

Family Medicine

Thirteen Things Physicians and Patients Should Question

by
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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.

2 Don't use antibiotics for upper respiratory infections that are likely viral in origin, such as influenza-like illness, or self-limiting, such as sinus 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 with Pap smears if under 21 years of age or over 69 years of age.

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

The potential harm from screening 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. Those 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.

6 Don't routinely measure Vitamin D in low risk adults.

Because Canada is located above the 35° North latitude, the average Canadian's exposure to sunlight is insufficient to maintain adequate Vitamin D levels, especially during the winter. Therefore, measuring serum 25-hydroxyvitamin D levels 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.

7 Don't routinely do screening mammography for average risk women aged 40 – 49. Individual assessment of each woman's preferences and risk should guide the discussion and decision regarding mammography screening in this age group.

If, after this careful assessment and discussion, a woman's breast cancer risk is not high, current evidence indicates that the benefit of screening mammography is small. Furthermore, for this age group there is a greater risk of false-positive screening results and consequently of undergoing unnecessary or harmful follow-up procedures. As always, clinicians need to be aware of changes in the balance of evidence on risk and benefit and support women in understanding this evidence. High quality materials to assist these discussions are available through the Canadian Task Force on Preventive Health Care.

8 Don't do annual physical exams on asymptomatic adults with no significant risk factors.

A periodic physical examination has tremendous benefits; it allows physicians to check on their healthy patients while they remain healthy. However, the benefits of this check-up being done on an annual basis are questionable since many chronic illnesses that benefit from early detection take longer than a year to develop. Preventive health checks should instead be done at time intervals recommended by guidelines, such as those noted by the Canadian Task Force on the Periodic Health Examination.

9 Don't order DEXA (Dual-Energy X-ray Absorptiometry) screening for osteoporosis on low risk patients.

While all patients aged 50 years and older should be evaluated for risk factors for osteoporosis using tools such as the osteoporosis self-assessment screening tool (OST), bone mineral density screening via DEXA is not warranted on women under 65 or men under 70 at low risk.

10 Don't advise non-insulin requiring diabetics to routinely self-monitor blood sugars between office visits.

While self-monitoring of blood glucose (SMBG) for patients with diabetes is recommended by certain groups to help monitor glycemic control, for most adults with type II diabetes who are not using insulin, many studies have shown that routine SMBG does little to control blood sugar over time.

11 Don't order thyroid function tests in asymptomatic patients.

The primary rationale for screening asymptomatic patients is that the resulting treatment results in improved health outcomes when compared with patients who are not screened. There is insufficient evidence available indicating that screening for thyroid diseases will have these results.

12 Don't continue opioid analgesia beyond the immediate postoperative period or other episode of acute, severe pain.

The immediate postoperative period or acute episodes of pain typically refers to a time period of three days or less, and rarely more than seven days. Prescribe the lowest effective dose and number of doses required to address the expected pain. This recommendation does not apply to individuals already on long term or chronic opioids or opioid agonist treatment.

13 Don't initiate opioids long-term for chronic pain until there has been a trial of available non-pharmacological treatments and adequate trials of non-opioid medications.

Depending on the pain mechanism and patient co-morbidities, this can include acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclics and gabapentinoids. Other non-medication modalities for managing acute, subacute and chronic pain may include exercise, weight loss, cognitive-behavioural therapy, massage therapy, physical therapy and/or spinal manipulation therapy. An opioid trial should be guided by clear criteria for monitoring the success of an opioid trial and a plan for stopping opioids if criteria are not met.

How the list was created

Recommendations 1 - 5

The Canadian Medical Association's (CMA) Forum on General and Family Practice Issues (GP Forum) is a collective of leaders of the General Practice sections of the provincial and territorial medical associations. To establish its Choosing Wisely Canada Top 5 recommendations, each GP Forum member consulted with their respective GP Section members to contribute candidate list items. Items from the American Academy of Family Physicians' Choosing Wisely® list were among the candidates. All candidate list items were collated and a literature search was conducted to confirm evidence-based support for the items. GP Forum members discussed which of the thirteen items that resulted should be included. Agreement was found on eight of them. Family physician members of the CMA's e-Panel voted to select five of the eight items. These five items were then approved by the provincial and territorial GP Sections. The College of Family Physicians of Canada is a member observer of the GP Forum and was involved in this list creation process. The first four items on this list are adapted with permission from the Five Things Physicians and Patients Should Question, © 2012 American Academy of Family Physicians.

