Say Yes to the Less; Making it Easy to Choose Wisely

Paediatric Perls Conference: Scarborough Health Network

Oct 25th , 2019

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SickKids Choosing Wisely Canada

Disclosure

- This presentation has received no support from any organization

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Objectives

- Appreciate why unnecessary care is important in paediatrics
- Understand drivers of unnecessary care
- Learn strategies/tools to enable Choosing Wisely principles

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Outline

- Cases
- The problem: what and why?
- The potential solution: Choosing Wisely
- Culture change: Trainees
- Local implementation
- Cases: enablers for success

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Case 1: Bronchiolitis

- 8 month old
- P/W: URTI, cough, decr feeding, incr WOB
- O/E: fever, congested, incr RR, indrawing, O2 sats 90 in RA

- Would you do respiratory viral testing?
  - *A: Yes*
  - *B: No*

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Respiratory Viral Testing: NOT Recommended!

	NICE (UK), 2015[38]	AAP (USA), 2014[39]	CPS (Canada), 2014[45]	SIGN (Scotland), 2006[46]	Italy, 2014[47]	Spain, 2010[48]	Australia, 2008[49]	France, 2013[50]
Diagnostic testing								
Pulse oximetry	No mention about continuous use; intermittent checks should be performed in all children	Not recommended if supplemental oxygen is not required, or if oxyhaemoglobin saturation >90%	Not recommended unless high-risk patients in acute phase of disease; intermittent checks appropriate	Intermittent pulse oximetry should be performed on every child who presents to hospital	No mention	Intermittent pulse oximetry; no clear recommendation for continuous monitoring	No mention	No mention
Viral testing	No mention	Not routinely recommended	Not routinely recommended	Rapid respiratory syncytial virus testing recommended for admitted infants to guide cohorting	Respiratory syncytial virus antigen recommended in hospital setting for cohorting and potentially decreasing antibiotic use	Not routinely recommended; respiratory syncytial virus testing might assist with cohorting	Not routinely recommended; consider if diagnostic uncertainty or young febrile infants	Not routinely recommended

Florin TA et al. Viral Bronchiolitis *Lancet.* 2017; 389(10065):211-224

Respiratory viral testing; what is the evidence?

It is not good enough to “do” just because we “can”

Gill PG et al. Testing for respiratory viruses in childhood: To swab or not to swab. JAMA Pediatrics 2017;17(8)

Case 2: Ankle injury

- 8 year old
- Swollen painful ankle after trip and awkward fall
- O/E: swollen tender left ankle and not willing to weight bear

- Would you do an x-ray?
  - *A: Yes*
  - *B: No*

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Low Risk Ankle Rule: Reduce unnecessary xrays by 60%

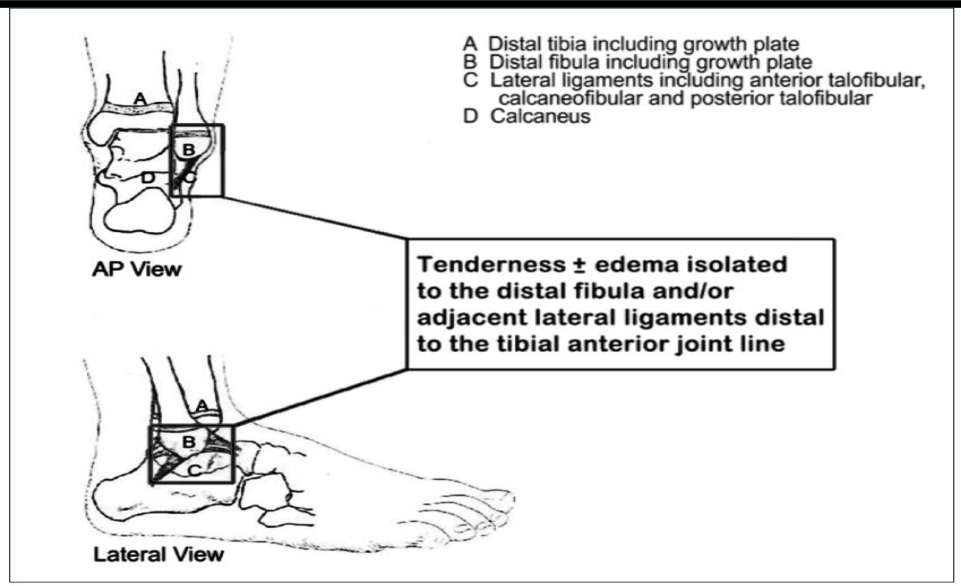

Figure 1: If a child presents with a low-risk injury on examination (i.e., tenderness and swelling isolated to the distal fibula and/or adjacent lateral ligaments distal to the tibial anterior joint line), then radiography may not be necessary to exclude a clinically important ankle injury. Reproduced, with permission, from Boutis et al.[4]

Boutis K et al Effect of Low Risk Ankle Rule on frequency of radiography in children with ankle injuries. *CMAJ* 2013;185(15): E731-8

Boutis K et al Sensitivity of a clinical exam to predict the need for radiography in children with ankle injuries: a prospective study. Lancet 2001;358:2119-21

Case 3: ITP

- 3 yr old
- petechiae, bruising
- O/E:
  - very well, petechiae
  - no adenopathy, no organomegaly
- Labs:
  - normal Hb/WCC
  - plts 5 x 10^9/L
- Do you recommend:
  - *A: oral steroids at home*
  - *B: observation at home*
  - *C: admit for IVIG*
  - *D: admit for steroids*

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Typical acute ITP: most are mild and self resolve

- Mild bruising, petechiae in 77%
- **Natural history: self resolution within 6m in 75-80%**
- 3% mucosal/GI bleeding, **0.1-0.5 % intracranial bleed**
- **Rx will incr plts; but impact on bleeding risk, chronic ITP unclear**

Heitink-Polle et al. IVIG vs observation in childhood ITP: a RCT. *Blood* 2018;132(9):883-91

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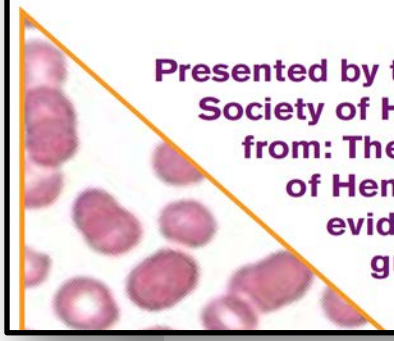
CPGs for ITP: observation is a recommended option

2011 Clinical Practice Guideline on the Evaluation and Management of Immune Thrombocytopenia (ITP)



Presented by the American Society of Hematology, adapted from: The American Society of Hematology 2011 evidence-based practice guideline for immune thrombocytopenia.

1.2.A. We recommend:

- Children with no bleeding or mild bleeding (defined as skin manifestations only, such as bruising and petechiae) be managed with observation alone regardless of platelet count (grade 1B).

Canadian Paediatric Society

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PRACTICE POINT

Diagnosis and management of typical, newly diagnosed primary immune thrombocytopenia (ITP) of childhood

Posted: Oct 26 2018

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Principal author(s)

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Abstract

This practice point applies to children aged 90 days through 17 years who have typical, newly diagnosed primary immune thrombocytopenia (ITP). Current recommendations on management and information from recent studies are summarized with the goal of decreasing variable practice among providers and improving patient-centred care. Options for initially managing young patients with ITP who experience bruising, petechiae or occasional mild epistaxis not interfering with daily living include observation without pharmacotherapy as a first-line option. When active therapy is pursued, choices include the use of corticosteroids and IVIG. Children with moderate or severe bleeding continue to require hospitalization and treatment. Shared decision-making can enhance patient-centred care and ensure that the families have a full understanding of the management options available.

