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

Family & Community Medicine UNIVERSITY OF TORONTO

Choosing Wisely Canada™

Using Antibiotics Wisely: A Family Medicine Antimicrobial Stewardship Campaign

Practical Talks for Family Docs

Tuesday, November 26, 2019, 12:00-13:00 (EST)

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Faculty/Presenter Disclosure

Faculty: **Dr. Allan Grill**

I have the following relevant financial relationships to disclose:

- **Physician Advisor, The College of Family Physicians of Canada**

Relationships with commercial interests:

- **Not applicable**

Disclosure of Commercial Support

- **This program has received NO Commercial support**
- **This program has received NO in-kind support**

- **<u>Potential for conflict(s) of interest</u>:**
  - **Not applicable**

Objectives

- To identify the barriers influencing inappropriate use of antibiotics to treat viral upper respiratory tract infections in primary care and urinary tract infections in Long-Term Care (LTC)
- To explain the consequences of antibiotic overuse in primary care and the important role clinicians play to influence practice change
- To integrate practical, evidence-based tools at the point of care that engages patients in dialogue supporting antimicrobial stewardship

Presentation Outline

- Overview of the Choosing Wisely Canada (CWC) *Using Antibiotics Wisely* campaign
- Case Scenarios & Clinical Practice Statements
- Tips on antimicrobial stewardship
  - Evidence-based tools for Practitioners & Patients

Choosing Wisely Canada

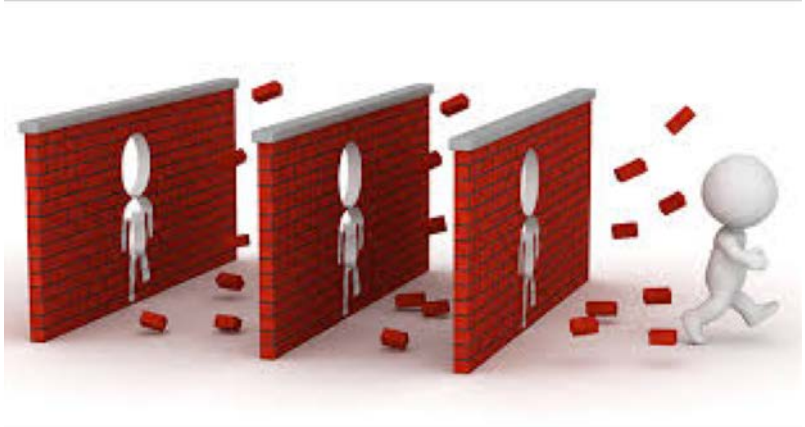
- Launched April 2014
- A national campaign to help clinicians and patients **engage in conversations** about unnecessary tests and treatments
- 70 societies; 300+ recommendations (low value care)
- Organized by the University of Toronto, Canadian Medical Association and St. Michael's Hospital

Choosing Wisely Canada

THE COLLEGE OF FAMILY PHYSICIANS OF CANADA

LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

What are the barriers to not prescribing antibiotics for viral URTIs in your practice?



I've always done this

The patient wants it

Time constraints

Better to do something than do nothing

Linder JA et al., Clin Ther 2003 25(9):2419-30

- Does antibiotic prescribing reduce office visit duration for patients presenting with URTI symptoms?
- 3764 visits (1995-2000); U.S. primary care practices
- Dx: acute URTI, nasopharyngitis, bronchitis, sinusitis, pharyngitis, AOM; age 18-60 (mostly healthy patients)
- Antibiotics prescribed 67% of the time
- When antibiotic prescribed: 14.2 minutes
- When antibiotic not prescribed: 15.2 minutes
- Multivariate analysis : 42 sec less (CI : 0 sec – 78 sec less)

Barriers to appropriate antibiotic prescribing in Long-Term Care

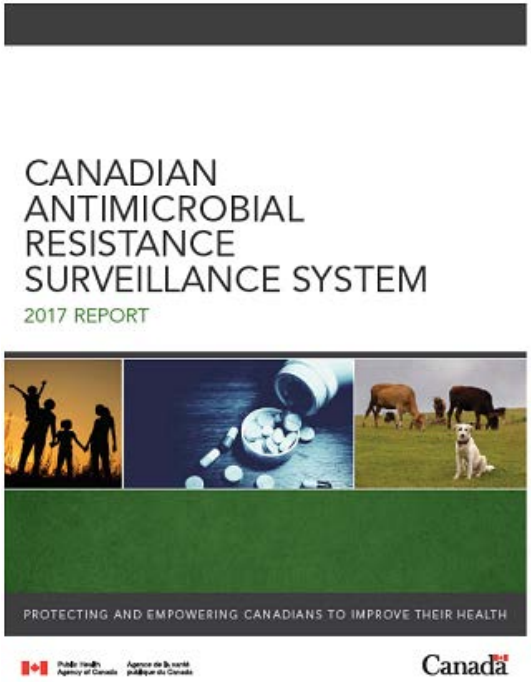
- Limited histories in cognitively impaired patients
- Blunted febrile responses in older patients
- difficulty distinguishing infection from comorbidity mimickers
  - eg, pneumonia VS congestive heart failure and COPD
  - eg, venous stasis VS cellulitis
  - eg, altered mental status from dementia VS sepsis
- Off-site radiology and laboratory testing
- Off-site physicians
  - up to half of antibiotic prescriptions called in by phone

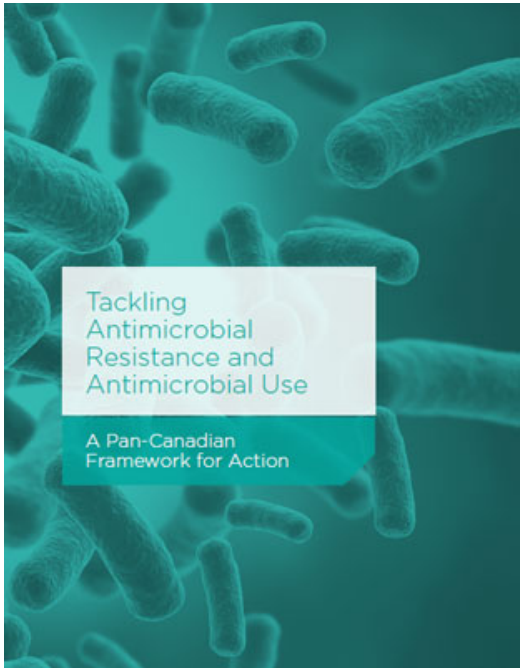
Nicolle *ICHE* 2000; Crnich *Drugs Aging* 2015; Katz *Arch IM* 1990

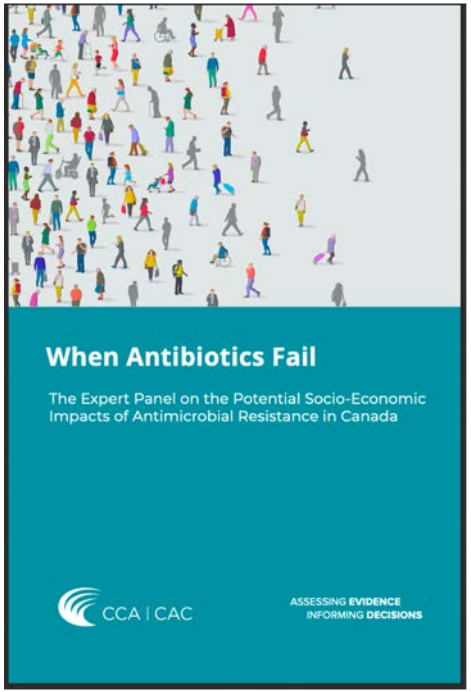
Should we care about Antibiotic Overuse?

