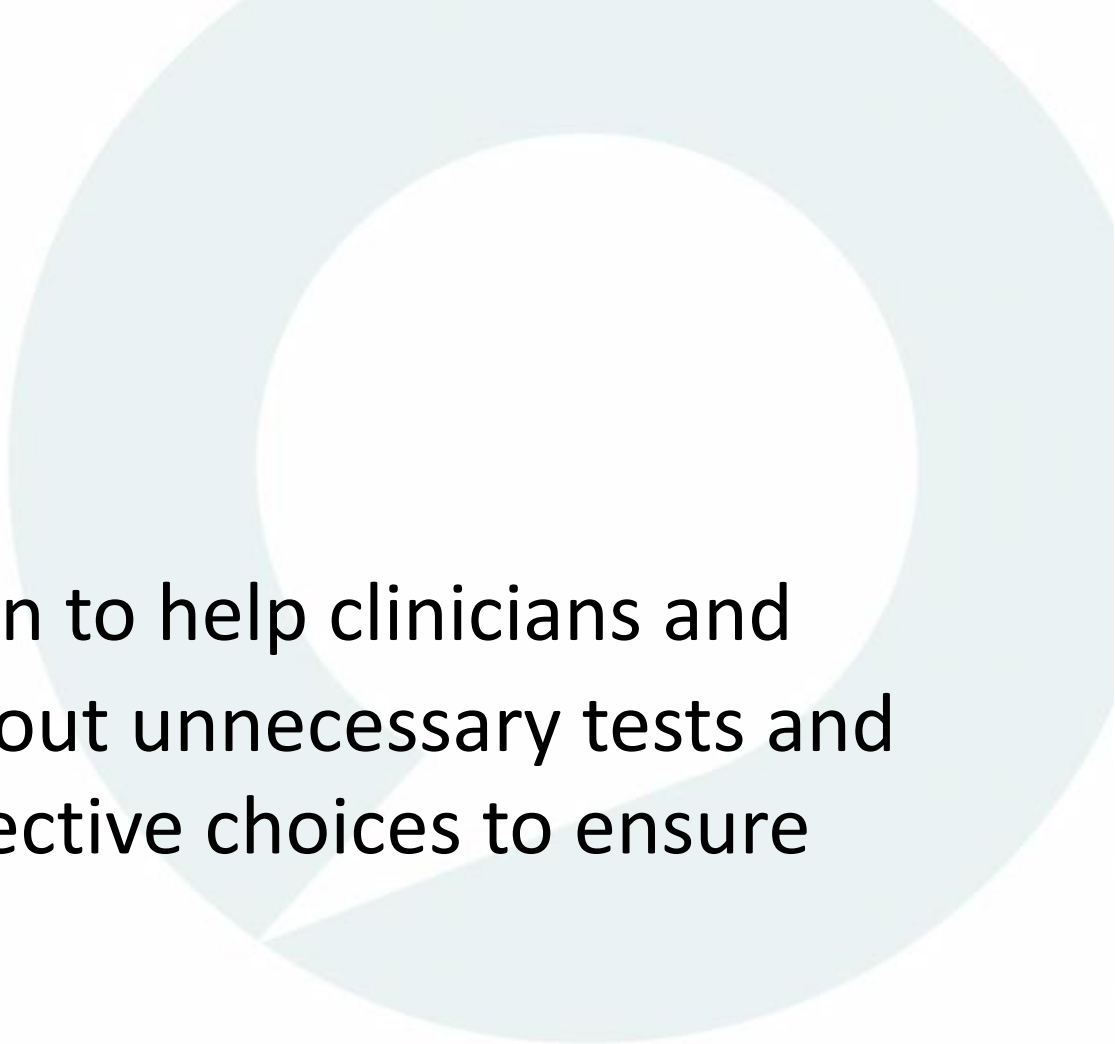
 Canadian Institute
for Health Information
Institut canadien
d'information sur la santé

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



Underuse problems emphasized more than overuse problems

Underuse (examples)		1999	2009	P value
Antithrombotics for AFib	6 of 9 underuse indicators improved significantly	46%	72%	<0.01
Aspirin for CAD		28%	64%	<0.01
B-blocker in CHF		21%	60%	<0.01
Statin in diabetes		12%	36%	<0.01
Tx for osteoporosis		35%	45%	0.21
Overuse (examples)		1999	2009	P value
Prostate CA screening > 74 yrs of age	Only 2 of 11 overuse indicators improved – and 1 indicator worsened	3.5%	5.7%	0.03
Screening ECG in general medical exam		6.1%	11.3%	0.20
Imaging for back pain		19%	23%	0.25
Screening CBC in general medical exam		22%	38%	0.08



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

Campaign approach

Clinicians

- Societies develop and disseminate lists

Patients

- Develop and disseminate patient materials

Medical education

- Mobilize students and trainees
- Integrate resource stewardship as a core competency

Implementation

- Support adoption of recommendations in care settings

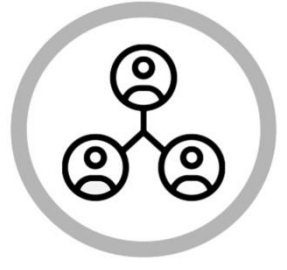
Measurement

- Measure rates of overuse and build research capacity

What is unique about CWC?