ITP in US children's hospitals : Admit for IVIG

- **US** 2008-14: **94% active Rx** (14% bleeding)
- Approx 80% IVIG
  - Witmer CM et al *Pediatr Blood Cancer* 2016;63:1227-31

- **UK**: **16% active Rx** (decr from 61% in 1995)
  - Grainger JD et al *Arch Dis Child* 2012;97:8-11

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Why is Unnecessary Care Important?

Scan for Author Video Interview

ONLINE FIRST

Eliminating Waste in US Health Care

Donald M. Berwick, MD, MPP
Andrew D. Hackbarth, MPhil

NO MATTER HOW POLARIZED politics in the United States have become, nearly everyone agrees that health care costs are unsustainable. At almost 18% of the gross domestic product (GDP) in 2011, headed for 20% by 2020,[1,2] the nation's increasing health care expenditures reduce the resources available for other worthy government programs, erode wages, and undermine the competitiveness of US industry. Although Medicare and Medicaid are often in the limelight, the health care cost problem affects the private sector just as much as the public sector. Both need

The need is urgent to bring US health care costs into a sustainable range for both public and private payers. Commonly, programs to contain costs use cuts, such as reductions in payment levels, benefit structures, and eligibility. A less harmful strategy would reduce waste, not value-added care. The opportunity is immense. In just 6 categories of waste—overtreatment, failures of care coordination, failures in execution of care processes, administrative complexity, pricing failures, and fraud and abuse—the sum of the lowest available estimates exceeds 20% of total health care expenditures. The actual total may be far greater. The savings potentially achievable from systematic, comprehensive, and cooperative pursuit of even a fractional reduction in waste are far higher than from more direct and blunter cuts in care and coverage. The potential economic dislocations, however, are severe and require mitigation through careful transition strategies.

JAMA. 2012;307(14):1513-1516
Published online March 14, 2012. doi:10.1001/jama.2012.362

www.jama.com

- **30%** of tests/therapies unnecessary
- Add no value
- May cause harm

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Berwick D et al. Eliminating waste in US health care. *JAMA* 2012;307(14):1513-16

Over-Testing Leads To…

ANNALS OF HEALTH CARE MAY 11, 2015 ISSUE

OVERKILL

An avalanche of unnecessary medical care is harming patients physically and financially. What can we do about it?

By Atul Gawande

It was lunchtime before my afternoon surgery clinic, which meant that I was at my desk, eating a ham-and-cheese sandwich and clicking through medical articles. Among those which caught my eye: a British case report on the first 3-D-printed hip implanted in a human being, a Canadian analysis of the rising volume of emergency-room visits by children who have ingested magnets, and a Colorado study finding that the percentage of fatal motor-vehicle accidents involving marijuana had doubled since its commercial distribution became legal. The one that got me thinking, however, was a study of more than a million Medicare patients. It suggested that a huge proportion had received care that was simply a waste.

Millions of Americans get tests, drugs, and operations that won't make them better, may cause harm, and cost billions.

Illustration by Anna Parini

Gawande A. Overkill. *New Yorker* 2015, May 11

- False positives
- "Incidentalomas"
- Overdiagnosis
- More testing

Coon E et al. Overdiagnosis: How our compulsion for diagnosis may be harming children

Pediatrics 2014;134(5):1013-23

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US Children's Hospitals: Evidence of overuse

TABLE 3 Selected Clinical Quality Indicators According to Diagnosis With Performance Measures

Condition	Median Hospital Performance, %	No. of Hospitals Included in ABC	ABC, %
Asthma			
CXR	46.1	5	24.5
Ipratropium bromide ≥0 d	73.3	5	2.4
Ipratropium bromide ≥1 d	7.8	4	0.3
Ipratropium bromide ≥2 d	1.5	5	0
Antibiotics	15.7	5	6.6
Bronchiolitis			
Viral test	45.0	4	0.6
CXR	52.9	4	32.4
Steroids	18.1	3	6.4
Antibiotics	37.0	5	18.5
Bronchodilator ≥0 d	74.4	4	18.9
Bronchodilator ≥1 d	30.3	3	0
Bronchodilator ≥2 d	11.4	3	0
Pneumonia			
C-reactive protein	19.3	5	0.1
Erythrocyte sedimentation rate	8.2	5	3.5
Complete blood cell count	55.1	5	28.8
Viral test	24.6	5	1.5
Initial narrow-spectrum antibiotics	27.3	5	60.7

Parikh K et al. Establishing benchmarks for the hospitalized care of children *Pediatrics* 2014;134(3):555-62

Unnecessary care in Canada


Wastes health system resources


Increases wait times for patients


Can lead to patient harm

Canadians have

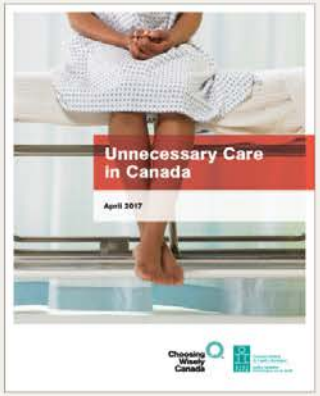
1 million+

potentially unnecessary medical tests and treatments each year.

of patients indicated in the 8 selected Choosing Wisely Canada recommendations had tests, treatments and procedures that **are potentially unnecessary**.

There is room to reduce unnecessary care.

Substantial variation exists among regions and facilities in terms of the number of unnecessary tests and procedures performed — **this points to an opportunity to improve.**



Choosing Wisely Canada is a campaign to help clinicians and patients engage in conversations about unnecessary tests and treatments, and make smart choices.

Unnecessary Care in Canada explores 8 out of 200+ Choosing Wisely Canada recommendations across sectors of the health system: primary care, specialist care, emergency care and hospital care.

Choosing Wisely Canada™ CIHI

cihi.ca

Dangers of Unnecessary Care

Potential Harm:
Radiation
Sedation
Side-effects
Discomfort

+

False Positives
Incidentalomas
Anxiety

+

Inconvenience to the Family and Child

Cost to the Family and System

Pearce MS et al Radiation exposure from CT scans in childhood & risk of leukemia and brain tumors *Lancet* 2012;385:499
Schroeder A et al Overuse of medical imaging; who's minding our children *JAMA Pediatr* 2016;170(11)

Morgan DJ et al. Setting a research agenda for medical overuse. *BMJ* 2015;351:h4534