Recommendations 6 - 11

Items 6 - 11 were selected from ten candidate items that were originally proposed for items 1 - 5. GP Forum members discussed which of these items should be included and agreement was found on eight of them. As was done for the first wave, family physician members of the CMA's e-Panel voted to select five of the eight items; however, subsequent discussions by the GP Forum resulted in six items being chosen. Feedback on these six items was then obtained from the provincial/territorial GP Sections. The College of Family Physicians of Canada is a member observer of the GP Forum and was involved in this list creation process.

The GP Forum was dissolved as of August 2015.

Recommendations 12, 13

In late 2016, Choosing Wisely Canada partners - the College of Family Physicians of Canada and the Canadian Medical Association - formed the Pan-Canadian Collaborative on Education for Improved Opioid Prescribing, with the goal to reduce harm from opioids, decrease the variability in prescribing practices, and improve pain management for patients. The Collaborative formally reached out to Choosing Wisely Canada (CWC) in early 2017, requesting its involvement, citing the important role played by CWC in convening professional societies representing different clinical specialties to tackle unnecessary care. As a result, the 'Opioid Wisely' was launched in March of 2018 and items 12 and 13 were added to the preexisting family medicine list of 11 things patients and clinicians should question.

Sources

- 1 Canadian Association of Radiologists. [The 2012 CAR diagnostic imaging referral guidelines](#) [Internet]. 2012 [cited 2017 May 9].
Chou R, et al. Imaging strategies for low-back pain: Systematic review and meta-analysis. *Lancet*. 2009 Feb 7;373(9662):463-72. PMID: 19200918.
Ontario Ministry of Health and Long-Term Care (MOHLTC). [Excellent care for all - low back pain strategy](#) [Internet]. 2013 [cited 2017 May 9].
Physicians of Ontario Collaborating for Knowledge Exchange and Transfer (POCKET). [Red and yellow flag indicator cards](#) [Internet]. 2009 [cited 2017 May 5].
Williams CM, et al. Low back pain and best practice care: A survey of general practice physicians. *Arch Intern Med*. 2010 Feb 8;170(3):271-7. PMID: 20142573.
- 2 American Academy of Allergy Asthma and Immunology. [Sinus infections account for more antibiotic prescriptions than any other diagnosis](#) [Internet]. 2013 Aug 28 [cited 2017 May 9].
Desrosiers M, et al. Canadian clinical practice guidelines for acute and chronic rhinosinusitis. *Allergy Asthma Clin Immunol*. 2011 Feb 10;7(1):2,1492-7-2. PMID: 21310056.
Hirschmann JV. Antibiotics for common respiratory tract infections in adults. *Arch Intern Med*. 2002 Feb 11;162(3):256-64. PMID: 11822917.
Low D. Reducing antibiotic use in influenza: Challenges and rewards. *Clin Microbiol Infect*. 2008 Apr;14(4):298-306. PMID: 18093237.
Meltzer EO, et al. Rhinosinusitis diagnosis and management for the clinician: A synopsis of recent consensus guidelines. *Mayo Clin Proc*. 2011 May;86(5):427-43. PMID: 21490181.
Schumann SA, et al. Patients insist on antibiotics for sinusitis? Here is a good reason to say "no". *J Fam Pract*. 2008 Jul;57(7):464-8. PMID: 18625169.
Smith SR, et al. Treatment of mild to moderate sinusitis. *Arch Intern Med*. 2012 Mar 26;172(6):510-3. PMID: 22450938.
- 3 Canadian Association of Radiologists. 2012 CAR diagnostic imaging referral guidelines. [Section E: cardiovascular](#) [Internet]. 2012 [cited 2017 May 9].
Canadian Association of Radiologists. [Medical imaging primer with a focus on x-ray usage and safety](#) [Internet]. 2013 [cited 2017 May 9].
Tigges S, et al. Routine chest radiography in a primary care setting. *Radiology*. 2004 Nov;233(2):575-8. PMID: 15516621.
U.S. Preventive Services Task Force (USPSTF). [Screening for coronary heart disease with electrocardiography](#) [Internet]. 2012 Jul [cited 2017 May 9].
- 4 Canadian Partnership Against Cancer. [Cervical cancer screening guidelines: Environmental scan](#) [Internet]. 2013 Sep [cited 2017 May 9].
Canadian Task Force on Preventive Health Care, et al. Recommendations on screening for cervical cancer. *CMAJ*. 2013 Jan 8;185(1):35-45. PMID: 23297138.
National Institute for Health and Care Excellence. [Cervical screening](#) [Internet]. 2010 [cited 2017 May 5].
- 5 Boland BJ, et al. Yield of laboratory tests for case-finding in the ambulatory general medical examination. *Am J Med*. 1996 Aug;101(2):142-52. PMID: 8757353.
U.S. Preventive Services Task Force. [Guide to clinical preventive services: An assessment of the effectiveness of 169 interventions](#) [Internet]. 1989 [cited 2014 Feb 15].
Wians FH. Clinical laboratory tests: Which, why, and what do the results mean?. *Lab Med*. 2009;40:105-13.
- 6 British Columbia Guidelines and Protocol Advisory Committee. [Vitamin D testing protocol](#) [Internet]. 2013 Jun 1 [cited 2014 Sep 25].
Hanley DA, et al. Vitamin D in adult health and disease: a review and guideline statement from Osteoporosis Canada. *CMAJ*. Sep 7 2010;182(12):E610-618. PMID: 20624868.
Ontario Association of Medical Laboratories. [Guideline for the Appropriate Ordering of Serum Tests for 25-hydroxy Vitamin D and 1,25-dihydroxy Vitamin D](#) [Internet]. 2010 Jun [cited 2014 Sep 25].
Toward Optimized Practice (TOP) Working Group for Vitamin D. [Guideline for Vitamin D Testing and Supplementation in Adults](#) [Internet]. Edmonton (AB): Toward Optimized Practice; 2012 Oct 31 [cited 2014 Sep 25].

