

## Ten (10) recommendations from Choisir avec soin Québec for the judicious use of resources in guidelines, knowledge transfer tools and scientific presentations

This tool may be of interest to a variety of audiences, including:

- Scientific committees for continuing medical education
- Continuing medical education accreditors
- Lecturers, speakers and teachers
- Those responsible for developing guidelines or other knowledge transfer tools
- Anyone wishing to critically evaluate a presentation or the medical literature

### Recommendation #1

#### Do not make recommendations without rigorous data evaluation

Rigorous and systematic evaluation of data quality helps to better appreciate the validity of available results and their applicability to the clinical context. This determination accurately establishes the level of confidence that can be attributed to the magnitude of mentioned effects, both positive and negative. It is important to avoid presenting a partial or random selection of studies or guidelines to limit the risk of bias. Every key assertion should be supported by credible references.

#### Sources

Barry HC, Cosgrove L, Slawson DC. Where Clinical Practice Guidelines Go Wrong. *Am Fam Physician*. 2022;105(4):350-352.

Guyatt GH, Oxman AD, Kunz R, Vist GE, Falck-Ytter Y, Schünemann HJ. What is "quality of evidence" and why is it important to clinicians? *BMJ*. 2008;336(7651):995-8.

Guyatt GH, Oxman AD, Vist GE, et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ*. 2008;336(7650):924-6.

Guyatt G, Rennie D, Meade MO, Cook DJ. eds. *Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice*. 3rd ed. McGraw Hill; 2015.  
<https://jamaevidence.mhmedical.com/content.aspx?bookid=847&sectionid=69030714>. Accessed on May 29, 2023.

Shaughnessy AF, Vaswani A, Andrews BK, et al. Developing a Clinician Friendly Tool to Identify Useful Clinical Practice Guidelines: G-TRUST. *Ann Fam Med*. 2017;15(5):413-418.

### Recommendation #2

#### Do not make recommendations without considering relevant patient oriented outcomes

It is important to ensure that the recommendations target clinically significant issues (e.g., impact on morbidity and mortality) and are focused on patient care goals. Data related to surrogate outcomes or composite outcomes should be used cautiously or limited.

#### Sources

Jatoi I, Sah S. Clinical practice guidelines and the overuse of health care services: need for reform. *CMAJ*. 2019;191(11):E297-E298.

Sims R, Michaleff ZA, Glasziou P, Thomas R. Consequences of a Diagnostic Label: A Systematic Scoping Review and Thematic Framework. *Front Public Health*. 2021;9:725877.

Weintraub WS, Lüscher TF, Pocock S. The perils of surrogate endpoints. *Eur Heart J*. 2015;36(33):2212-2218.

### Recommendation #3

#### Do not make recommendations without considering resource utilization

In 2017, it was estimated that up to 30% of tests, treatments, and procedures performed in Canada were potentially unnecessary. Besides carrying risks (false positives, overdiagnosis, side effects), this contributes to access-to-care issues. Therefore, recommendations should account for judicious resource utilization.

#### Sources

Canadian Institute for Health Information. Overuse of tests and treatments in Canada. <https://www.cihi.ca/en/overuse-of-tests-and-treatments-in-canada>. Published on November 10, 2022. Accessed on October 12, 2023.

### Recommendation #4

#### Do not use expert opinions without considering potential conflicts of interest

While expertise on a specific subject is essential, it's important to ensure that conflicts of interest are disclosed and considered when interpreting data and formulating recommendations. Beyond financial conflicts of interest, intellectual conflicts should also be considered. Recommendations based on expert opinions should be clearly identified to distinguish them from evidence-based data. Expert opinions, even when widely adopted, do not substitute for evidence and should not replace it.

*'Intellectual conflicts occur when clinicians or researchers may be too deeply embedded in their own area of expertise to objectively look at a research question "with an open mind"'*.

- Gordon Guyatt in *Healthy Debate*, February 2, 2012

#### Sources

Born K, Laupacis A. Managing conflicts of interest in research. *Healthy Debate*. February 2, 2012. <https://healthydebate.ca/2012/02/topic/politics-of-health-care/conflicts-of-interest-2/>. Accessed on May 29, 2023.

Brignardello-Petersen R, Carrasco-Labra A, Guyatt GH. How to Interpret and Use a Clinical Practice Guideline or Recommendation: Users' Guides to the Medical Literature [published correction appears in *JAMA*. 2022 Feb 22;327(8):784]. *JAMA*. 2021;326(15):1516-1523.