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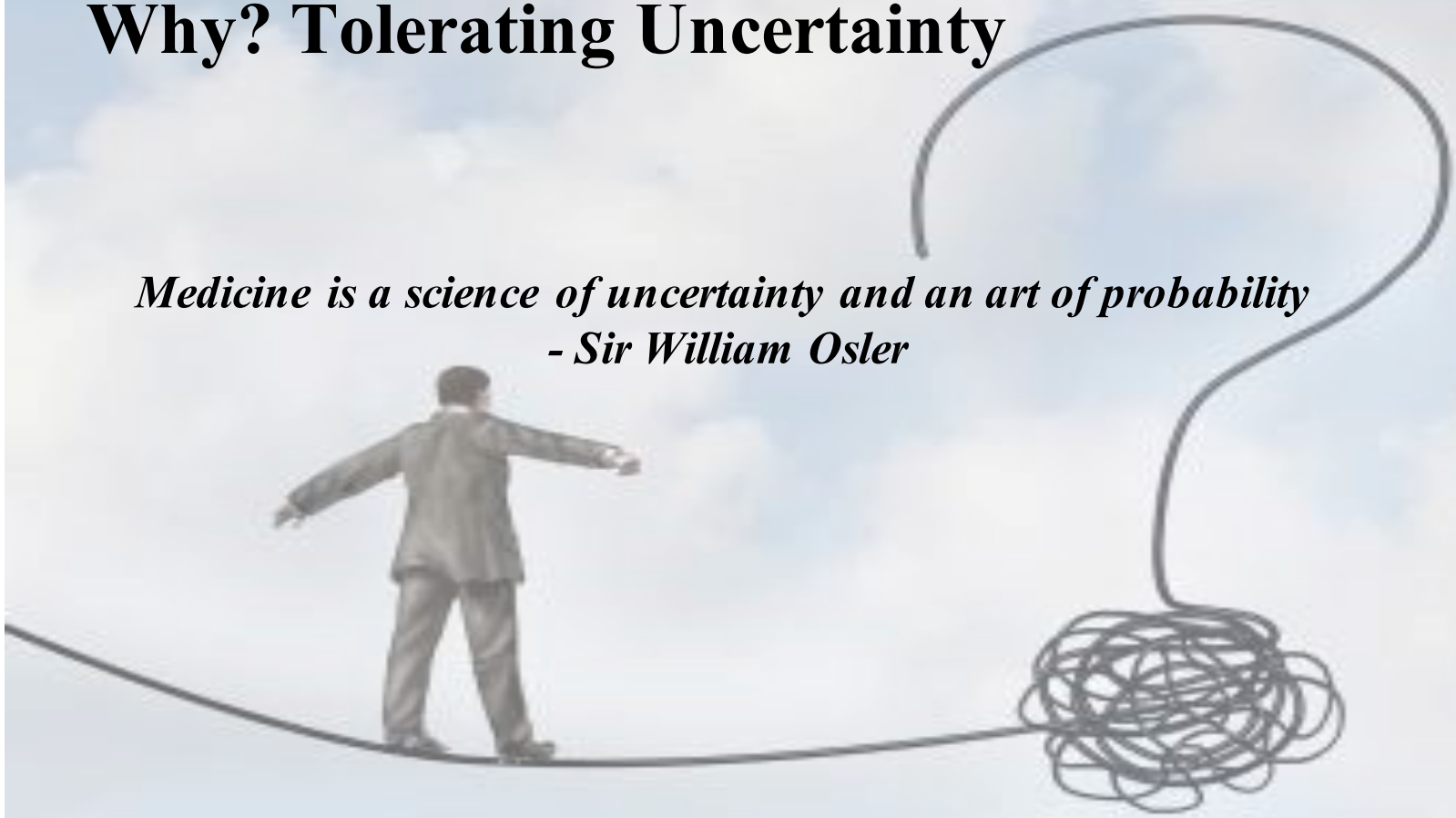
Why? Therapeutic illusion

Tendency amongst pts & physicians to overestimate benefits of medical interventions and underestimate harms

Casarett D. The science of Choosing Wisely: overcoming the therapeutic illusion. *NEJM* 2016;374(13):1203-05
Hoffman TC. Clinicians' expectations of benefits & harms of Rx, screening and tests: systematic review *JAMA Intern Med* 2017

Why? Tolerating Uncertainty

Medicine is a science of uncertainty and an art of probability
- Sir William Osler



Simpkin AL et al. Tolerating uncertainty – the next medical revolution? *NEJM* 2016;375:1713-15
Epstein D. When evidence says no but doctors say yes. *The Atlantic* Feb 2017

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- Culture change: Trainees
- Local implementation
- Cases: enablers for success

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Choosing Wisely Canada

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.

SickKids Choosing Wisely Canada

MORE IS
NOT
ALWAYS
BETTER

Clinician Engagement: National societies/Recommendations

60+ SOCIETIES COMMITTED

to Choosing Wisely Canada at various stages of engagement.

270+ RECOMMENDATIONS

published to date across 45+ specialties.

OTHER HEALTH CARE PROVIDER GROUPS ENGAGED

including nursing, pharmacy, nurse practitioner, hospital dentistry.

BEYOND THE LISTS

SickKids Choosing Wisely Canada

Choosing Wisely®

An initiative of the ABIM Foundation

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

Five Things Physicians and Patients Should Question

1 Antibiotics should not be used for apparent viral respiratory illnesses (sinusitis, pharyngitis, bronchitis).

Although overall antibiotic prescription rates for children have fallen, they still remain alarmingly high. Unnecessary medication use for viral respiratory illnesses can lead to antibiotic resistance and contributes to higher health care costs and the risks of adverse events.

2 Cough and cold medicines should not be prescribed or recommended for respiratory illnesses in children under four years of age.

Research has shown these products offer little benefit to young children and can have potentially serious side effects. Many cough and cold products for children have more than one ingredient, increasing the chance of accidental overdose if combined with another product.

3 Computed tomography (CT) scans are not necessary in the immediate evaluation of minor head injuries; clinical observation/Pediatric Emergency Care Applied Research Network (PECARN) criteria should be used to determine whether imaging is indicated.

Minor head injuries occur commonly in children and adolescents. Approximately 50% of children who visit hospital emergency departments with a head injury are given a CT scan, many of which may be unnecessary. Unnecessary exposure to x-rays poses considerable danger to children including increasing the lifetime risk of cancer because a child's brain tissue is more sensitive to ionizing radiation. Unnecessary CT scans impose undue costs to the health care system. Clinical observation prior to CT decision-making for children with minor head injuries is an effective approach.

4 Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure.

CT scanning is associated with radiation exposure that may escalate future cancer risk. MRI also is associated with risks from required sedation and high cost. The literature does not support the use of skull films in the evaluation of a child with a febrile seizure. Clinicians evaluating infants or young children after a simple febrile seizure should direct their attention toward identifying the cause of the child's fever.

5 Computed tomography (CT) scans are not necessary in the routine evaluation of abdominal pain.

Utilization of CT imaging in the emergency department evaluation of children with abdominal pain is increasing. The increased lifetime risk for cancer due to excess radiation exposure is of special concern given the acute sensitivity of children's organs. There also is the potential for radiation overdose with inappropriate CT protocols.

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Five More Things Physicians and Patients Should Question

6 Don't prescribe high-dose dexamethasone (0.5mg/kg per day) for the prevention or treatment of bronchopulmonary dysplasia in pre-term infants.

High-dose dexamethasone (0.5 mg/kg/day) does not appear to confer additional therapeutic benefit over lower doses and is not recommended. High doses also have been associated with numerous short- and long-term adverse outcomes, including neurodevelopmental impairment.

7 Don't perform screening panels for food allergies without previous consideration of medical history.

Ordering screening panels (IgE tests) that test for a variety of food allergens without previous consideration of the medical history is not recommended. Sensitization (a positive test) without clinical allergy is common. For example, about 8% of the population tests positive to peanuts but only approximately 1% are truly allergic and exhibit symptoms upon ingestion. When symptoms suggest a food allergy, tests should be selected based upon a careful medical history.