Clinician led



Bottom up approach



Focused on common clinical conditions



Simple

Clinician Engagement

70+ SOCIETIES
COMMITTED

300+
RECOMMENDATIONS



**OTHER HEALTH CARE
PROVIDER GROUPS ENGAGED**



BEYOND THE LISTS

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


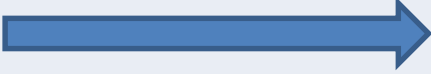



The potential harm from screening women younger than 21 years of age outweighs the benefits and there is little evidence to suggest the necessity of conducting this test annually when previous test results were normal. Women who have had a full hysterectomy for benign disorders no longer require this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

Challenging Misperceptions of Patients

More medicine is better medicine		Unnecessary care = unnecessary risk + cost
Screening and early diagnosis is always good		Overdiagnosis can cause harm
Benefits of treatments always outweigh harms		Balance between benefits and harms is often marginal or uncertain
Denial of treatment = rationing		Efficiency = better for everyone (NOT rationing)
Doctors know best so should make all the decisions		Doctors should share decisions with patients



MORE IS
NOT
ALWAYS
BETTER

FOUR QUESTIONS TO ASK YOUR DOCTOR

- 1) Do I really need this test, treatment or procedure?
- 2) What are the downsides?
- 3) Are there simpler, safer options?
- 4) What happens if I do nothing?



CAIR Canadian Association of Radiologists
L'Association canadienne des radiologistes

THE COLLEGE OF
FAMILY PHYSICIANS
OF CANADA LE COLLÈGE DES
MÉDECINS DE FAMILLE
DU CANADA

ASSOCIATION
MÉDICALE
CANADIENNE CANADIAN
MEDICAL
ASSOCIATION
Forum on General and Family Practice Issues

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:

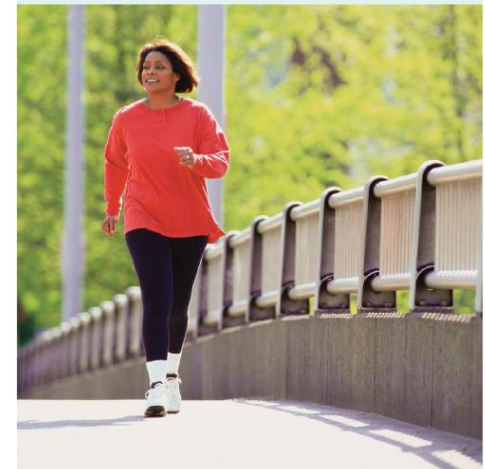
Stay active. Resting in bed for more than a day or so can cause stiffness, weakness, depression, and slow recovery.


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.



A hand is shown pouring a stream of black and white capsules from a small orange container. The background is a solid reddish-pink color.

Sorry, but no amount of antibiotics will get rid of your cold.

The best way to treat most colds, coughs or sore throats is with plenty of fluids and rest. Talk to your health care provider.

I/we pledge to provide patients with the highest quality of care by avoiding unnecessary antibiotic use.

Signature

Opioid Wisely

**There are many ways
to manage pain.**

Talk to your doctor about safer options.



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.

There are often diagnostic approaches and treatment options that result in the same clinical outcome but are less invasive. Examples include the use of ultrasound instead of computed tomography (CT) scanning to diagnose acute appendicitis in children, or the use of an oral antibiotic that has similar oral bioavailability as its intravenous counterpart. Taking time to consider the diagnostic sensitivity and specificity of less invasive tests or the therapeutic effectiveness of less invasive treatments can minimize unnecessary patient exposure to harmful side effects of more invasive tests or treatments.

2 Don't suggest a test, treatment, or procedure that will not change the patient's clinical course.

When ordering tests, it is important to always consider the diagnostic characteristics such as sensitivity, specificity and predictive value in light of the patient's pre-test probability. Patients who are at very low baseline risk often do not require an additional test to rule out the diagnosis. Furthermore, evidence suggests that in such low-risk patients, diagnostic tests do not reassure patients, decrease their anxiety, or resolve their symptoms. Examples include the use of computed tomography (CT) scanning in low-risk patients to rule out pulmonary embolism, or pre-operative cardiac testing for patients prior to low risk surgery. Evaluation of baseline risk and the use of decision tools wherever possible, along with a 'how will this change my management' approach, can help to avoid unnecessary 'rule out' testing in patients.

3 Don't miss the opportunity to initiate conversations with patients about whether a test, treatment or procedure is necessary.

Patient requests sometimes drive overuse. For example, a parent might request antibiotics for his or her child who likely has viral sinusitis, or a patient might request magnetic resonance imaging (MRI) for low-back pain. Often patients are unaware of the benefits, side-effects and risks of tests and treatments. Taking time to explore a patient's concerns, and counselling them about the relative benefits and risks of tests or treatments represents a patient-centered approach to ensuring the appropriate use of resources.

4 Don't hesitate to ask for clarification on tests, treatments, or procedures that you believe are unnecessary.

Unfortunately, in some learning environments, a hierarchy exists between supervisors and students that makes it difficult for students to feel comfortable speaking up. As a result, students might observe unnecessary care, but avoid saying anything for

6 Don't suggest ordering tests or treatments pre-emptively for the sole purpose of anticipating what your supervisor would want.

