Occupational Medicine

Six Things Physicians and Patients Should Question

by

Occupational Medicine Specialists of Canada Last updated: September 2021



Don't endorse clinically unnecessary absence from work.

There is substantial evidence to support the positive link between work and health (physical, mental and social health). Both employment and income are separate determinants of health and are used as health status indicators. Absence from work contributes to declining health, slower recovery times, and longer duration of disability. Maintaining and restoring working capacity is an important function of health services which improves function and can also impact upon recovery and prognosis. Supporting unnecessary restrictions or total disability (absence from work) creates disability which in turn negatively impacts upon health. When asked to provide an opinion on functional abilities to employers or insurers, the focus should be on abilities; restrictions should be objective, specific, and listed only when absolutely medically indicated.

Don't prescribe opiates for the treatment of acute or chronic non-cancer pain without first assessing side effects, work status, and capacity to drive a motor vehicle.

Increases in opioid prescribing have been accompanied by simultaneous increases in abuse, serious injuries, and deaths from overdose. Compared to those on no, or lower opiate doses, those prescribed higher opiate doses have increased disability risk and duration. The use of opiates can result in effects such as euphoria, drowsiness or inability to concentrate. Cognitive and psychomotor ability are essential functions for driving a motor vehicle and other complex work tasks. Those who prescribe opiates may be obligated to report a patient's inability to drive safely.

Don't order X-rays for acute low back pain in the absence of red flags.

Acute low back pain is a common health problem affecting between 50-90% of people over the course of a lifetime with less than 2% of cases representing potentially serious conditions requiring surgical or medical intervention. Red flags suggesting additional testing include such things as a history of significant trauma, cauda equina syndrome, symptoms suggestive of tumour or infection (fever, weight loss, history of cancer), steroid use, etc. However, the majority of acute low back pain episodes are benign, self-limited cases that do not warrant any imaging studies. Unnecessary imaging can be harmful due to the potential adverse health effects associated with radiation exposure and due to attribution of symptoms to unrelated incidental findings leading to prolonged disability.

Don't order blood mercury levels unless: dietary history suggests risk; the patient is pregnant or planning to become pregnant; and/or the patient is occupationally exposed to organomercury compounds.

Although clinically significant exposures may still occur in Canada, less than 1% of Canadian adults have total blood mercury concentrations above Health Canada's guidance value. As such, the large majority of individuals who present with concerns of metal toxicity do not actually have toxicity, and testing results in false positives (values above the reference range but not in the range of toxicity). Occupationally exposed workers and childbearing women are susceptible subgroups therefore testing in these populations is warranted in cases where a careful occupational and/or environmental history suggests a significant exposure. In the absence of clinical presentation and history indicating toxicity risk, testing should be avoided because it may lead to misinterpretation and unnecessary concern or interventions (dietary restriction, chelation) that may cause harm.

Don't repeat chest X-rays when screening exposed workers for asbestosis unless clinical indications are present or required by legislation.

Asbestosis generally becomes manifest clinically 15-20 years after the onset of exposure. High resolution CT (HRCT) is more sensitive than both chest radiography and conventional CT for detecting parenchymal fibrosis (asbestosis) but a normal HRCT scan cannot completely exclude asbestosis. Given the long latency between asbestos exposure and asbestosis and given that no effective treatment is available to improve the outcome, screening and early detection of asbestosis is unlikely to allow any remedial action to be taken in the workplace or to confer any health advantage on asbestos-exposed individuals. Repeated imaging exposes the patient to radiation, which is not without risk. Therefore, while it is appropriate to obtain a baseline X-ray at the time of first assessment, for screening purposes, radiation risk outweighs the benefit of frequent chest X-rays. Radiation exposure would also be a concern for repeated CT scans.



Do not use a test-based requirement for return to work clearance following COVID-19 when time-based strategies are appropriate.

Reverse Transcription-Polymerase Chain Reaction (RT-PCR) amplification tests remain positive in some people's respiratory samples after recovery from coronavirus disease 2019 (COVID-19) infection with prolonged viral RNA shedding demonstrated without direct evidence of there being viable virus capable of replicating or causing infection. Test-based strategies relying on the absence of viral fragments, such as RNA or antigen, for return to work clearance may therefore inappropriately delay return to work. The United States Centres for Disease Control (US-CDC) recommends time-based approaches. A time-based approach based on epidemiologic studies suggests that it is safe to return to work 10 to 20 days after symptom onset depending on the severity of the illness and symptom resolution criteria. Return to work criteria requiring one or more negative RT-PCR or other approved tests may still be considered in high risk occupational settings such as working with high risk persons in a health care setting.