8 Avoid using acid blockers and motility agents such as metoclopramide (generic) for physiologic gastroesophageal reflux (GER) that is effortless, painless and not affecting growth. Do not use medication in the so-called "happy-spitter."

There is scant evidence that gastroesophageal reflux (GER) is a causative agent in many conditions though reflux may be a common association. There is accumulating evidence that acid-blocking and motility agents such as metoclopramide (generic) are not effective in physiologic GER. Long-term sequelae of infant GER is rare, and there is little evidence that acid blockade reduces these sequelae. The routine performance of upper gastrointestinal (GI) tract radiographic imaging to diagnose GER or gastroesophageal disease (GERD) is not justified. Parents should be counseled that GER is normal in infants and not associated with anything but stained clothes. GER that is associated with poor growth or significant respiratory symptoms should be further evaluated.

9 Avoid the use of surveillance cultures for the screening and treatment of asymptomatic bacteruria.

There is minimal evidence that surveillance urine cultures or treatment of asymptomatic bacteruria is beneficial. Surveillance cultures are costly and produce both false positive and false negative results. Treatment of asymptomatic bacteruria also increases exposure to antibiotics, which is a risk factor for subsequent infections with a resistant organism. This also results in the overall use of antibiotics in the community and may lead to unnecessary imaging.

10 Infant home apnea monitors should not be routinely used to prevent sudden infant death syndrome (SIDS).

There is no evidence that the use of infant home apnea monitors decreases the incidence of SIDS; however, they might be of value for selected infants at risk for apnea or cardiovascular events after discharge but should not be used routinely.

Paediatrics

Five Things Physicians and Patients Should Question
by
Canadian Paediatric Society
Last updated: November 2016

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In partnership with the Canadian Medical Association

1. **Don't routinely use acid blockers or motility agents for the treatment of gastroesophageal reflux in infants.**

2. **Don't perform screening panels (IgE tests) for food allergies without previous consideration of the pertinent medical history.**

3. **Don't administer psychostimulant medications to preschool children with Attention Deficit Disorder (ADD), but offer parent-administered behavioural therapy.**

4. **Don't routinely do a throat swab when children present with a sore throat if they have a cough, rhinitis, or hoarseness as they almost certainly have viral pharyngitis.**

5. **Don't recommend the use of cough and cold remedies in children under six years of age.**

Pediatric Infectious Diseases and Medical Microbiology

Four Things Physicians and Patients Should Question

by

Association of Medical Microbiology and Infectious Disease Canada

Last updated: January 2018

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1. **Don't routinely use antibiotics other than amoxicillin in the treatment of children with presumed community-acquired pneumonia (in the outpatient setting).**

2. **Don't use a bag for collection of urine cultures to diagnose urinary tract infections.**

3. **Don't routinely collect or process specimens for Clostridium difficile testing in infants less than one year of age with diarrhea.**

4. **Don't routinely treat uncomplicated acute hematogenous osteomyelitis with prolonged intravenous therapy.**

Choosing Wisely: (lack of) progress in 1st 5 yrs

Evidence of Impact

7 CW recommendations using national US data:

- 2 slight decline
- 2 increased usage
- 3 unchanged

Rosenberg A, et al. Early trends among seven recommendations from the CW campaign *JAMA Int Med* 2015;175(12):1913-20

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- The potential solution: Choosing Wisely
- Culture change: Education
- Local implementation
- Cases: enablers for success

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www.ChoosingWiselyCanada.org / medical-education

Medical Education: Students

Six Things Medical Students and Trainees Should Question

by
Canadian Federation of Medical Students
Fédération médicale étudiante du Québec