- 7 Canadian Task Force on Preventive Health Care, Tonelli M, Connor Gorber S, et al. Recommendations on screening for breast cancer in average-risk women aged 40-74 years. *CMAJ*. 2011 Nov 22;183(17):1991-2001. PMID: 22106103.
Canadian Task Force on Preventive Health Care. Screening for breast cancer: Summary of recommendations for clinicians and policymakers [Internet]. 2011 Nov 22 [cited 2014 Sep 25].
Canadian Task Force on Preventive Health Care. Screening for Breast Cancer. Risk vs. Benefits Poster: For ages 40-49 [Internet]. 2014 [cited 2014 Sep 25].
Ringash J, et al. Preventive health care, 2001 update: screening mammography among women aged 40-49 years at average risk of breast cancer. *CMAJ*. 2001 Feb 20;164(4):469-76. PMID: 11233866.
US Preventive Services Task Force. Screening for breast cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2009 Nov 17;151(10):716-26, W-236. PMID: 19920272.
- 8 Blais J, et al. L'évaluation médicale périodique 2014. Agence de la santé et des services sociaux de Montréal et Collège des médecins du Québec [Internet]. 2014 [cited 2014 Aug 25].
Boulware LE, et al. Systematic review: the value of the periodic health evaluation. *Ann Intern Med*. 2007 Feb 20;146(4):289-300. PMID: 17310053.
Krogsbøll LT, et al. General health checks in adults for reducing morbidity and mortality from disease: Cochrane systematic review and meta-analysis. *BMJ*. 2012 Nov 20;345:e7191. PMID: 23169868.
Si S, et al. Effectiveness of general practice-based health checks: a systematic review and meta-analysis. *Br J Gen Pract*. 2014 Jan;64(618):e47-53. PMID: 24567582.
The periodic health examination. Canadian Task Force on the Periodic Health Examination. *Can Med Assoc J*. 1979 Nov 3;121(9):1193-254. PMID: 115569.
US Preventive Services Task Force Guides to Clinical Preventive Services. The Guide to Clinical Preventive Services 2012: Recommendations of the U.S. Preventive Services Task Force. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012.
- 9 Lim LS, et al. Screening for osteoporosis in the adult U.S. population: ACPM position statement on preventive practice. *Am J Prev Med*. 2009 Apr;36(4):366-75. PMID: 19285200.
Papaioannou A, et al. 2010 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: summary. *CMAJ*. 2010 Nov 23;182(17):1864-73. PMID: 20940232.
Powell H, et al. Adherence to the U.S. Preventive Services Task Force 2002 osteoporosis screening guidelines in academic primary care settings. *J Womens Health (Larchmt)*. 2012 Jan;21(1):50-3. PMID: 22150154.
The International Institute for Clinical Densitometry. 2013 ISCD Official Positions – Adult [Internet]. 2013 [cited 2014 Aug 26].
- 10 Brownlee C. For Diabetics Not on Insulin, Self-Monitoring Blood Sugar Has No Benefit. The Cochrane Library [Internet]. 2012 Jan 19 [cited 2014 Sep 25].
Cameron C, et al. Cost-effectiveness of self-monitoring of blood glucose in patients with type 2 diabetes mellitus managed without insulin. *CMAJ*. 2010 Jan 12;182(1):28-34. PMID: 20026626.
Canadian Agency for Drugs and Technologies in Health (CADTH). Optimal therapy recommendations for the prescribing and use of blood glucose test strips. CADTH Technol Overv. 2010;1(2):e0109. PMID: 22977401.