- 23 million Rxs annually
- Antibiotic resistance
- WHO top ten threats for global health in 2019

Should we care about Antibiotic Overuse?







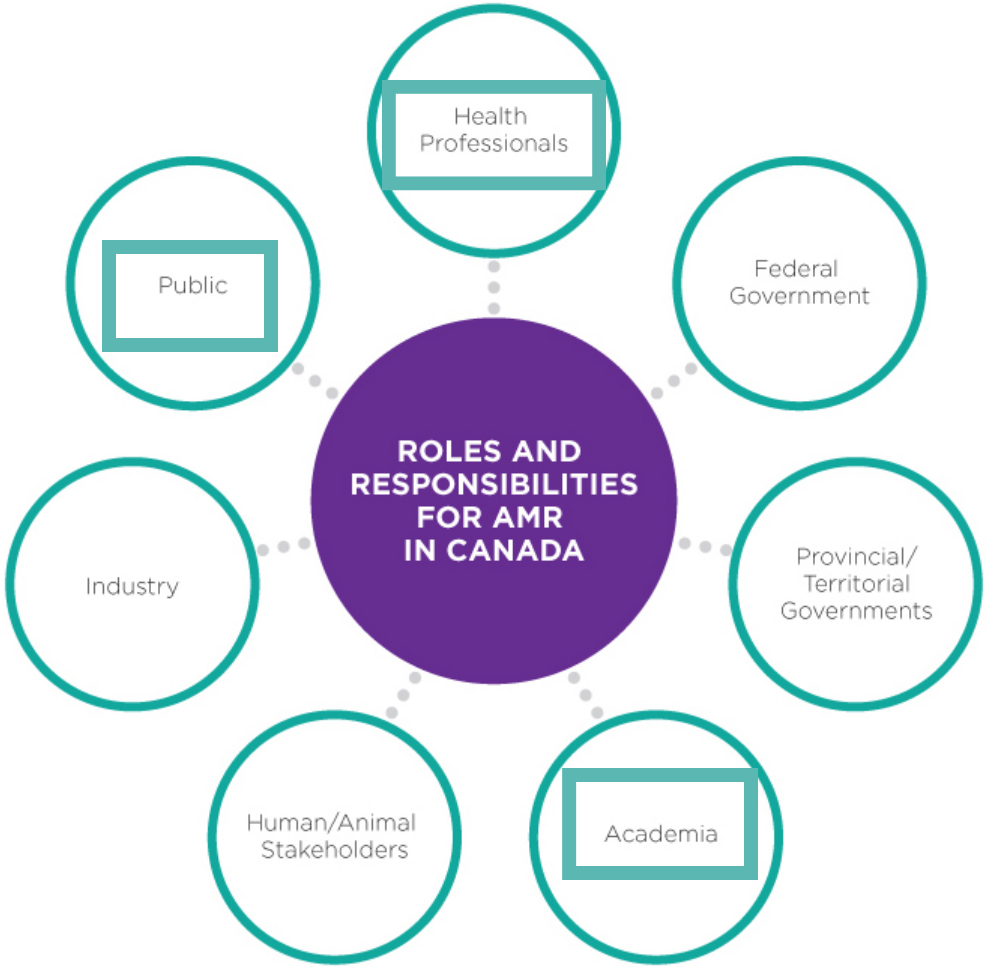
Should we care about Antibiotic Overuse?

- Drug resistant infections
  - MRSA
  - VRE
  - Gonorrhea
  - C. diff
  - TB
- Cost
- Adverse Drug Reactions – diarrhea, vomiting, candida infection, AKI, allergic reaction
- Continued loss of effectiveness –> new drug development cannot keep up -> less effective/more toxic alternatives being used -> longer courses of treatment -> worse patient outcomes
- ↓ Labour productivity (hospitality, transportation industry)
  - Reduced Canada's GDP by $2 billion in 2018

The socioeconomic impact of AMR in Canada

2018	Projection for 2050
29% antibiotic resistance to first-line antibiotics	40% antibiotic resistance to first-line antibiotics
5,400 deaths	13, 700 deaths
1.4 billion in additional healthcare costs	7.6 billion in additional healthcare costs

Council of Canadian Academies, 2019


ROLES AND RESPONSIBILITIES FOR AMR IN CANADA
Health Professionals
Federal Government
Provincial/ Territorial Governments
Academia
Human/Animal Stakeholders
Industry
Public

Who are the prescribers of antibiotics in Canada?

- Physicians prescribe 90% of the antibiotics among health care providers.

- 92% of antibiotics are prescribed/dispensed in the community (2016)

- Family physicians account for 65% of all antibiotic prescriptions dispensed by community pharmacies in Canada (2016)
  - Respiratory infections > genito-urinary infections > skin & soft tissue infections

Courtesy of Public Health Agency of Canada

How much avoidable antibiotics for management of non-bacterial RTI in primary care?

- Retrospective analysis of linked administrative health care data – 2012
  - Older adults in Ontario (ODB)

- 8990 primary care physicians; 185 014 patients with a nonbacterial RTI
  - Dx: common cold, acute bronchitis/sinusitis/laryngitis
  - **46%** received an antibiotic prescription

- Rate of antibiotic prescribing higher among:
  - Mid to late career physicians
  - Physicians trained outside of Canada
  - Physicians with large patient volumes

Silverman M et al, *Ann Intern Med*, 2017; 166:765–774.

About half of antibiotic prescriptions in LTC are unnecessary or inappropriate

Author	Year	Population	N	% inappropriate
Zimmer	1986	42 U.S. NHs	1748	38%
Jones	1987	2 Portland NHs	120	51%
Loeb	2001	22 chronic care facilities in Canada	3656	51%
Mitchell	2014	Patients with advanced dementia in 21 Boston NHs	214	56%
Rotjapanan	2011	Urinary tract infections in 2 Rhode Island NHs	172	73%

Loeb *JGIM* 2001; Jones *AJM* 1987; Mitchell *JAMA IM* 2014; Rotjapanan *JAMA IM* 2011; Zimmer *JAGS* 1986

Research

Original Investigation | LESS IS MORE

Variability in Antibiotic Use Across Nursing Homes and the Risk of Antibiotic-Related Adverse Outcomes for Individual Residents

Nick Daneman, MD, MSc; Susan E. Bronskill, PhD; Andrea Gruneir, PhD; Alice M. Newman, MSc; Hadas D. Fischer, MD, MSC; Paula A. Rochon, MD, MPH; Geoffrey M. Anderson, MD, PhD; Chaim M. Bell, MD, PhD