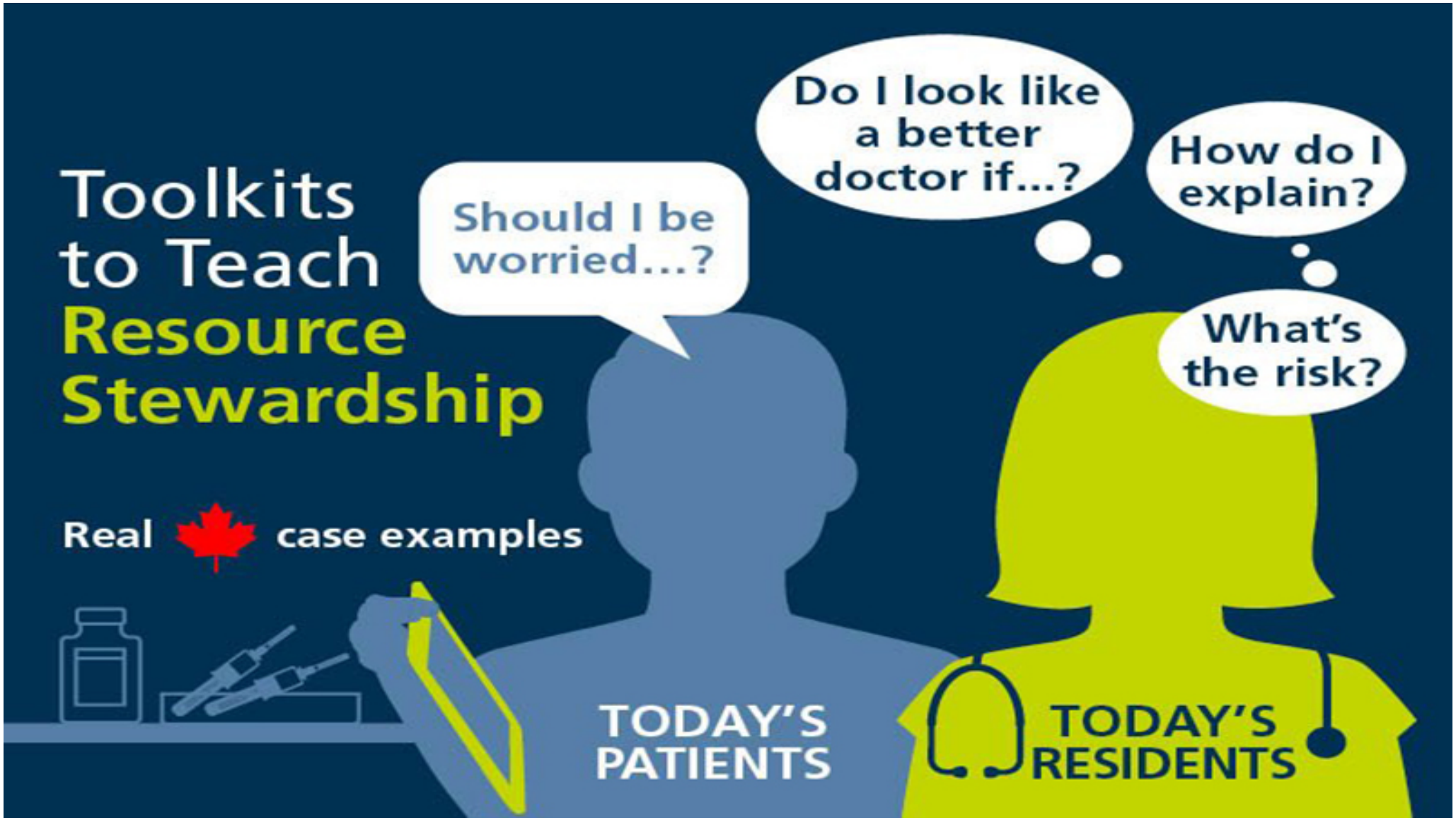
Last updated: November 2015

Choosing Wisely Canada™
In partnership with the Canadian Medical Association

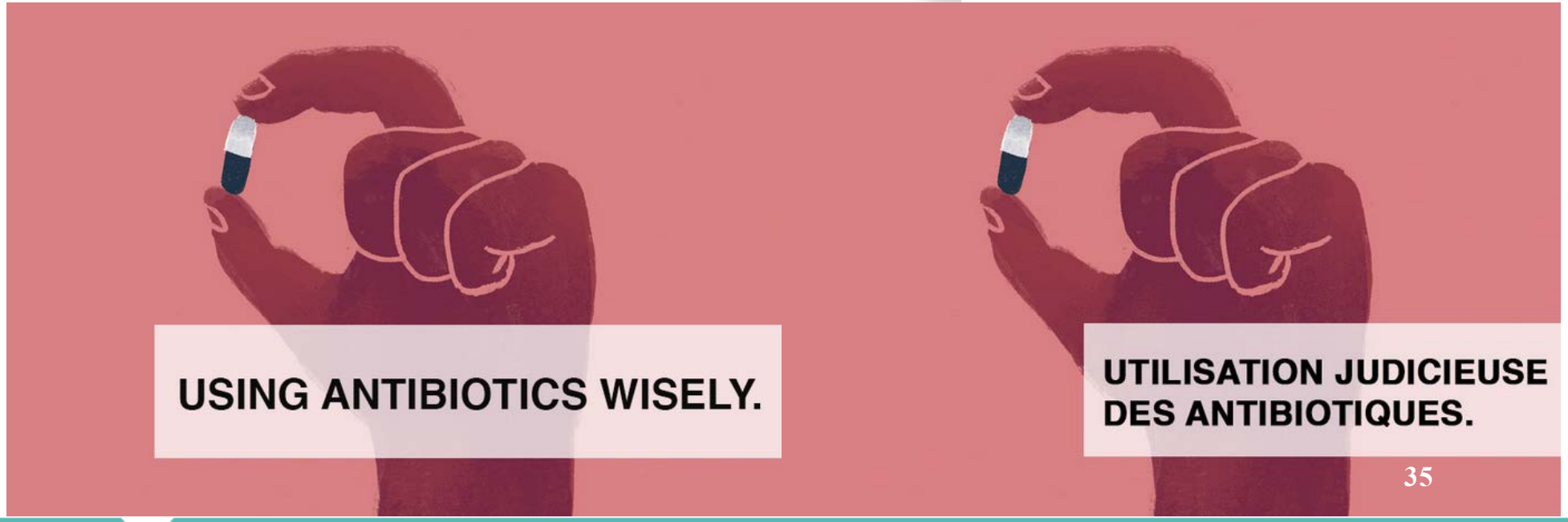
1. **Don't suggest ordering the most invasive test or treatment before considering other less invasive options.**
2. **Don't suggest a test, treatment, or procedure that will not change the patient's clinical course.**
3. **Don't miss the opportunity to initiate conversations with patients about whether 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.**

Toolkits to Teach Resource Stewardship

Real case examples



Choosing Wisely Canada - Using Antibiotics Wisely Campaign



Priorities of *Using Antibiotics Wisely* Campaign

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

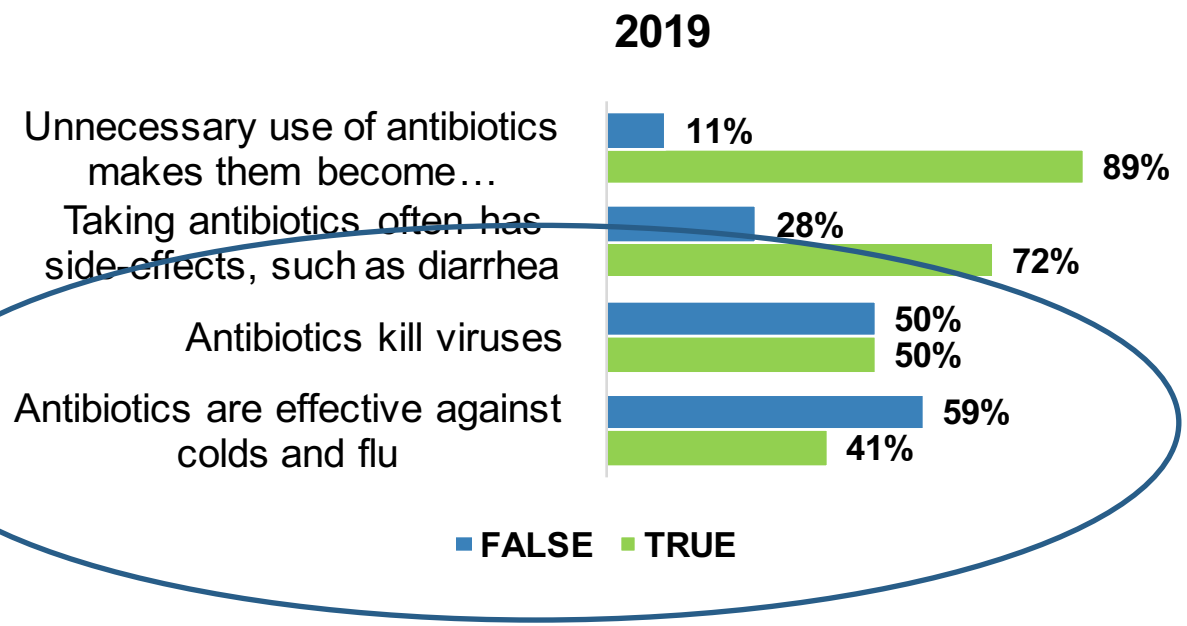
Health Canada
Santé Canada

Choosing Wisely Canada™
Choisir avec soin MC

2019 Choosing Wisely Canada IPSOS Survey

- Half expect reassurance (51%) or suggestions for symptom relief (49%) for a cough or cold. 29% expect an antibiotic

- The majority of respondents correctly demonstrate awareness of the effect and impact of antibiotics, however they are split on whether antibiotics kill viruses



Using Antibiotic Wisely resources are available in multiple languages including English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

Viral and Delayed Prescription Pads

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 "Viral Prescription Pad" has been adapted from the RQHR Antimicrobial Stewardship Program www.rqhealth.ca/centers/clinicalresearch/qi, 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.

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

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.