A "hidden curriculum" pervasive in the academic environment encourages medical students to search for zebras through extensive (and often unnecessary) diagnostic workups. Because restraint is often discouraged, students adopt the belief that faculty expect an exhaustive diagnostic approach, and feel that they need to demonstrate their knowledge, thoroughness and curiosity through test ordering. Students can overcome this practice by articulating why they chose not to order a specific test. This, combined with a shift towards 'celebrating restraint' by faculty can help to combat this pervasive practice in medical training.

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The Implementation Spectrum

Education

- Clinician education
- Patient education
- Awareness campaigns

Measurement & Improvement

- Performance measurement
- Quality improvement projects
- Audit and feedback

Hard Coding

- Medical directives
- Order sets
- EMR/CPOE integration

Low leverage interventions



High leverage interventions

DIY Toolkits



Choosing Wisely Canada 

LESS SEDATIVES FOR YOUR OLDER RELATIVES.

A toolkit for reducing inappropriate use of benzodiazepines and sedative-hypnotics among older adults in hospitals

version 1.1





Choosing Wisely Canada 

WHY GIVE TWO WHEN ONE WILL DO?

A toolkit for reducing unnecessary red blood cell transfusions in hospitals

version 1.0




Choosing Wisely Canada 

DROP THE PRE-OP.

A toolkit for reducing unnecessary visits and investigations in pre-operative clinics

version 1.0





Choosing Wisely Canada  

LOSE THE TUBE.

A toolkit for appropriate use of urinary catheters in hospitals

Version 1.1
October 2016





Choosing Wisely Canada 

WHEN PSYCHOSIS ISN'T THE DIAGNOSIS

A Toolkit for Reducing Inappropriate Use of Antipsychotics in Long Term Care

version 1.0



Choosing Wisely Canada 

BYE-BYE, PPI.

A toolkit for deprescribing proton pump inhibitors in EMR-enabled primary care settings

version 1.0



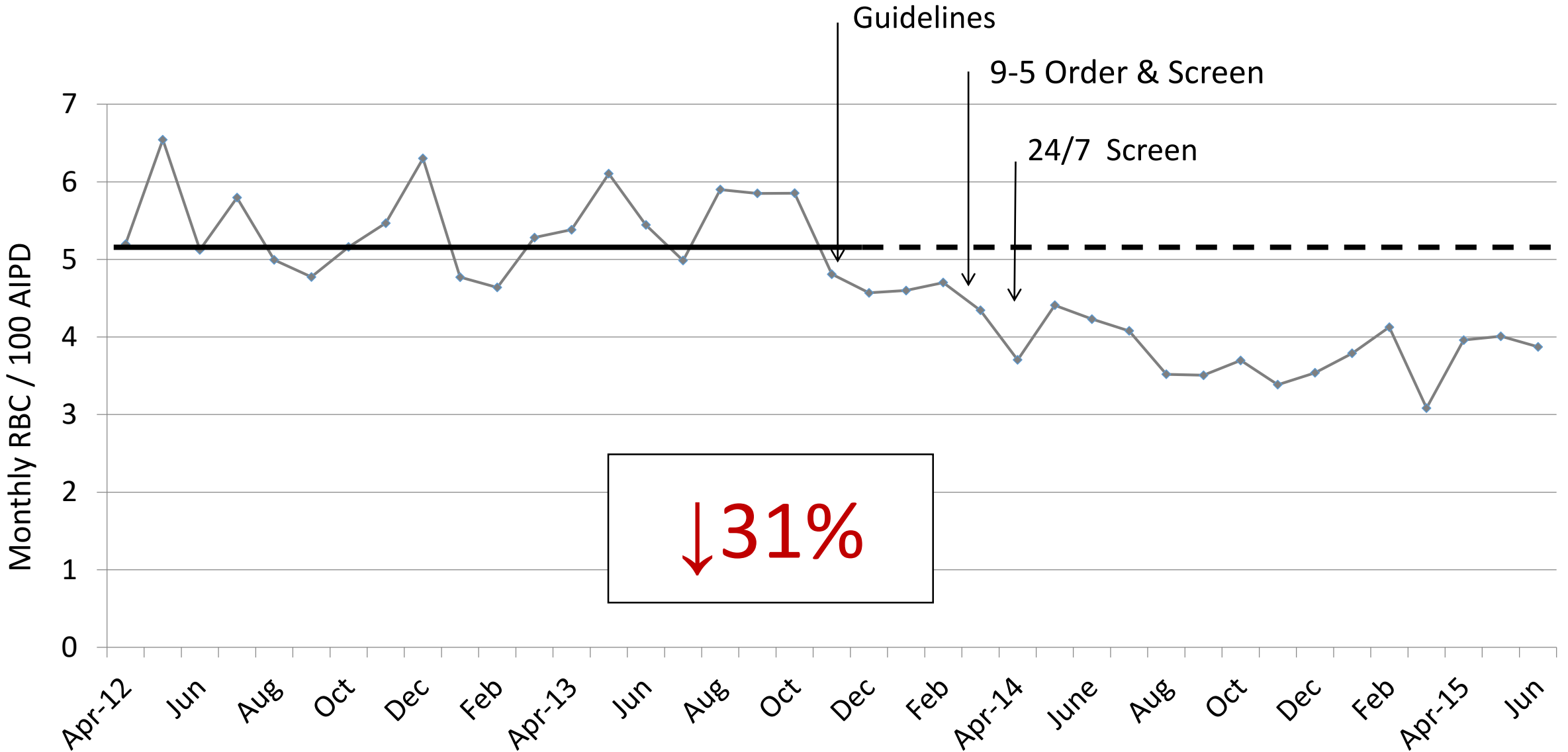
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WHY GIVE TWO WHEN ONE WILL DO?