- Retrospective open cohort study
- All residents living in Ontario nursing homes at any time in Jan, 1 2010 - Dec 31 2011
- 110,656 residents in 607 long-term care homes
- Antibiotic use: **10-fold variation across facilities**

Daneman et al, *JAMA Intern Med* 2015

Priorities of *Using Antibiotics Wisely* Campaign

Duration January 31, 2018 – March 31, 2020

1. Acute respiratory infection in primary care
   30-50% of antibiotics are unnecessary

2. Urinary tract infection in long-term care
   50-70% of antibiotics are unnecessary

Public Health Agency of Canada
Agence de la santé publique du Canada

Health Canada
Santé Canada

Choosing Wisely Canada™
Choisir avec soin℠

Framework for *Using Antibiotics Wisely*

- Describe drivers of overuse and barriers to change
- Articulate prescribing practices we hope to change
  - Develop practice statements
- Select nationally useful AMS tools
  - Assess how tools need to be adapted to ensure uptake
- Determine how tools are best disseminated to front-line prescribers
- Aligning tools with MD's workflow key to ensure uptake

Choosing Wisely Canada -
Using Antibiotics Wisely in Primary Care

https://choosingwiselycanada.org/campaign/antibiotics-primary-care

Clinical Case 1

- 21-year-old woman
  - Presents with 3-day history of fever and sore throat
  - Not coughing; very mild coryza
- Examination:
  - Temperature 39^{o}C
  - Erythematous oropharynx – but no tonsillar exudate
  - No cervical lymphadenopathy

Poll everywhere

- Using the Modified Centor Scoring system for pharyngitis, which of the following scores alone is associated with empiric antibiotic treatment without the need for a throat swab?
- (a) 2
- (b) 3
- (c) 4
- (d) 5
- (e) None of the above - **answer**

Poll everywhere

- How would you manage this patient?

- (a) Give a Rx for Pen VK as they probably have strep throat
- (b) Perform a rapid strep test and treat only if positive - **answer**
- (c) Send a throat culture to the lab and instruct the patient to call for the result in a couple of days
- (d) Tell the patient it's probably a viral infection and provide reassurance

Uncomplicated Pharyngitis

- Do not prescribe unless:
  - 'M' Centor score ≥ 2 AND
  - Throat swab culture (or rapid antigen test) confirms GAS
- Don't even perform a throat swab if:
  - 'M' Centor score ≤ 1 or
  - Symptoms of a viral infection are present (rhinorrhea, oral ulcers, hoarseness)
- Think symptom control, access to f/u & viral Rx

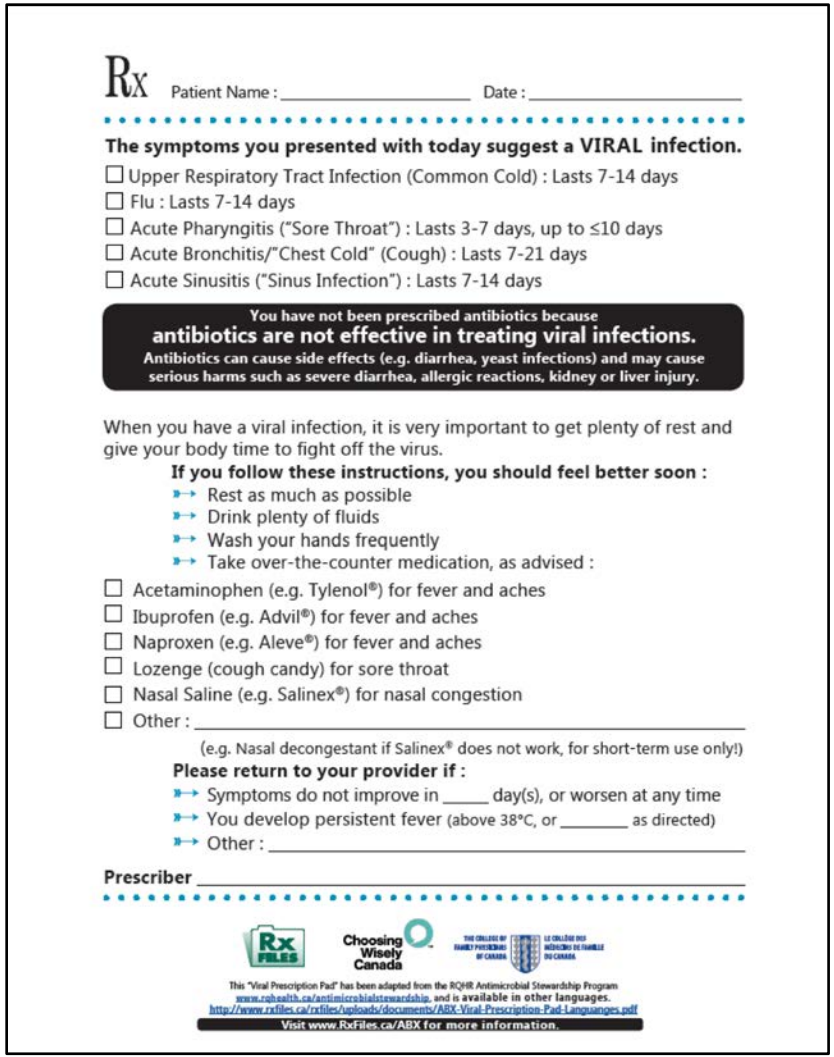
MODIFIED/MCISAAC CENTOR SCORE	
Criteria	**Score**
Age 3-14 years	1
Age ≥ 45 years	-1
Tonsillar exudate	1
Tender or swollen lateral cervical lymph nodes	1
Temperature > 38° C	1
Absence of cough	1

VIRAL PRESCRIPTION

Available languages:
English, French, Arabic, Chinese (Traditional and Simplified), Farsi (Persian), German, Hindi, Romanian, Russian, Spanish, Ukrainian, Urdu

Available via EMR (loot bag)

Satisfaction linked to reassurance, info, and symptom relief



Rx Patient Name : _____ Date : _____

The symptoms you presented with today suggest a VIRAL infection.

- ☐ Upper Respiratory Tract Infection (Common Cold) : Lasts 7-14 days
- ☐ Flu : Lasts 7-14 days
- ☐ Acute Pharyngitis ("Sore Throat") : Lasts 3-7 days, up to ≤10 days
- ☐ Acute Bronchitis/"Chest Cold" (Cough) : Lasts 7-21 days
- ☐ Acute Sinusitis ("Sinus Infection") : Lasts 7-14 days

You have not been prescribed antibiotics because
antibiotics are not effective in treating viral infections.
Antibiotics can cause side effects (e.g. diarrhea, yeast infections) and may cause serious harms such as severe diarrhea, allergic reactions, kidney or liver injury.

When you have a viral infection, it is very important to get plenty of rest and give your body time to fight off the virus.