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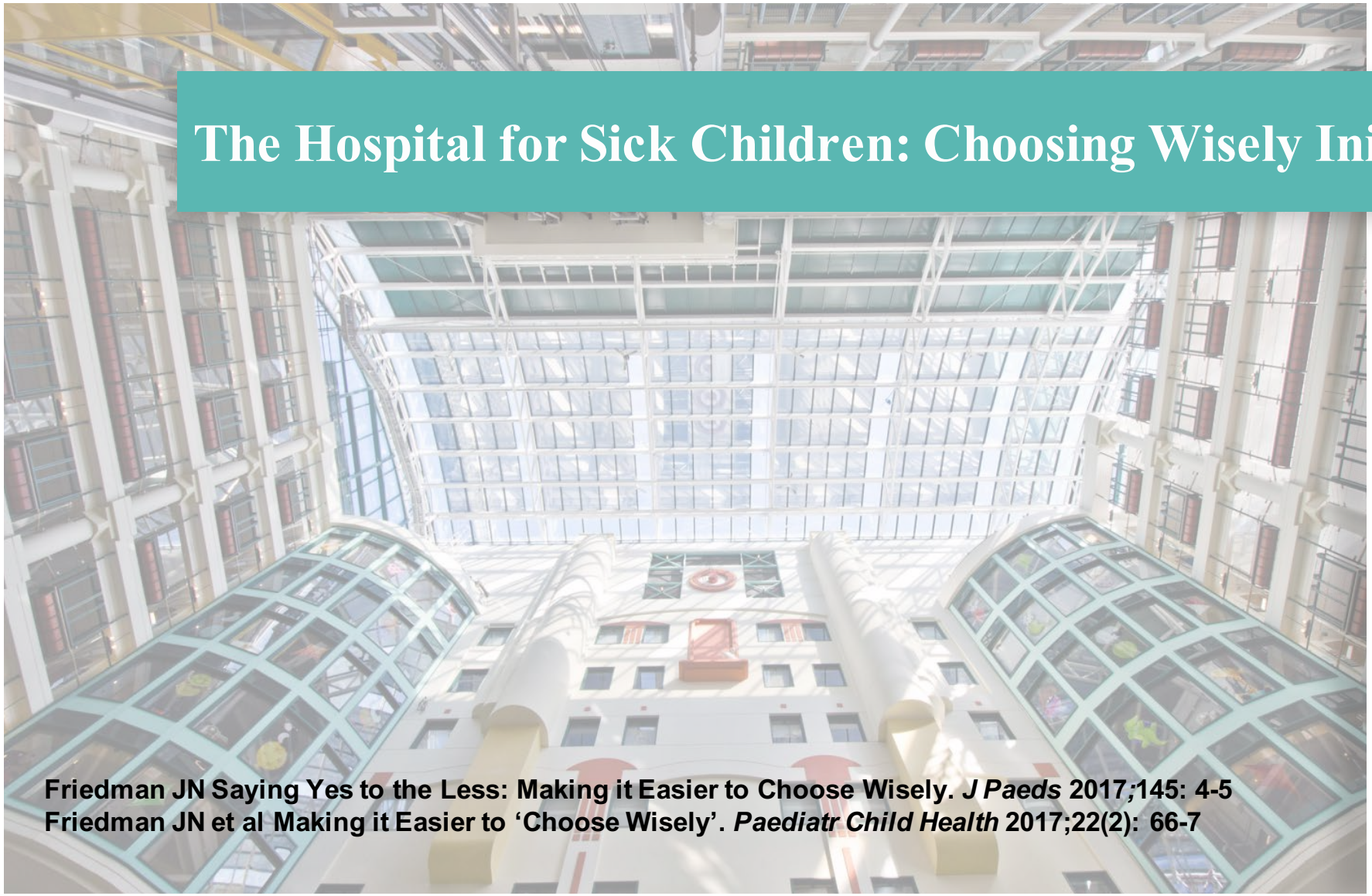
The Hospital for Sick Children: Choosing Wisely Initiative



Friedman JN Saying Yes to the Less: Making it Easier to Choose Wisely. *J Paeds* 2017;145: 4-5
Friedman JN et al Making it Easier to 'Choose Wisely'. *Paediatr Child Health* 2017;22(2): 66-7

Five Things Clinicians and Patients Should Question

1. Don't routinely order nasopharyngeal (NP) testing for typical respiratory viruses unless results are likely to impact management.

2. Don't routinely perform a voiding cystourethrogram (VCUG) in infants after a first febrile urinary tract infection.

3. Don't use continuous pulse oximetry routinely in children hospitalized with acute respiratory illness unless they are on supplemental oxygen.

4. Don't automatically give IVIG as first-line treatment for children with newly diagnosed, typical ITP.

5. Don't use routine radiography in children who present with acute ankle injuries and meet criteria for a low risk examination.

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IMPLEMENTATION IS WHERE THE RUBBER HITS THE ROAD

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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

Outline

- Cases
- The problem: what and why?
- The potential solution: Choosing Wisely
- Culture change: Trainees
- Local implementation
- Cases: enablers for success

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1 Don't routinely order nasopharyngeal (NP) testing for typical respiratory illnesses unless results are likely to impact management

Respiratory viral infections frequently occur in children and are a common reason to seek medical care. The diagnosis is made clinically and usually does not require confirmatory testing. NP testing is uncomfortable for children and the results frequently do not impact their medical management. Therefore, **NP testing should only be considered in high risk patients where results will influence treatment decisions such as the need for antibiotics, performance of additional tests, or hospitalization**. Reducing routine respiratory viral testing promotes high value care.

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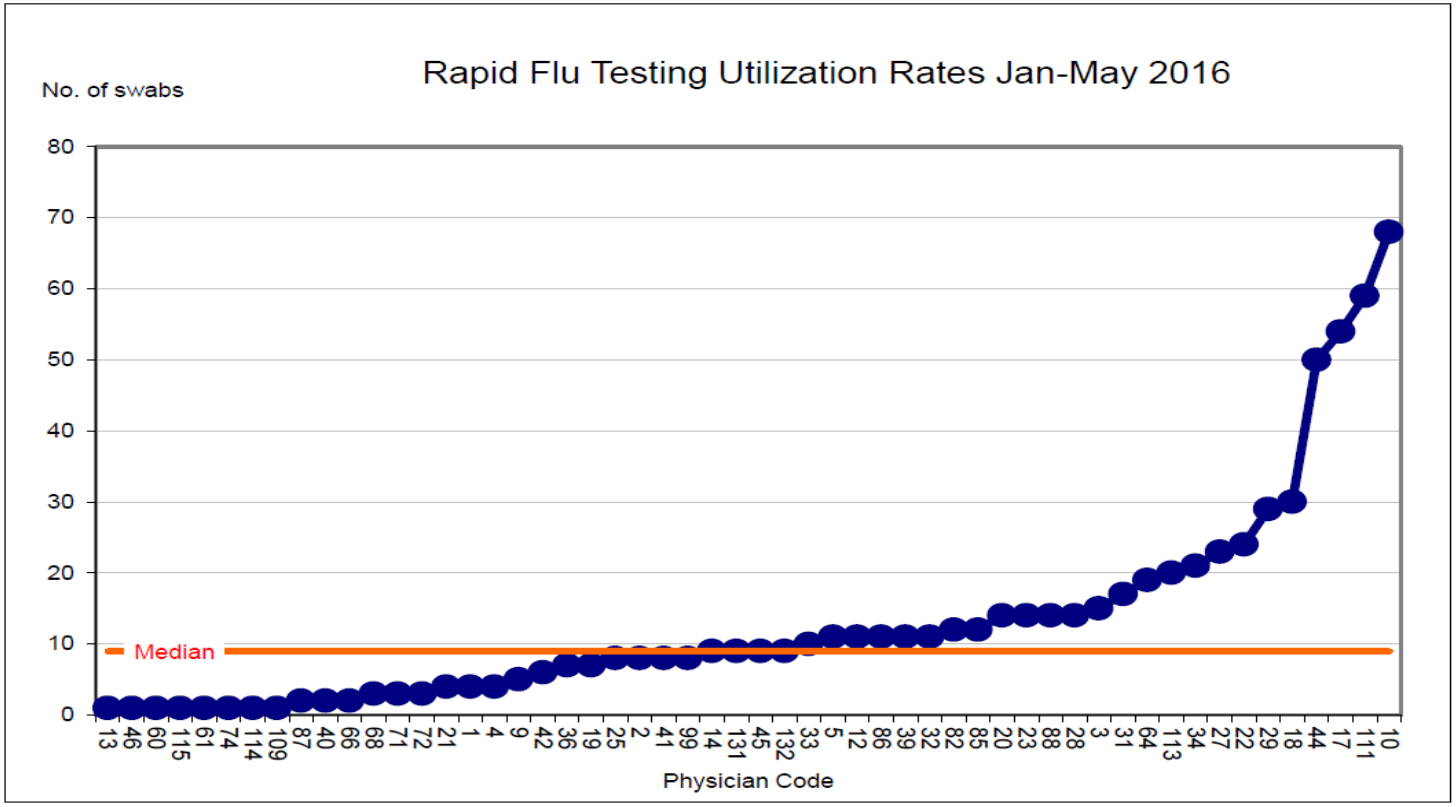
Practice variation in the ED: Audit and feedback