A toolkit for reducing unnecessary red blood cell transfusions in hospital

Decreasing Unnecessary Transfusions

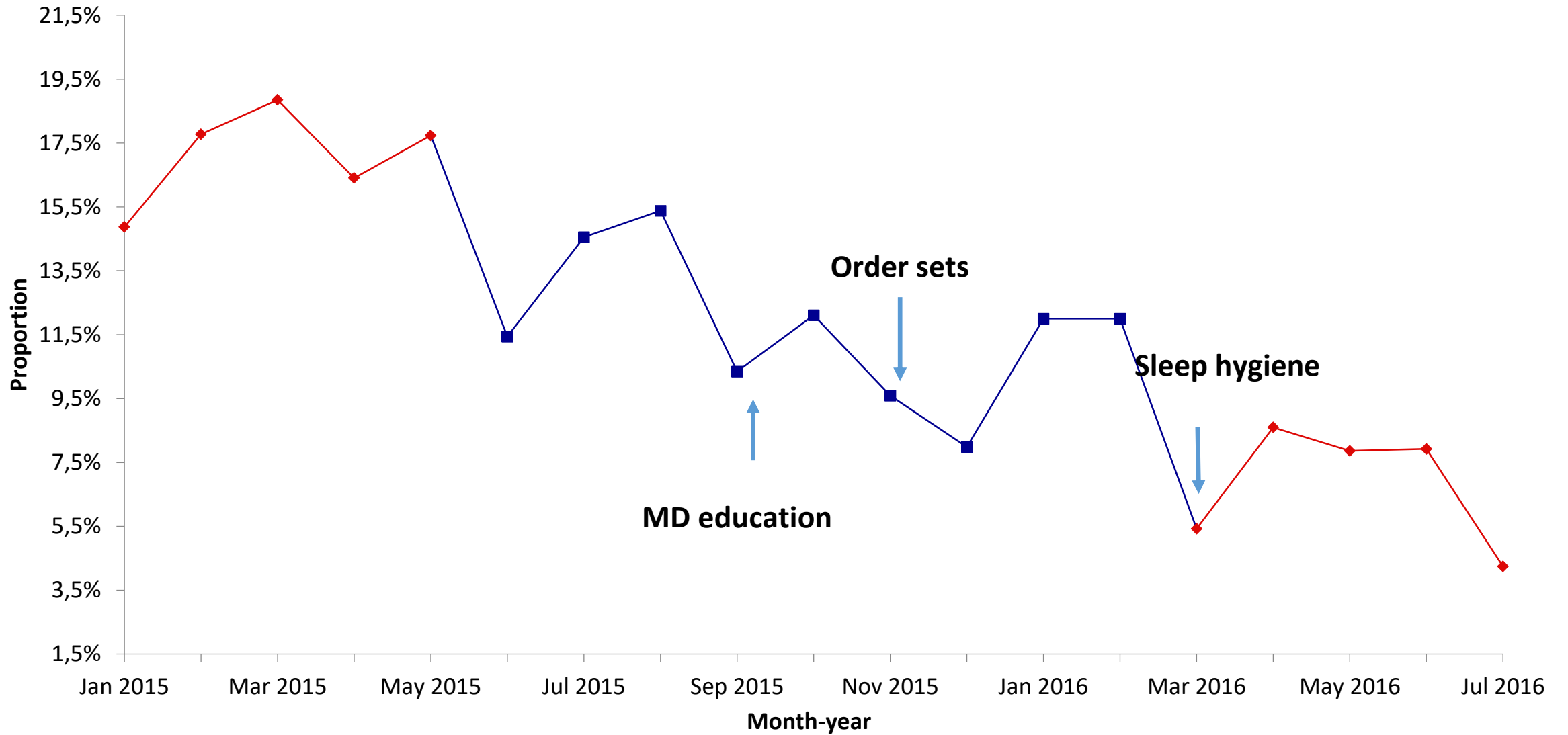




LESS SEDATIVES FOR YOUR OLDER RELATIVES.