If you follow these instructions, you should feel better soon :

- ➳ Rest as much as possible
- ➳ Drink plenty of fluids
- ➳ Wash your hands frequently
- ➳ Take over-the-counter medication, as advised :

- ☐ Acetaminophen (e.g. Tylenol®) for fever and aches
- ☐ Ibuprofen (e.g. Advil®) for fever and aches
- ☐ Naproxen (e.g. Aleve®) for fever and aches
- ☐ Lozenge (cough candy) for sore throat
- ☐ Nasal Saline (e.g. Salinex®) for nasal congestion
- ☐ Other : _____

(e.g. Nasal decongestant if Salinex® does not work, for short-term use only!)

Please return to your provider if :

- ➳ Symptoms do not improve in _____ day(s), or worsen at any time
- ➳ You develop persistent fever (above 38°C, or _____ as directed)
- ➳ Other : _____

Prescriber _____

RX FILES · Choosing Wisely Canada · The College of Family Physicians of Canada / Le Collège des médecins de famille du Canada

This "Viral Prescription Pad" has been adapted from the RQHR Antimicrobial Stewardship Program www.rqhealth.ca/antimicrobialstewardship, and is available in other languages. http://www.rxfiles.ca/rxfiles/uploads/documents/ABX-Viral-Prescription-Pad-Languages.pdf

Visit www.RxFiles.ca/ABX for more information.

Clinical Case 2

- 52-year-old healthy man with 8-day history of:
  - Nasal obstruction
  - Frontal headache & facial pressure
  - Productive cough with green phlegm each morning
- Patient does not appear very sick, but is clearly annoyed by his symptoms
- Reports that his symptoms are not improving

Poll everywhere

- Would you treat this patient with antibiotics for acute bacterial sinusitis?
- (a) Yes
- (b) No - **answer**

Uncomplicated Sinusitis

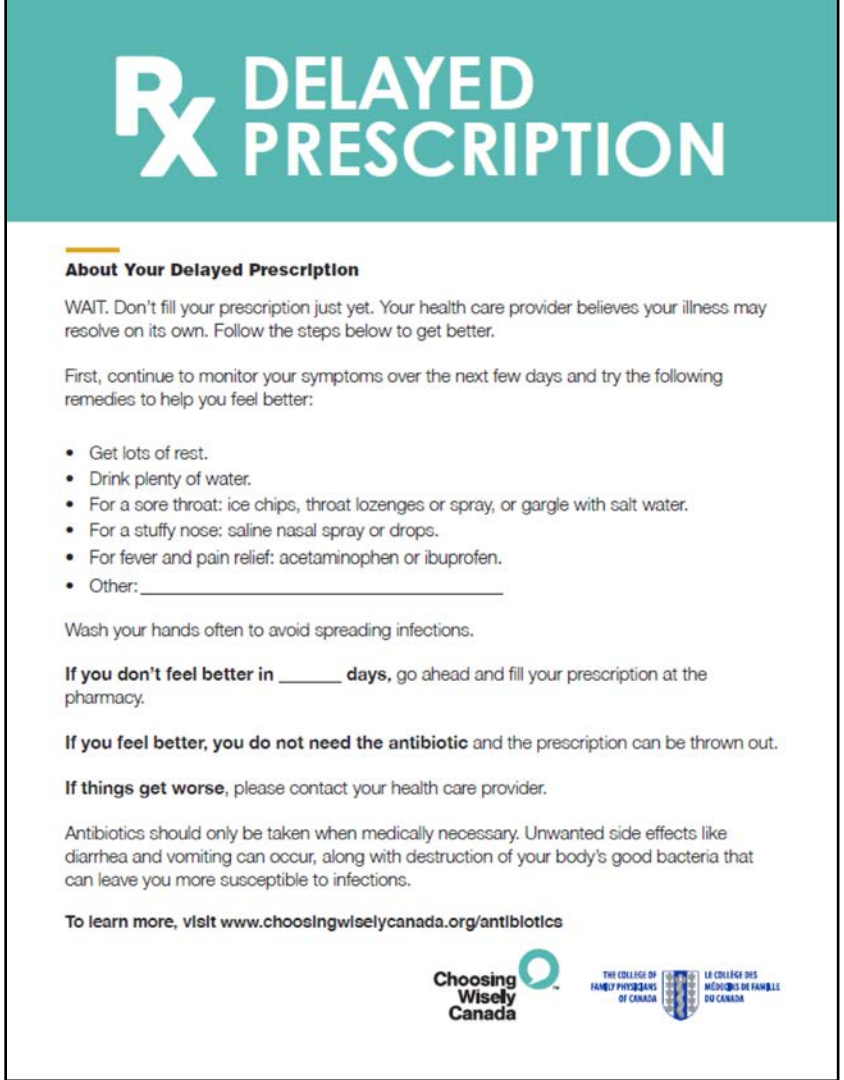
- Do not prescribe unless:
  - Symptoms persist 7-10 days
  - No improvement
- At least 2 PODS symptoms:
  - Facial **P**ain/**P**ressure
  - Nasal **O**bstruction
  - Purulent nasal **D**ischarge
  - Hyposmia/anosmia (**S**mell)
- Plus 1 of:
  - Severe; or
  - Mild to moderate w/ no response to 72 hr. trial of nasal steroids

Clinical Case 2

- He fits all criteria except for severity
- Recommended management: nasal corticosteroids and consider antibiotic therapy only if he does not respond
  - Option 1 : nasal corticosteroids and a **viral prescription** with follow up as needed
  - Option 2: nasal corticosteroids and a **delayed prescription**

DELAYED ANTIBIOTIC PRESCRIPTION

- Decreases antibiotic use
- No difference in satisfaction



Rx DELAYED PRESCRIPTION

About Your Delayed Prescription

WAIT. Don't fill your prescription just yet. Your health care provider believes your illness may resolve on its own. Follow the steps below to get better.

First, continue to monitor your symptoms over the next few days and try the following remedies to help you feel better:

- Get lots of rest.
- Drink plenty of water.
- For a sore throat: ice chips, throat lozenges or spray, or gargle with salt water.
- For a stuffy nose: saline nasal spray or drops.
- For fever and pain relief: acetaminophen or ibuprofen.
- Other: _____

Wash your hands often to avoid spreading infections.

If you don't feel better in _____ days, go ahead and fill your prescription at the pharmacy.

If you feel better, you do not need the antibiotic and the prescription can be thrown out.

If things get worse, please contact your health care provider.

Antibiotics should only be taken when medically necessary. Unwanted side effects like diarrhea and vomiting can occur, along with destruction of your body's good bacteria that can leave you more susceptible to infections.