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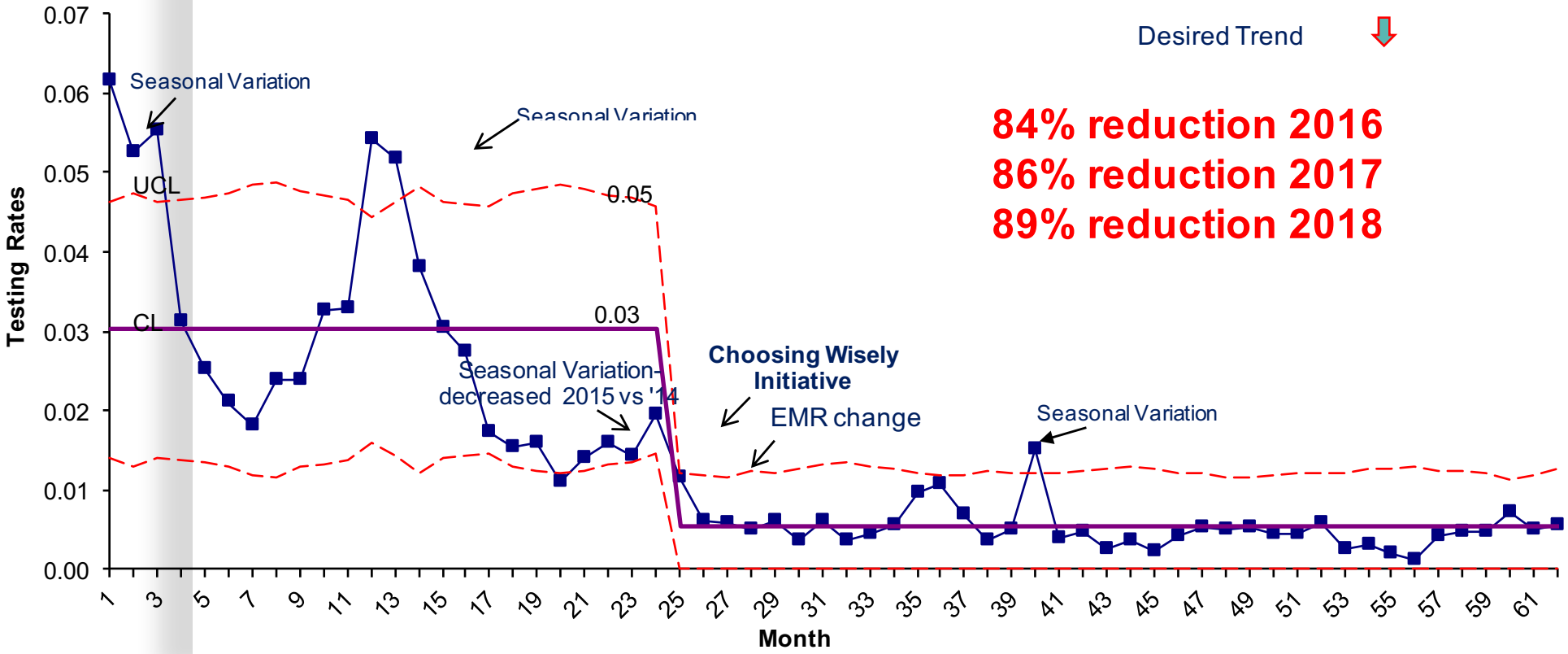
ED Respiratory Multiplex testing rates: 85% decrease



5 Don't use routine radiography in children who present with acute ankle injuries and meet criteria for a low risk examination.

In North America, approximately 2 million children present to emergency departments annually with ankle injuries; about 12% demonstrate fractures on plain films. A **paediatric clinical decision rule (Low Risk Ankle Rule)** has been developed, validated and demonstrated a safe reduction in unnecessary radiographs by up to 60%. Implementing this rule reduces unnecessary radiation exposure and saves health care resources.

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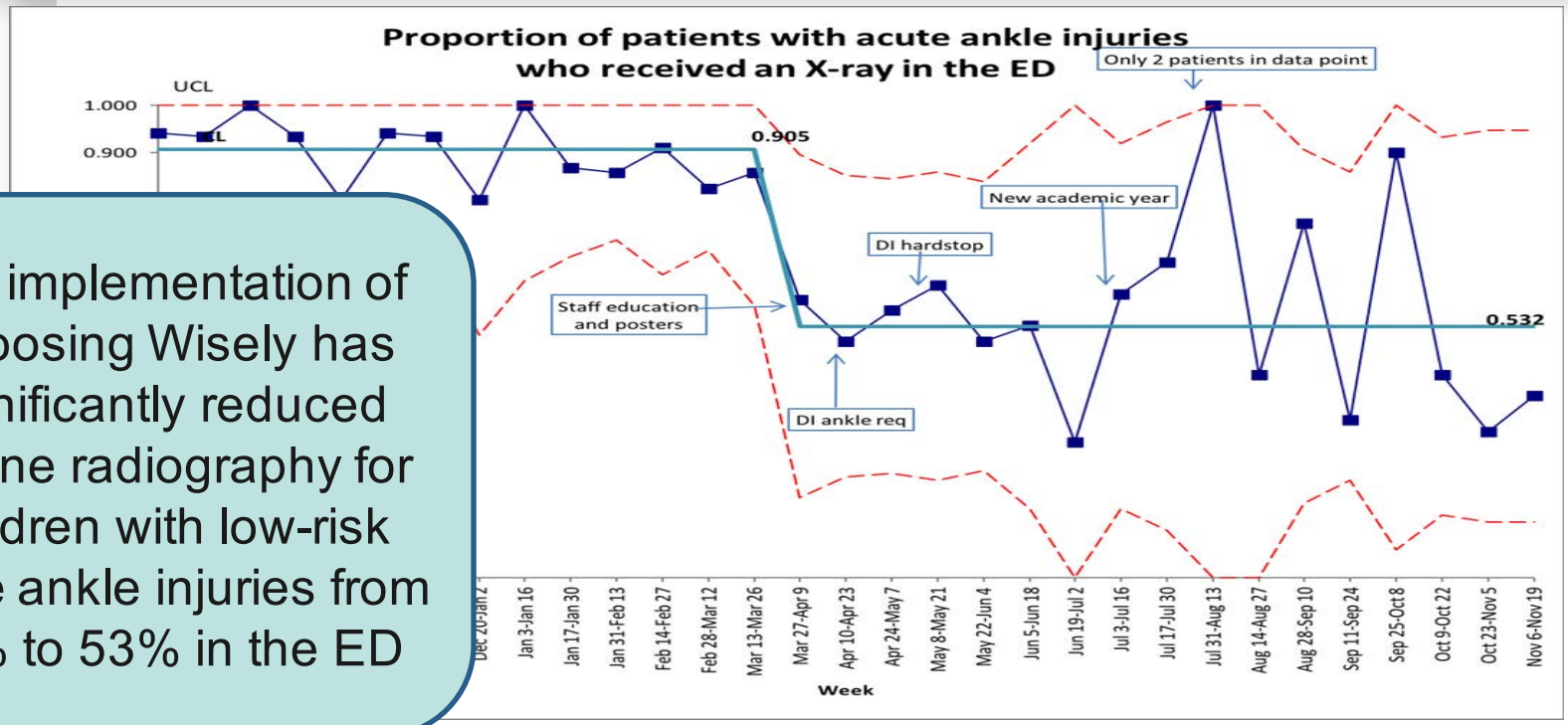
Proportion with ankle injury receiving X-ray in ED