How the list was created

The Occupational Medicine Specialist of Canada (OMSOC) established its Choosing Wisely Canada Top 5 recommendations by consensus and literature review methods. The first step was to examine the list and references developed and provided to us by The American College of Occupational and Environmental Medicine (ACOEM). This list was used as a starting point for extensive survey consultation with the membership of OMSOC and also with the membership of The Occupational and Environmental Medicine Association of Canada (OEMAC). This process enabled input from a breadth of health care providers working in the field of occupational medicine, including both occupational medicine specialists as well as family medicine practitioners with a special interest in the field. The comments and topic suggestions that emerged from this consultation were qualitatively categorized by an OMSOC member with expertise in qualitative research. There was high initial agreement; the emergent topics fit into 6 categories overall, 5 of which are represented on the list. The excluded item was least consistent with a campaign to help physicians and patients engage in conversations about the overuse of tests and procedures because of its administrative nature. With the assistance of Health Quality Ontario, a small committee reviewed literature, identified clinical practice guideline repositories, and organizational and government statements to identify the supporting references. Draft list items, rationale statements, and references were provided to members of OMSOC and also made available to OEMAC for feedback. This resulted in minor modifications to specific wording but no changes to topics. The Board of Directors of OMSOC reviewed and approved the Choosing Wisely Canada list.

Sources

Black C. Working for a healthier tomorrow. Dame Carol Black's Review of the health of Britain's working age population [Internet]. London (UK): TSO (The Stationary Office); 2008 Mar 17 [cited 2014 Sep 19].

CMA Policy. The Treating Physician's Role in Helping Patients Return to Work after an Illness or Injury [Internet]. 2013 [cited 2014 Sep 19].

IOMSC. Summary Proceedings: Inaugural Meeting of IOMSC [Internet]. 2013 May [cited 2014 Sep 19].

Mental Health Commission of Canada. <u>Psychological health and safety in the workplace - Prevention, promotion, and guidance to staged implementation</u> [Internet]. 2013 [cited 2014 Sep 19].

The Public Health Agency of Canada. What Determines Health? [Internet]. 2011 Oct 21 [cited 2014 Sep 19].

Stay-at-Work and Return-to-Work Process Improvement Committee. Preventing needless work disability by helping people stay employed. J Occup Environ Med. 2006 Sep;48(9):972-87. PMID: 16966965.

World Health Organization. Connecting Health and Labour. <u>Bringing together occupational health and primary care to improve the health of working people.</u> Executive Summary of the WHO Global Conference 2011 November 29-December 1 [Internet]. The Hague, The Netherlands. 2012 [cited 2014 Sep 23].

Canadian Medical Association. Determining Medical Fitness to Operate Motor Vehicles 8th Edition. Ottawa (ON): Canadian Medical Association; 2012. Franklin GM, et al. Early opioid prescription and subsequent disability among workers with back injuries: the Disability Risk Identification Study Cohort. Spine (Phila Pa 1976). 2008 Jan 15;33(2):199-204. PMID: 18197107.

Kuehn BM. Opioid prescriptions soar: increase in legitimate use as well as abuse. JAMA. Jan 17 2007;297(3):249-251. PMID: 17227967. National Opioid Use Guideline Group (NOUGG). Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain [Internet]. 2010 [cited 2014 Sep 23].

Webster BS, et al. Relationship between early opioid prescribing for acute occupational low back pain and disability duration, medical costs, subsequent surgery and late opioid use. Spine (Phila Pa 1976). Sep 1 2007;32(19):2127-2132. PMID: 17762815.

Weiss MS, et al. Opioids Guideline [Internet]. In: Hegmann K, ed. ACOEM's Occupational Medicine Practice Guidelines. 3rd ed revised. Westminster (CO): Reed Group Ltd: 2014.

3 Chou R, et al. Diagnostic imaging for low back pain: advice for high-value health care from the American College of Physicians. Ann Intern Med. 2011 Feb 1;154(3):181-9. PMID: 21282698.