To learn more, visit www.choosingwiselycanada.org/antibiotics

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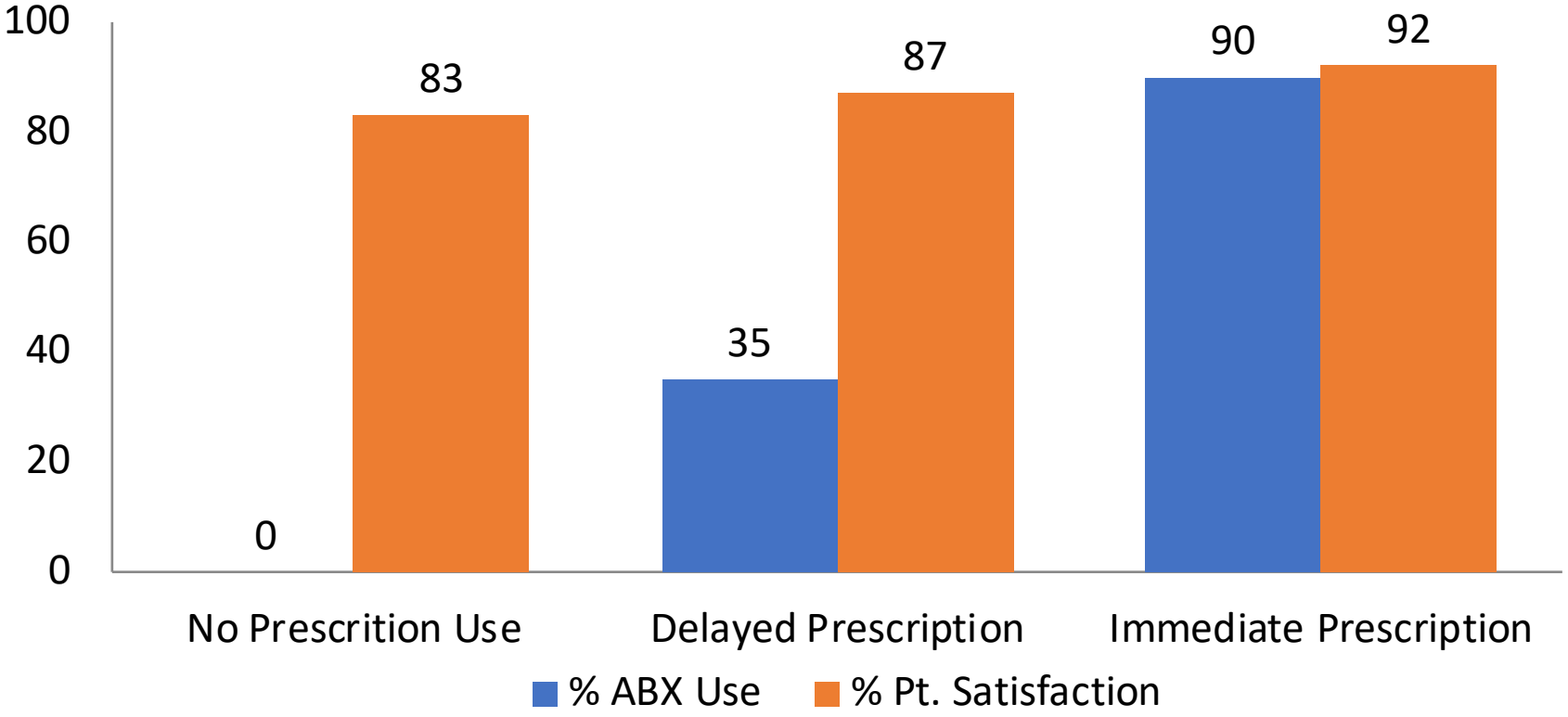
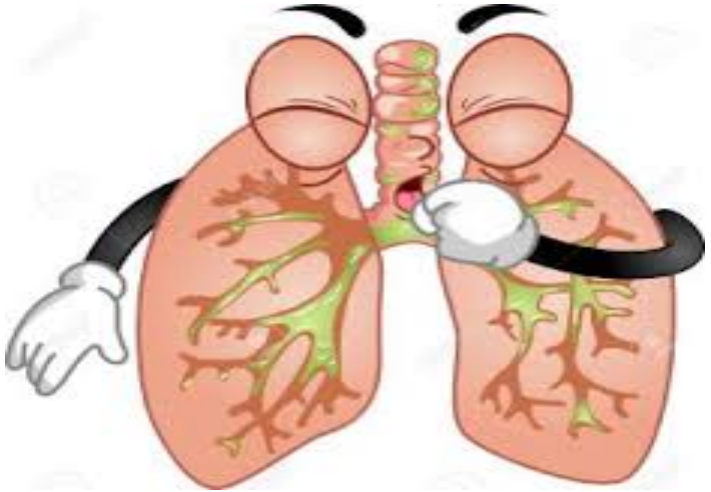
ABX Use & Patient Satisfaction



Cochrane Database of Systematic Reviews 2013

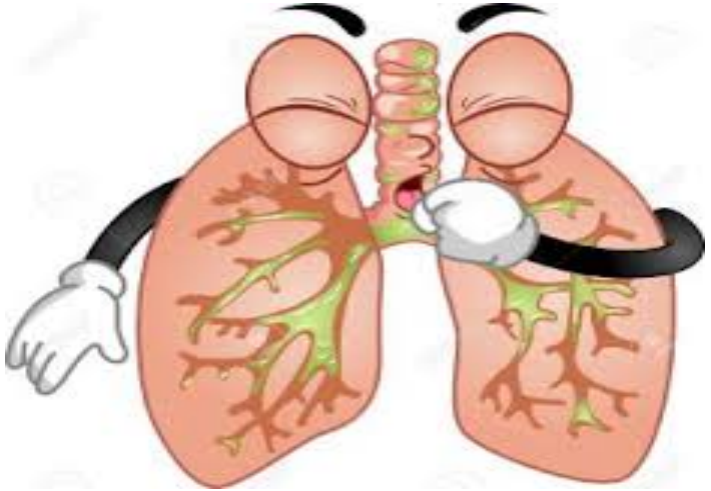
Clinical Case 3

- 40 y.o. healthy woman presents to clinic because she is tired of coughing for the last 2 weeks
- Mainly at night, disturbs her sleep
- Also started with runny nose and sore throat, but now resolved



Clinical Case 3

- Physical examination:
  - Looks tired, but well
  - Temperature 37.4
  - Respiratory rate - normal, not tachycardic
  - Lung examination: wheezes and inspiratory crackles heard in RLL



Poll everywhere

- Which of the following statements about cough is false?
- (a) Can last up to 3 weeks in 50% of patients with a viral URTI
- (b) Can last up to 1 month or more in 25% of patients with a viral URTI
- (c) Green sputum usually correlates with a bacterial infection - **answer**
- (d) Antibiotics are not helpful for symptom relief in acute bronchitis
- (e) Coughing in someone's face can spread germs

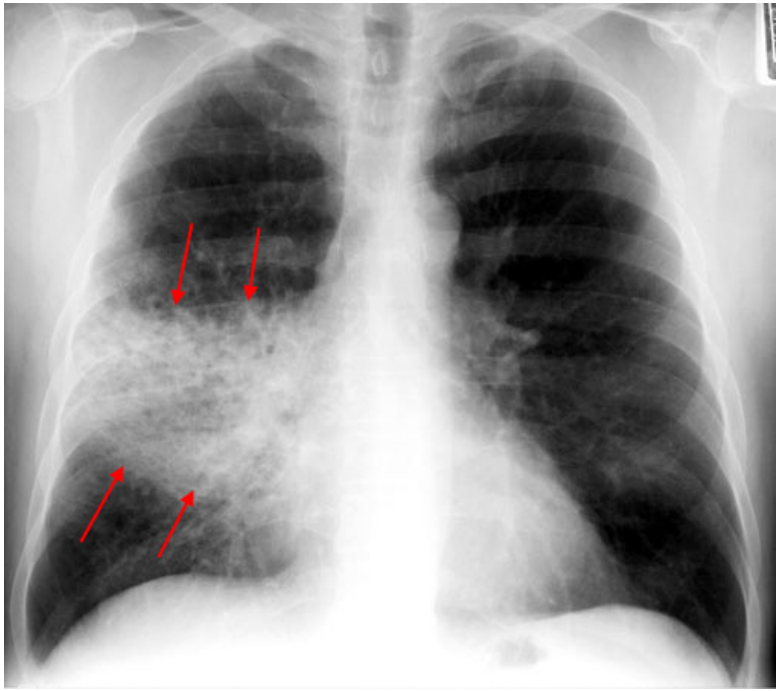
Poll everywhere

- How would you manage this patient?