The implementation of Choosing Wisely has significantly reduced routine radiography for children with low-risk acute ankle injuries from 90% to 53% in the ED

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4 Don’t automatically give IVIG as first-line treatment for children with newly diagnosed, typical ITP

Management choices for children with newly diagnosed, typical ITP include observation (when the bleeding is mild), prednisone, or IVIG. **Each option has risks and benefits; ideally these can be discussed with families and their preferences accounted for**. There is no evidence of a relationship between these initial therapies and subsequent development of severe bleeding. Prior to choosing IVIG, consideration should be given to its requirement for iv access, day-hospital or overnight admission, its expense, and its side-effect profile that frequently includes aseptic meningitis.

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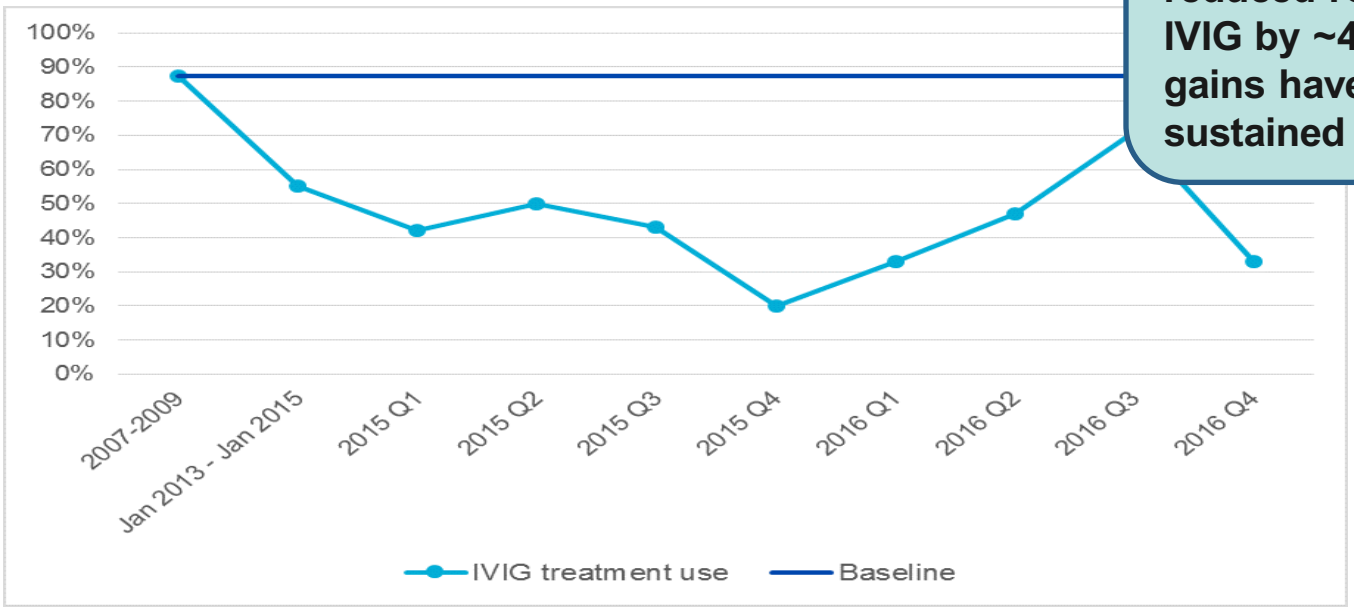
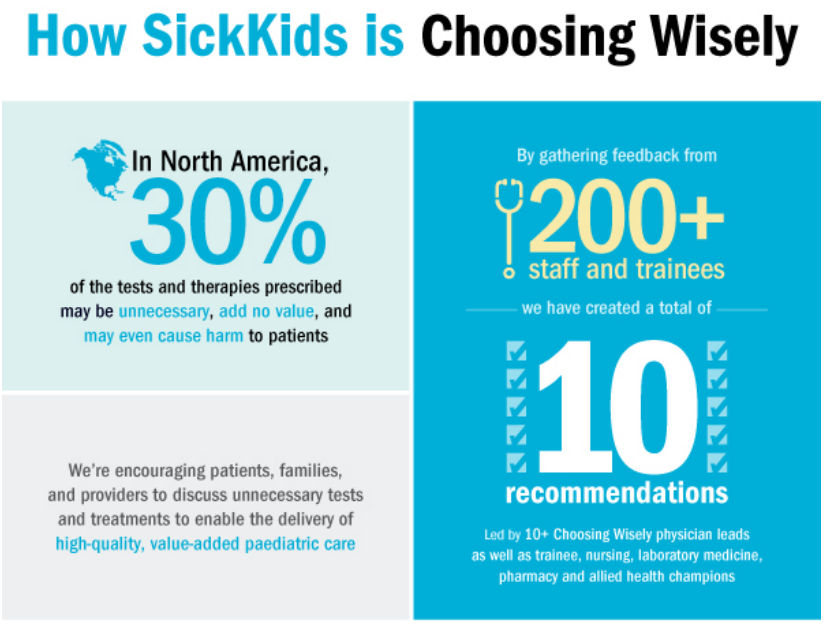
IVIG use for typical acute ITP: reduced by 40%



The implementation of Choosing Wisely reduced routine use of IVIG by ~40%; gains have been sustained from 2016

Scheft M et al. Change theory contributes to Choosing Wisely for ITP. *Hospital Pediatrics* 2019;9(3):

Lessons Learned from SickKids Choosing Wisely



- Choosing Wisely = opportunity for dialogue/action
- Lists are easy, implementation is hard
- Enablers:
  - Clinician Champions
  - Leadership
  - Measurement
  - Process/hard coding changes
  - Feedback/audit

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Take Home Points

- 30% tests/therapies don't add value
- We need to own it
- 'Choosing Wisely' opportunity for dialogue/action
- Critical thinking; tolerating uncertainty
- Target trainees
- Local initiatives can produce good outcomes
- Changing culture

Questions?

Author Unknown

The largest room in the world is the room for improvement.

Quotes from *Healthcare Kaizen: Engaging Front-Line Staff in Sustainable Continuous Improvements* by Graban & Swartz

www.hckaizen.com

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