**A toolkit for reducing inappropriate use of
benzodiazepines and sedative-hypnotics
among older adults in hospitals**

Sedative Use in Hospital

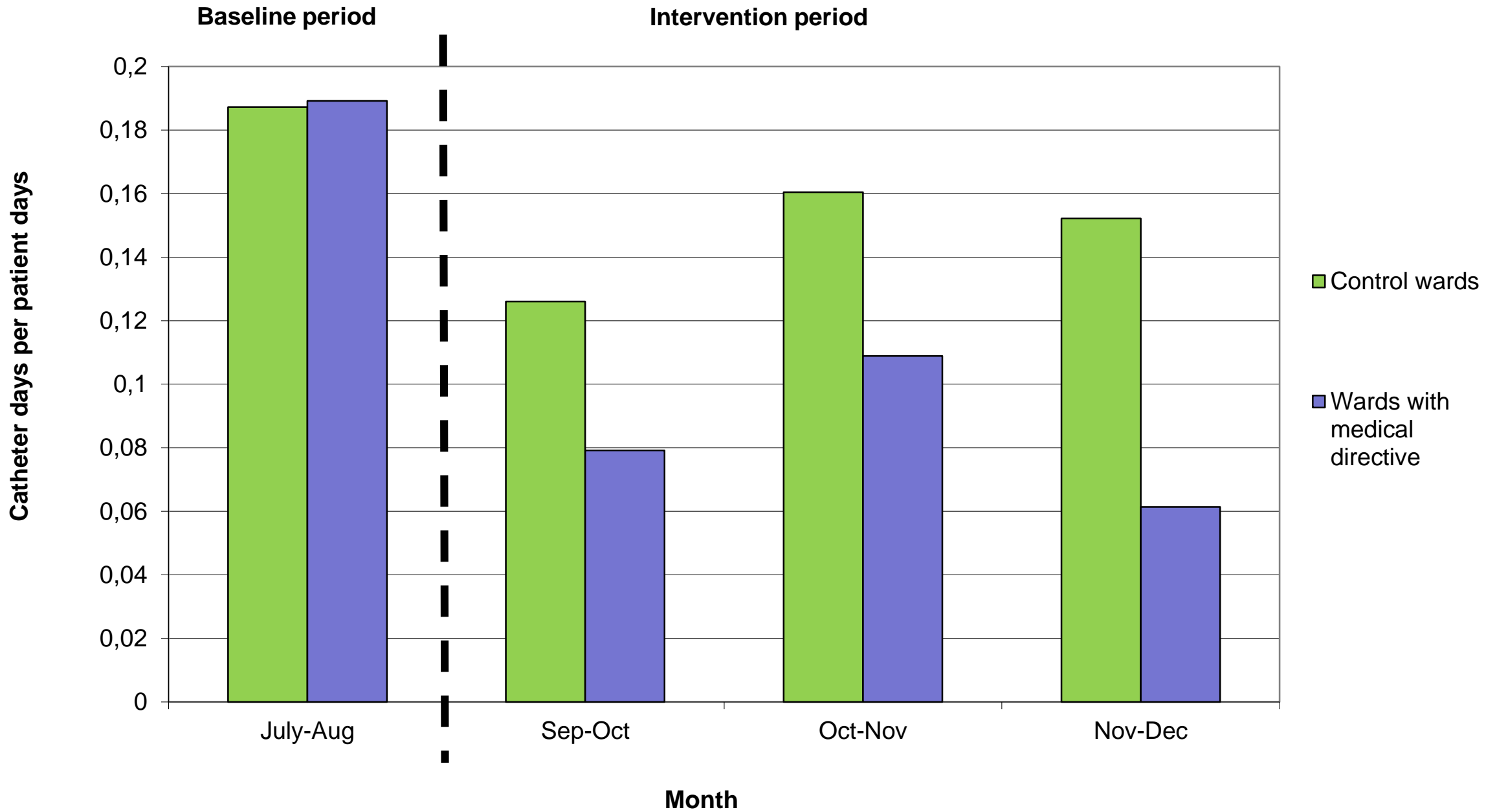


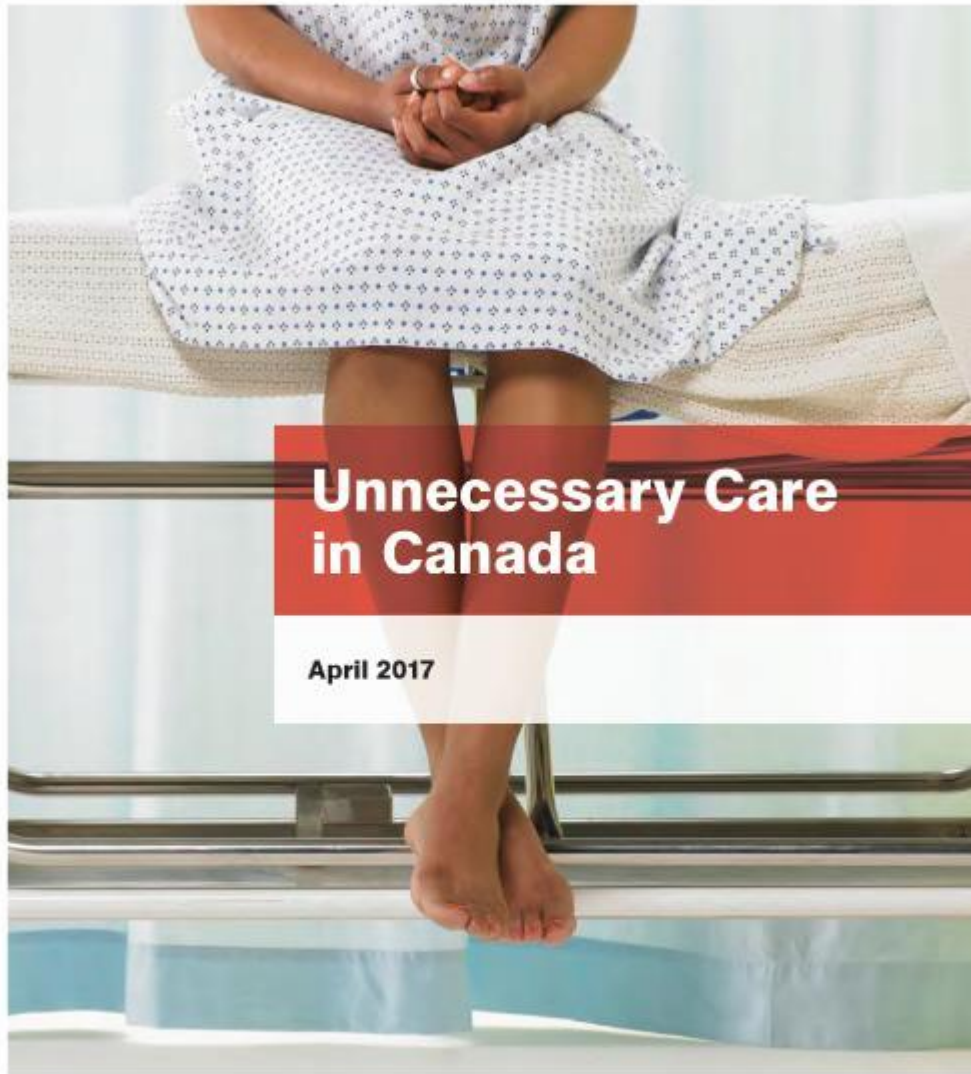
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LOSE THE TUBE.