- (a) Her RLL crackles indicates pneumonia – treat her with antibiotics
- (b) Order a CXR to r/o pneumonia - **answer**
- (c) Give her a Rx for cough syrup and tell her to avoid coughing on others
- (d) Give her a Rx for inhaled corticosteroids + short acting beta agonist prn and advise f/u if no improvement in 2 weeks

Pneumonia – need objective evidence

- Do not prescribe unless:
  - CXR confirms presence of new consolidation
- Physical exam alone not sufficient
  - e.g. Presence of respiratory crackles
- Normal vital signs & no findings on physical exam
  - Unlikely to be pneumonia
  - No CXR needed



AECOPD

- Do not prescribe unless:

- Clear increase in sputum purulence AND
- Increase in sputum volume AND/OR increased dyspnea

- Consider steroids and SABD

"I'm prescribing a patch to help you quit smoking. Wear it over your mouth."

Asthma/Bronchitis/Bronchiolitis

- Do not prescribe antibiotics for exacerbations

- Consider steroids and SABD for asthma; SABD for bronchitis

Influenza-Like Illness

- Symptoms can include:
  - Fever
  - Cough
  - Sore throat
  - Runny nose
  - **Myalgia**
  - **Headache**
  - **Chills**
  - **Malaise**
- Do not prescribe antibiotics unless clear evidence of secondary bacterial infection

Don’t routinely prescribe antibiotics for acute respiratory infection in primary care settings

- Otitis Media – vaccinated patients older than 6 months
- Pharyngitis – modified Centor score
- Sinusitis – PODS symptoms
- Pneumonia – objective evidence
- AECOPD – inhalers
- Bronchitis/Asthma - inhalers
- URTI - “common cold”
- ILI – Influenza-Like Illness

Don’t routinely prescribe antibiotics for acute respiratory infection in primary care settings

- Otitis Media – vaccinated patients older than 6 months

MYTH: All patients coming to clinic with an URTI want antibiotics

FACT: Most patients want a diagnosis and a way to relieve their symptoms

JGIM 2003

ILI – Influenza-Like Illness

USING ANTIBIOTICS WISELY CAMPAIGN RESOURCES

- Information posters (CWC-CFPC)
- Viral prescription (Rx files-CWC-CFPC)
- Delayed prescription pad (CWC-CFPC)
- Patient resources (CWC)
- RTI Toolkit (CWC-CFPC) – NEW !!
- Practice statements (CWC-CFPC)

POSTERS

ANTIBIOTICS:
THREE QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER

1) Do I really need antibiotics?

Antibiotics fight bacterial infections, like strep throat, whooping cough and bladder infections. But they don't fight viruses – like common colds, flu, or most sore throats and sinus infections. Ask if you have a bacterial infection.

2) What are the risks?

Antibiotics can cause unwanted side effects such as diarrhea and vomiting. They can also lead to "antibiotic resistance"– if you use antibiotics when you don't need them, they may not work when you do need them in the future.

3) Are there simpler, safer options?

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

Talk about what you need, and what you don't.
To learn more, visit www.choosingwiselycanada.org/antibiotics

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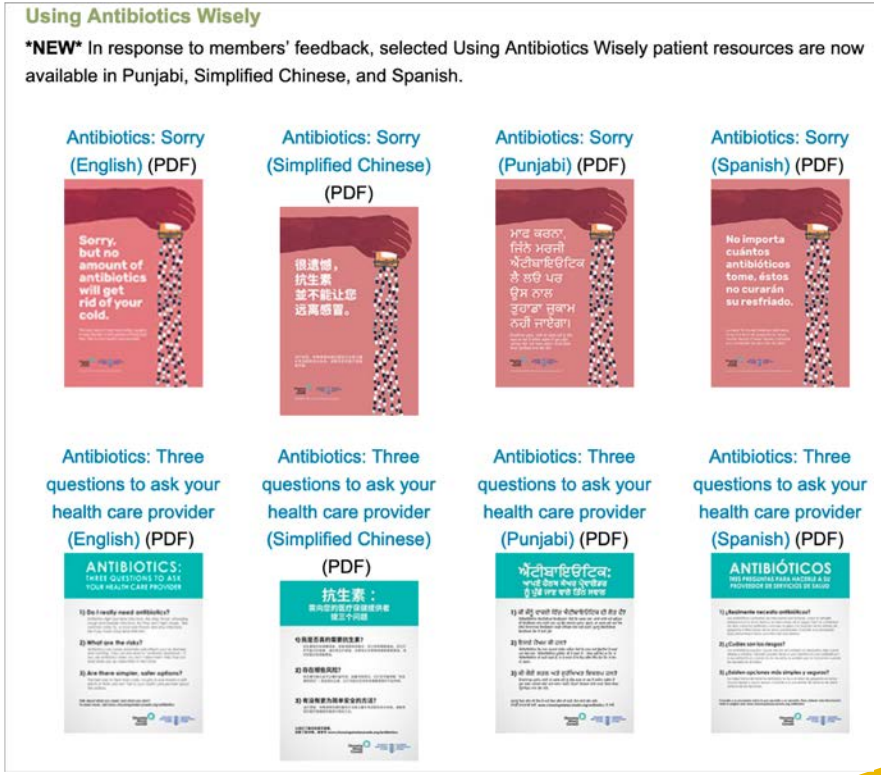
CFPC website

- https://www.cfpc.ca/choosingwiselycanada/



Viral and Delayed Prescription Pads

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- Drink plenty of fluids
- Wash your hands frequently
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Rx FILES | Choosing Wisely Canada

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Rx DELAYED PRESCRIPTION

_____

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To learn more, visit www.choosingwiselycanada.org/antibiotics

Choosing Wisely Canada

YOU CAN INTEGRATE THESE ANTIBIOTIC TOOLS INTO YOUR EMR!

Delayed and viral prescription pad e-forms are available for Accuro EMR, TELUS Health EMR, and OSCAR EMR.