Gomes T, et al. Blood glucose test strips: options to reduce usage. *CMAJ*. 2010 Jan 12;182(1):35-8. PMID: 20026624.
O'Kane MJ, et al. Efficacy of self monitoring of blood glucose in patients with newly diagnosed type 2 diabetes (ESMON study): randomised controlled trial. *BMJ*. 2008 May 24;336(7654):1174-7. PMID: 18420662.
- 11 Best Practice Advocacy Centre New Zealand. Management of thyroid dysfunction in adults [Internet]. *BPJ*. 2010 Dec;(22):22-33 [cited 2014 Sep 25].
Surks MI, et al. Subclinical thyroid disease: scientific review and guidelines for diagnosis and management. *JAMA*. 2004 Jan 14;291(2):228-238. PMID: 14722150.
The Canadian Task Force on the Periodic Health Examination. Screening for thyroid disorders and thyroid cancer in asymptomatic adults. The Canadian Guide to Clinical Preventive Health Care [Internet]. 1994;612-18 [cited 2014 Sep 25].
U.S. Preventive Services Task Force. Screening for thyroid disease: recommendation statement. *Ann Intern Med*. 2004 Jan 20;140(2):125-7. PMID: 14734336.
- 12 Centers for Disease Control and Prevention. CDC Guideline for Prescribing Opioids for Chronic Pain [Internet]. 2017 Aug 29 [cited 2017 Oct 6].
Scully RE, et al. Defining Optimal Length of Opioid Pain Medication Prescription After Common Surgical Procedures. *JAMA Surg*. 2017 Sep 27. PMID: 28973092.
Shah A, et al. Characteristics of Initial Prescription Episodes and Likelihood of Long-Term Opioid Use - United States, 2006-2015. *MMWR Morb Mortal Wkly Rep*. 2017 Mar 17;66(10):265-269. PMID: 28301454.
- 13 Busse JW, et al. Guideline for opioid therapy and chronic noncancer pain. *CMAJ*. 2017 May 8;189(18):E659-E666. PMID: 28483845.
Fritz JM, et al. Early Physical Therapy vs Usual Care in Patients With Recent-Onset Low Back Pain A Randomized Clinical Trial. *JAMA*. 2015;314(14):1459-1467. PMID: 26461996.
CADTH Publication Rapid Response. Manual Therapy for Recent-Onset or Persistent Non-Specific Lower Back Pain: A Review of Clinical Effectiveness and Guidelines [Internet]. 2017 Aug 2 [cited 2017 December 11].
Fritz JM, et al. Early Physical Therapy vs Usual Care in Patients With Recent-Onset Low Back Pain A Randomized Clinical Trial. *JAMA*. 2015;314(14):1459-1467. PMID: 26461996.
Qaseem A, et al. Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians. *Ann Intern Med*. 2017;166:514-530. PMID: 28192789.

About the College of Family Physicians of Canada

The CFPC represents more than 30,000 members across the country. It is the professional organization responsible for establishing standards for the training, certification and lifelong education of family physicians. The College provides quality services and programs, supports family medicine teaching and research, and advocates on behalf of family physicians and the specialty of family medicine. The CFPC accredits postgraduate family medicine training in Canada's 17 medical schools, undergraduate and continuing medical education and encourages the development of research in oncologic surgery.



About Choosing Wisely Canada

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

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