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Unnecessary Care in Canada

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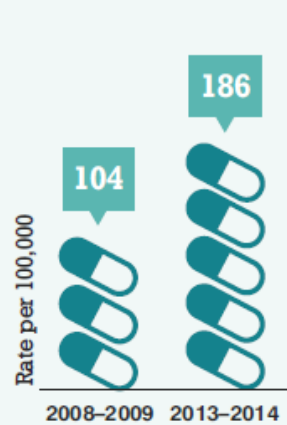
Key findings



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.



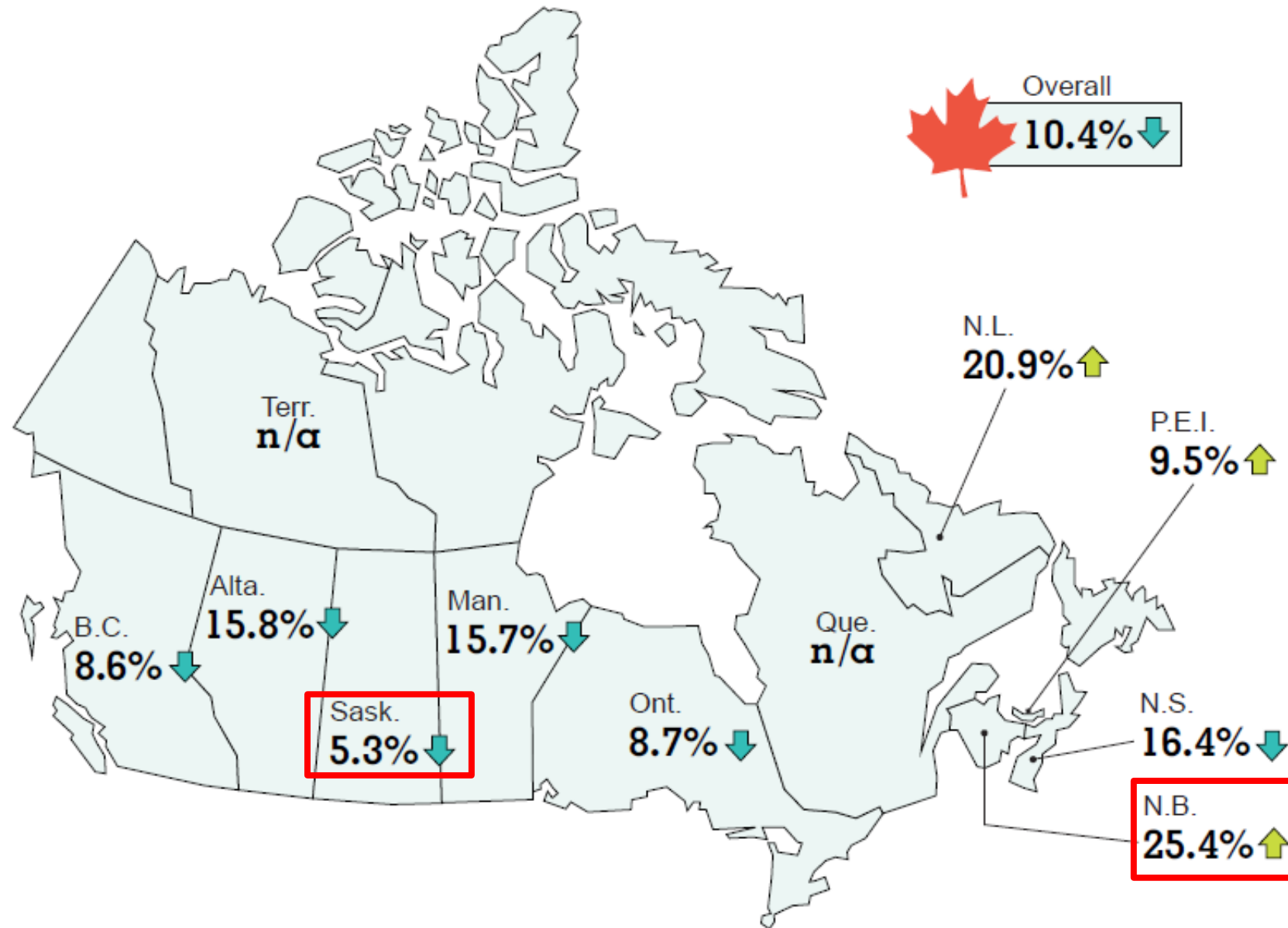
In Ontario, **23%** of inpatients with delirium **had a potentially unnecessary head CT scan.**



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.