PATIENT RESOURCES

Treating Sinus Infections: Don't rush to antibiotics

Choosing Wisely Canada

Millions of people are prescribed antibiotics each year for sinus infections, a frequent complication of the common cold, hay fever, and other respiratory allergies. In fact, 15 to 21 percent of all antibiotic prescriptions for adults in outpatient care are for treating sinus infections. Unfortunately, most of those people don't need the drugs. Here's why:

The drugs usually don't help

Sinus infections can be painful. People with the condition usually have a stuffy nose combined with yellow, green, or gray nasal discharge plus pain or pressure around the eyes, cheeks, forehead, or teeth that worsens when they bend over. But sinus infections almost always stem from a viral infection, not a bacterial one - and antibiotics don't work against viruses. Even when bacteria are the cause, the infections often clear up on their own in a week or so. And antibiotics don't help ease allergies, either.

They can pose risks.

About one in four people who take antibiotics have side effects, such as stomach problems, dizziness, or rashes. Those problems clear up soon after stopping the drugs, but in rare cases antibiotics can cause severe allergic reactions.

Overuse of antibiotics also promotes the growth of bacteria that can't be controlled easily with drugs. That makes you more vulnerable to antibiotic-resistant infections and undermine the good that antibiotics can do for others.

So when are antibiotics necessary?

They're usually required only when symptoms last longer than a week, start to improve but then worsen again, or are very severe. Worrisome symptoms that can warrant immediate antibiotic treatment include a fever over 38.6 °C, extreme pain and tenderness over your sinuses, or signs of a skin infection, such as a hot, red rash that spreads quickly.

When you do need antibiotics, the best choice in many cases is amoxicillin, which typically costs about $4 and is just as effective as more expensive brand-name antibiotics. Note that some health care providers recommend CT scans when they suspect sinus infections. But those tests are usually necessary only if you have frequent or chronic sinus infections or you're going to have sinus surgery.

Colds, Flu, and Other Respiratory Illnesses: Don't rush to antibiotics

Choosing Wisely Canada

If you have a sore throat, cough, or sinus pain, you might expect to take antibiotics. After all, you feel bad, and you want to get better fast. But antibiotics don't help most respiratory infections, and they can even be harmful.

Antibiotics kill bacteria, not viruses.

Antibiotics fight infections caused by bacteria. But most respiratory infections are caused by viruses. Antibiotics can't cure a virus.

Viruses cause:

- All colds and flu.
- Almost all sinus infections.
- Most bronchitis (chest colds).
- Most sore throats, especially with a cough, runny nose, hoarse voice, or mouth sores.

Antibiotics have risks.

Antibiotics can upset the body's natural balance of good and bad bacteria. Antibiotics can cause:

- Nausea, vomiting, and severe diarrhea.
- Vaginal infections.
- Nerve damage.
- Torn tendons.
- Life-threatening allergic reactions.

Many adults go to emergency rooms because of antibiotic side effects.

Overuse of antibiotics is a serious problem.

Wide use of antibiotics breeds "superbugs." These are bacteria that become resistant to antibiotics.

They can cause drug-resistant infections, even disability or death. The resistant bacteria—the superbugs—can also spread to family members and others.

You may need an antibiotic if you have a respiratory infection. Some examples are:

You have a sinus infection that doesn't get better in 7 days. Or it gets better and then suddenly gets worse.

You have a fever of 39 °C, or fever over 38 °C for 3 days or more, green or yellow mucus, or face pain for three or more days in a row.

Bacterial pneumonia.

- Symptoms can include cough with coloured mucus, fever of at least 38 °C, chills, shortness of breath, and chest pain when you take a deep breath.
- The diagnosis is made with a physical exam and a chest x-ray.

The Cold Standard

A Toolkit for Using Antibiotics Wisely for the Management of Respiratory Tract Infections in Primary Care

Choosing Wisely Canada™

THE COLLEGE OF FAMILY PHYSICIANS OF CANADA

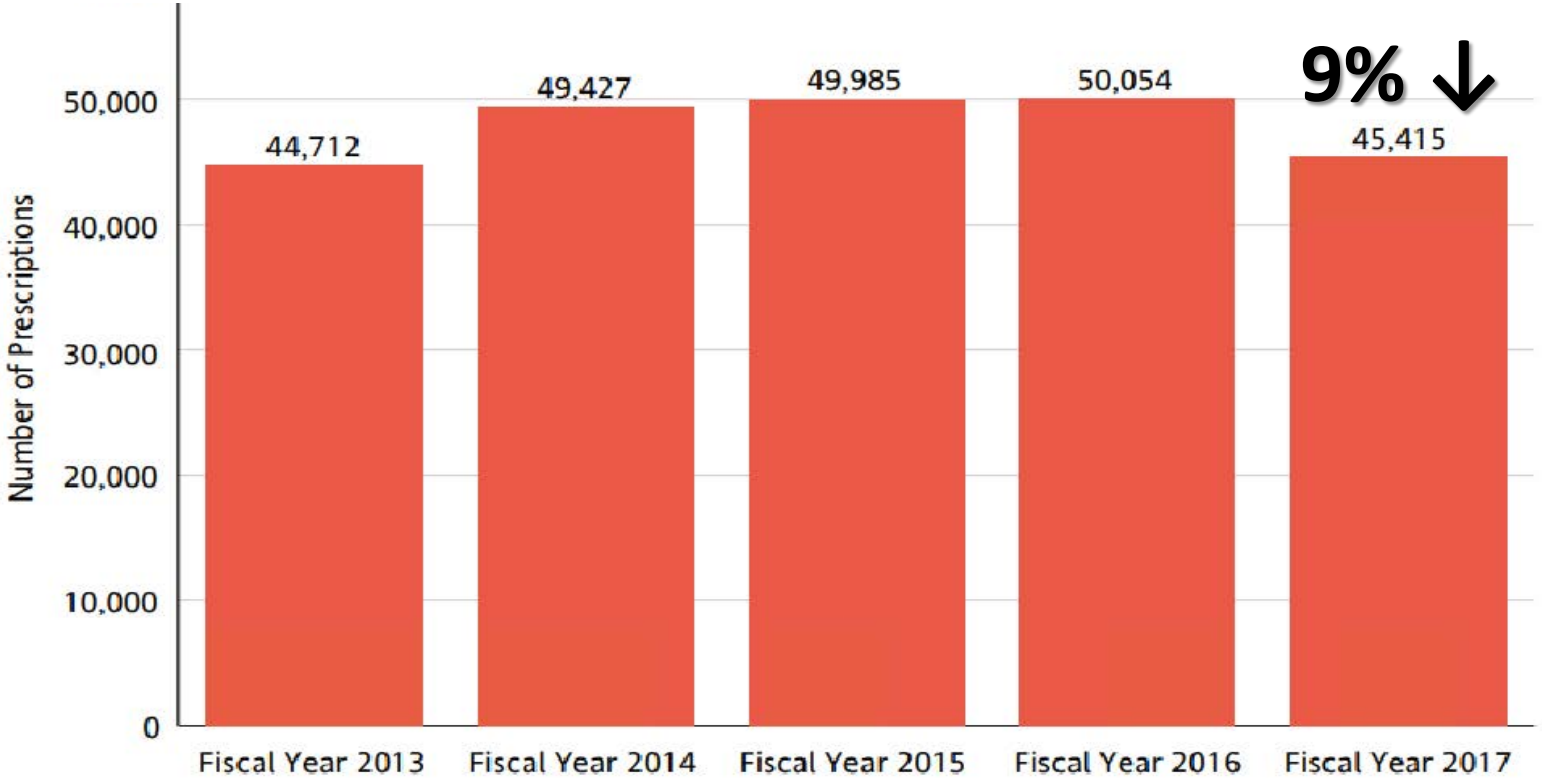
LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

Can we do something to improve this?