Davis PC, et al. <u>ACR Appropriateness Criteria® low back pain</u> [Internet]. Reston (VA): American College of Radiology (ACR); 2011 [cited 2014 Sep 19]. Henschke N, et al. Prevalence of and screening for serious spinal pathology in patients presenting to primary care settings with acute low back pain. Arthritis Rheum. Oct 2009;60(10):3072-3080. <u>PMID</u>: 19790051.

Linet MS, et al. Cancer risks associated with external radiation from diagnostic imaging procedures. CA Cancer J Clin. 2012 Mar-Apr;62(2):75-100. PMID: 22307864.

Talmage J, et al. Low back disorders. In: Hegmann K, ed. Occupational Medicine Practice Guidelines 3rd Edition. Elk Grove Village (IL): American College of Occupational and Environmental Medicine; 2011.

Toward Optimized Practice. <u>Guideline for the evidence-informed primary care management of low back pain</u> 3rd Edition [Internet]. Edmonton (AB): Toward Optimized Practice Program; 2017.

Brodkin E, et al. Lead and mercury exposures: interpretation and action. CMAJ. Jan 2 2007;176(1):59-63. PMID: 17200393. Kales SN, et al. Mercury exposure: current concepts, controversies, and a clinic's experience. J Occup Environ Med. 2002 Feb;44(2):143-54. PMID: 11851215.

Lambrinos A. Testing for Blood Mercury Levels in the General Population: a rapid review [Internet]. Toronto (ON): Health Quality Ontario; 2014 Aug [cited 2014 September 19].

Myers GJ, et al. Twenty-seven years studying the human neurotoxicity of methylmercury exposure. Environ Res. 2000 Jul;83(3):275-85. PMID: 10944071. Wong SL, et al. Lead, mercury and cadmium levels in Canadians. Health Rep. 2008 Dec;19(4):31-6. PMID: 19226925.

American Thoracic Society. Diagnosis and initial management of nonmalignant diseases related to asbestos. Am J Respir Crit Care Med. 2004 Sep 15;170(6):691-715. PMID: 15355871.

Linet MS, et al. Cancer risks associated with external radiation from diagnostic imaging procedures. CA Cancer J Clin. 2012 Mar-Apr;62(2):75-100. PMID: 22307864.

McCunney RJ. Should we screen for occupational lung cancer with low-dose computed tomography? J Occup Environ Med. 2006 Dec;48(12):1328-33. PMID: 17159649.

Roberts HC, et al. Screening for malignant pleural mesothelioma and lung cancer in individuals with a history of asbestos exposure. J Thorac Oncol. 2009 May;4(5):620-8. PMID: 19357540.

Vierikko T, et al. Psychological impact of computed tomography screening for lung cancer and occupational pulmonary disease among asbestos-exposed workers. Eur J Cancer Prev. 2009 Jun;18(3):203-6. PMID: 19728402.

6

Bullard J, Dust K, Funk D, et al. Predicting infectious SARS-CoV-2 from diagnostic samples. <u>PMID: 32442256</u>.

Public Health England. <u>COVID-19: management of staff and exposed patients or residents in health and social care settings - GOV.UK</u>. Accessed July 31, 2020

United States Centers for Disease Control and Prevention. <u>Stay Home When You Are Sick</u>. CDC. Accessed July 30, 2020. United States Centers for Disease Control and Prevention. <u>Return-to-Work Criteria for Healthcare Workers</u> | CDC. Accessed July 30, 2020. Wölfel R, Corman VM, Guggemos W, et al. Virological assessment of hospitalized patients with COVID-2019. <u>PMID: 32235945</u>.

About Occupational Medicine Specialists of Canada

Occupational Medicine Specialists of Canada (OMSOC) is a proud partner of the Choosing Wisely Canada campaign. OMSOC's membership comprises occupational physicians certified as specialists by The Royal College of Physicians and Surgeons of Canada or le Collège des Médecins du Québec as well as specialists from other medical and surgical specialties with an interest in occupational medicine. OMSOC provides a forum for advancing the practice of occupational medicine by facilitating dialogue amongst physician specialists and between occupational medicine practitioners and members of allied fields, notably government, industry, management, and the law.



About Choosing Wisely Canada

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