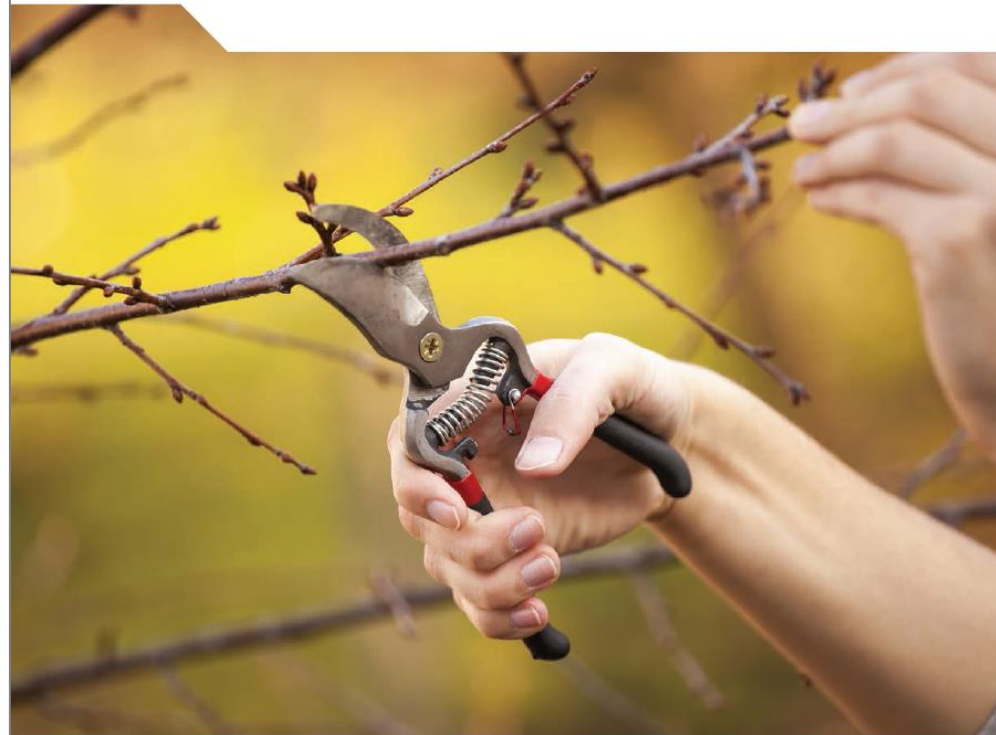
Rate of Chronic Benzodiazepine use Among Seniors