- 2017 – NL Family physicians
- Audit & feedback program
- Access to 2015/16 personal & peer comparison data on antibiotic Rx for adults 65 y.o. with public drug plan coverage
- Patient pamphlets and viral prescription pads were sent to those interested in receiving tools to help improve practice

Family MD Antibiotic Rx ordering/year

Choosing Wisely NL™



Choosing Wisely Canada - *Using Antibiotics Wisely in LTC*

https://choosingwiselycanada.org/campaign/antibiotics-ltc/

Long-Term Care Campaign Support

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

Long Term Care
Medical Directors Association of Canada
Association canadienne des directeurs médicaux
en soins de longue durée

CANADIAN NURSES ASSOCIATION

Poll everywhere

- A LTC patient with dementia has cloudy urine with a foul odour for two days. The SDM requests a urine culture be ordered. No other clinical concerns.

- Would you order a urine C&S based on the above information?

- (a) Yes
- (b) No - **answer**

Poll everywhere

- Which of the following symptoms in a non-catheterized LTC resident are not part of the Modified Loeb criteria for a UTI?
- (a) acute dysuria
- (b) fever > 37.9 C
- (c) suprapubic pain
- (d) confusion/behavior change - **answer**
- (e) flank pain

Poll everywhere

- Which of the following symptoms in a non-catheterized LTC resident are not part of the Modified Loeb criteria for a UTI?
- (a) acute dysuria
- (b) fever > 37.9 C
- (c) suprapubic pain
- (d) confusion/behavior change - **answer**
- (e) flank pain

MINIMUM CRITERIA FOR UTI (MODIFIED LOEB CRITERIA[1,2])

In a non-catheterized resident:	In a catheterized resident:

• Acute dysuria or 2 or more of the following:
  • fever [> 37.9°C (100°F) or a 1.5° C (2.4°F) increase above baseline on at least two occasions over the last 12 hours]
  • new or worsening urgency
  • frequency
  • suprapubic pain
  • gross hematuria
  • flank pain
  • urinary incontinence
	• Any one of the following after alternate explanations have been excluded:
	  • fever [> 37.9°C (100°F) or a 1.5° C (2.4°F) increase above baseline on at least two occasions over the last 12 hours]
	  • flank pain
	  • shaking chills
	  • new onset delirium

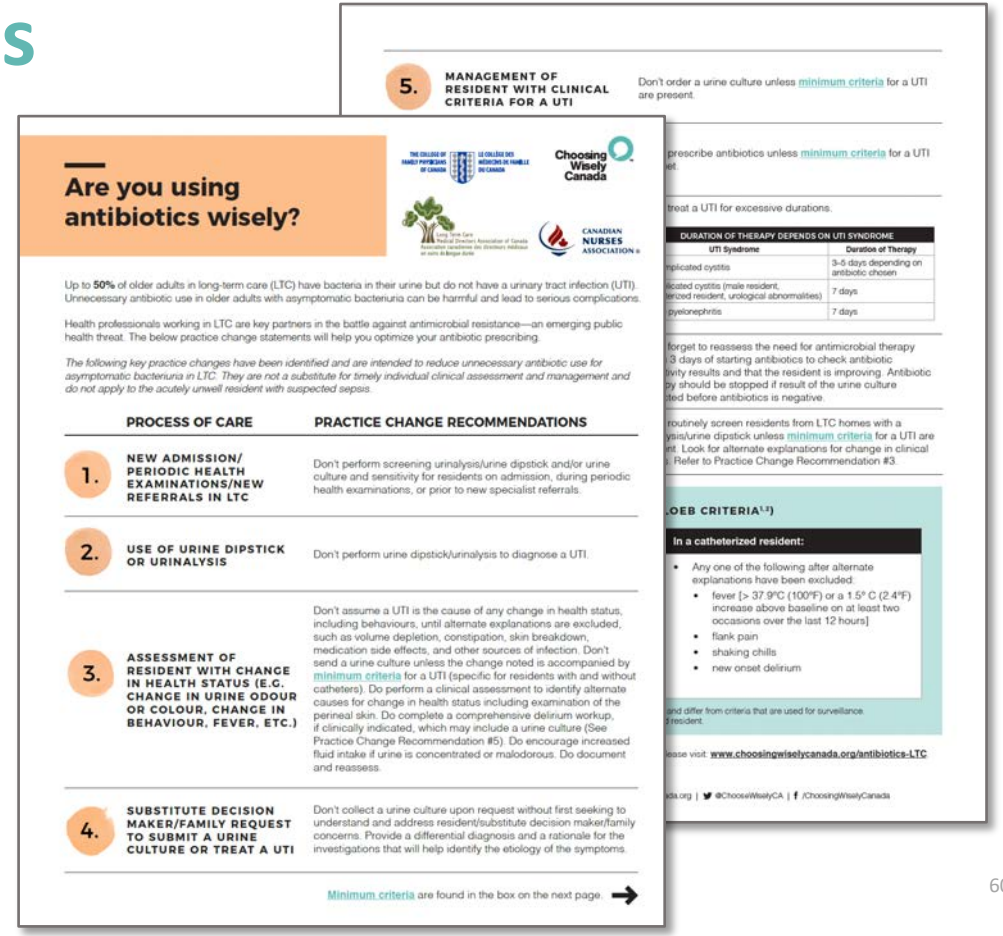
[1] Note that these are clinical criteria validated for diagnosis for a UTI and differ from criteria that are used for surveillance.
[2] Note that confusion alone is not symptom of UTI in non-catheterized resident.

Poll everywhere

- True or False – A urine culture result comes back negative 3 days after a LTC patient was started on antibiotics for a suspected UTI. The patient's condition has improved. One should therefore stop the antibiotics.

- (a) True - **answer**
- (b) False

Supporting Materials



2020 CHOOSING WISELY CANADA NATIONAL MEETING

MAY 25/26 2020 | OTTAWA, ON

Choosing Wisely Canada

Association Médicale Canadienne
Canadian Medical Association

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Jayne Johnston	Director – Communications, CFPC

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Take Home Points

- Antibiotics are being overused for viral URTIs in primary care and UTIs in LTC

- Most patients want a proper diagnosis & advice on symptom management – as opposed to antibiotics

Take Home Points

- CWC *Using Antibiotics Wisely* campaign tools can:
  - Help educate patients about AMS
  - Promote consistency in clinical practice
  - Increase ease re: culture change

- Further research on the impact of the *Using Antibiotics Wisely* campaign is underway and will help determine the scalability of such initiatives

Questions and Discussion

PPS@CFPC.CA

To learn more about the campaign or download resources, please visit:

www.choosingwiselycanada.org/antibiotics (EN)

www.choisiravecsoin.org/campaign/antibiotiques (FR)