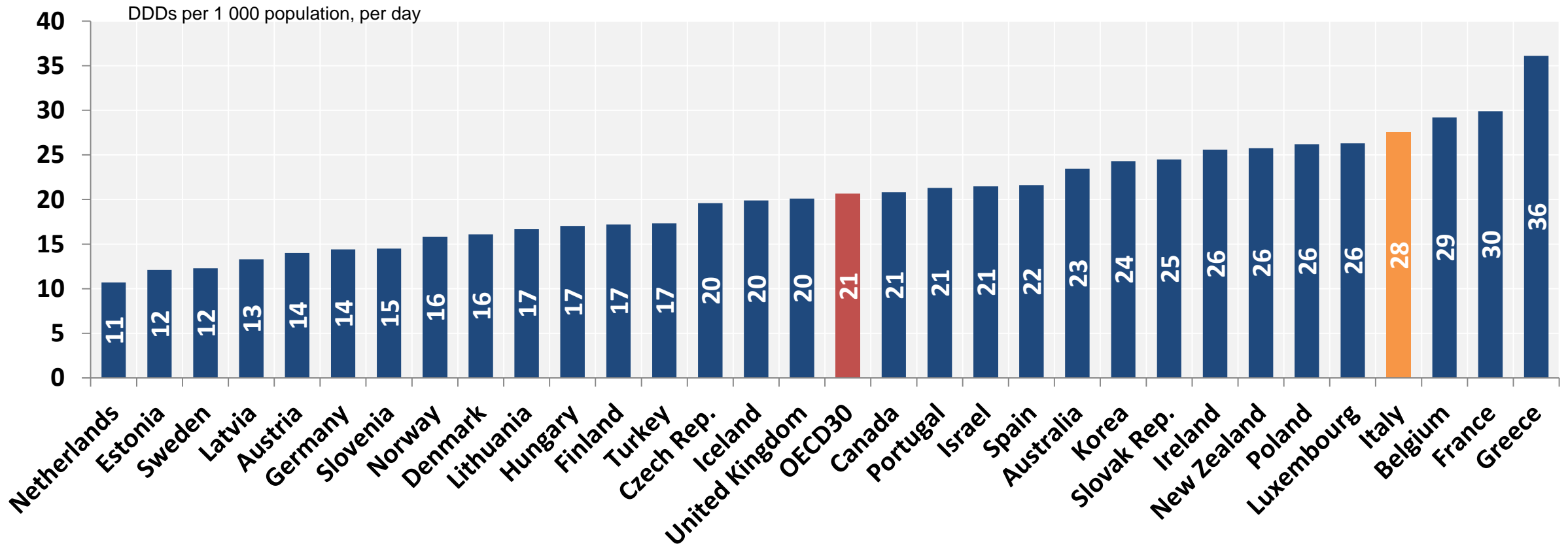




Tackling Wasteful Spending on Health

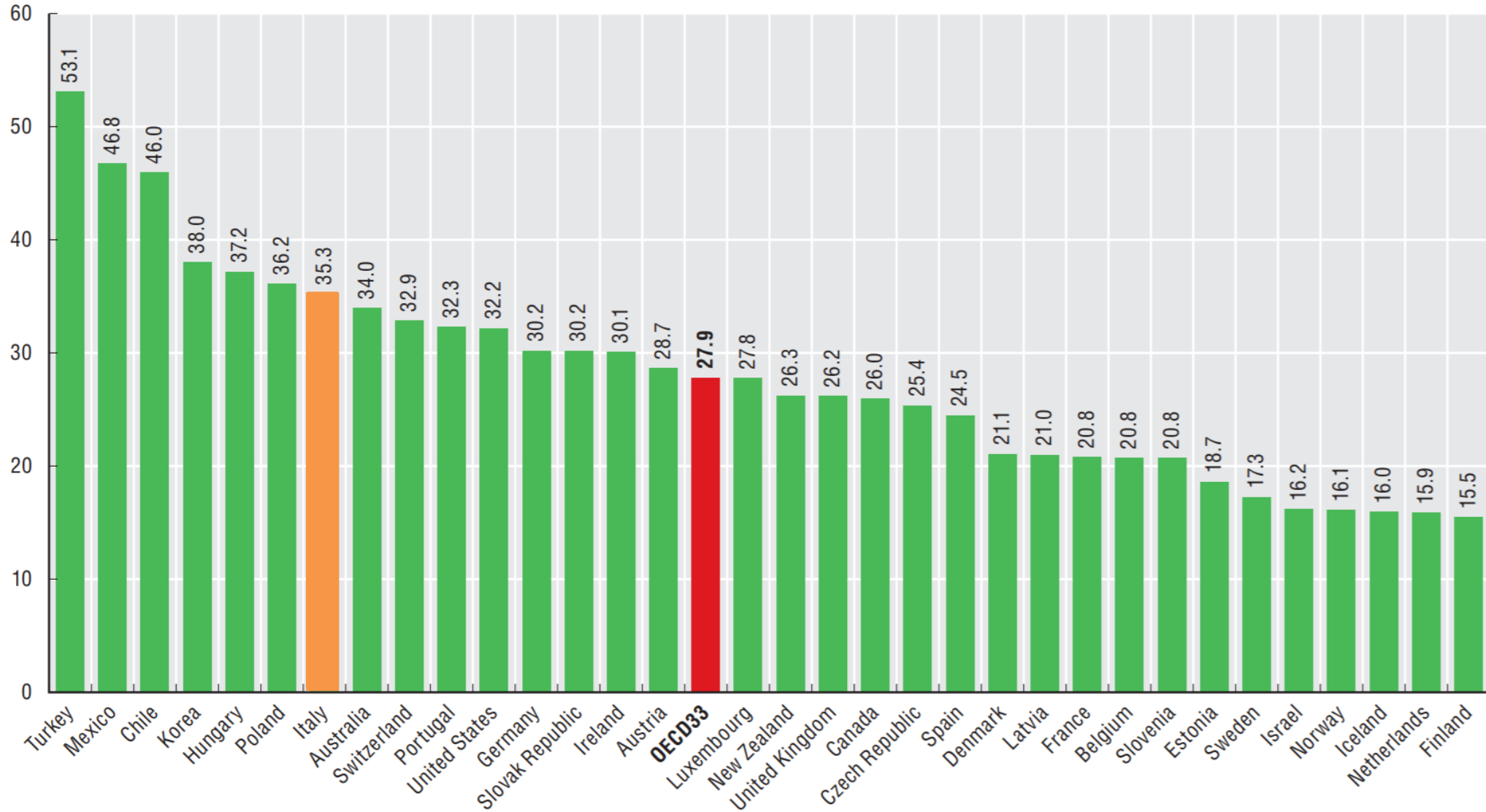


Antibiotic consumption across OECD countries



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

Per 100 live births



Source: OECD Health Statistics 2017.

Choosing Wisely Campaigns Worldwide



CHOOSING WISELY
INTERNATIONAL

Choosing Wisely International Meeting - 2016



Why has Choosing Wisely spread?



1. Perception of the innovation

- Aligns with professional values – “do no harm”
- 5 things – easy, simple
- Adaptable & flexible but shared principles



2. People who Adopt the Innovation

- Physician networks spread innovation
- Early adopters influence peers, share successes



3. Contextual Factors to Support Diffusion

- **Professionals**
 - improve quality of care
- **Patients**
 - shared decision making
- **Governments**
 - improving value



Conclusion

- Choosing wisely has resonated in many countries as way to address overuse
- First phase was engaging physicians
- Now about implementation and measuring impact
- Medical education is a key area to address
- **It is all about CULTURE.**