Cosgrove L, Bursztajn HJ, Erlich DR, Wheeler EE, Shaughnessy AF. Conflicts of interest and the quality of recommendations in clinical guidelines. *J Eval Clin Pract*. 2013;19(4):674-81.

Guyatt G, Akl EA, Hirsh J, et al. The vexing problem of guidelines and conflict of interest: a potential solution. *Ann Intern Med*. 2010;152(11):738-41.

Hansen C, Lundh A, Rasmussen K, Hróbjartsson A. Financial conflicts of interest in systematic reviews: associations with results, conclusions, and methodological quality. *Cochrane Database Syst Rev*. 2019;8(8):MR000047.

Moynihan R, Lai A, Jarvis H, et al. Undisclosed financial ties between guideline writers and pharmaceutical companies: a cross-sectional study across 10 disease categories. *BMJ Open*. 2019;9(2):e025864.

Nejstgaard CH, Bero L, Hróbjartsson A, et al. Conflicts of interest in clinical guidelines, advisory committee reports, opinion pieces, and narrative reviews: associations with recommendations. *Cochrane Database Syst Rev*. 2020;12(12):MR000040.

Siering U, Eikermann M, Hausner E, Hoffmann-Eßer W, Neugebauer EA. Appraisal tools for clinical practice guidelines: a systematic review. *PLoS One*. 2013;8(12):e82915.

#### Recommendation #5

Do not present data without providing absolute numbers

Presenting study results in absolute risk improves understanding for both patients and clinicians, facilitating decision-making. Publication guidelines for RCTs (CONSORT) recommend never presenting relative risk without accompanying absolute risk. Without absolute risk, relative risks are difficult to interpret for patients and clinicians. Moreover, clinicians tend to present intervention benefits predominantly over risks or side effects; this information should be presented together with similar denominators and on a scale that is clinically meaningful.

#### Sources

Hoffmann TC, Del Mar C. Patients' expectations of the benefits and harms of treatments, screening, and tests: a systematic review. *JAMA Intern Med*. 2015;175(2):274-86.

Hoffmann TC, Del Mar C. Clinicians' expectations of the benefits and harms of treatments, screening, and tests: a systematic review. *JAMA Intern Med*. 2017;177(3):407-419.

Schulz KF, Altman DG, Moher D. CONSORT 2010 statement: updated guidelines for reporting parallel group randomised trials. *BMJ*. 2010;340:c332.

Zipkin DA, Umscheid CA, Keating NL, et al. Evidence-based risk communication: a systematic review. *Ann Intern Med*. 2014;161(4):270-80.

## Recommendation #6

Do not make new recommendations without considering all consequences, including potential harms

Changes to disease definitions or their management are often made without considering possible negative consequences. One should not assume a preponderance of benefits over risks without supporting data. Any modification should prompt at least the following questions:

- What additional benefits are associated with this change?
- What additional risks are associated with this change?
- Is there a preponderance of benefits over potential risks with the proposed change?

This approach helps to guard against overmedicalization, for instance when expanding diagnostic criteria for a disease or redefining a risk factor as a disease. This should be communicated transparently.

### Sources

Doust J, Vandvik PO, Qaseem A, et al. Guidance for modifying the definition of diseases: a checklist. *JAMA Intern Med.* 2017;177(7):1020-1025.

Moynihan R, Brodersen J, Heath I, et al. Reforming disease definitions: a new primary care led, people-centred approach. *BMJ Evid Based Med.* 2019;24(5):170-173.

Moynihan RN, Cooke GP, Doust JA, Bero L, Hill S, Glasziou PP. Expanding disease definitions in guidelines and expert panel ties to industry: a cross-sectional study of common conditions in the United States. *PLoS Med.* 2013;10(8):e1001500.

## Recommendation #7

Do not presume effectiveness or safety of screening

Before suggesting a screening modality, ensure that high-quality studies support the efficacy of screening; evidence from randomized clinical trials should be prioritized over observational data, when available. Assess the magnitude of potential benefits and risks, including those arising from the test itself, false positive results, overdiagnosis, and risks associated with diagnostic or therapeutic interventions following a positive result. Identifying more cases, the existence of a safe screening test, or an effective treatment is not sufficient to conclude that a screening test is beneficial. It must be demonstrated that benefits outweigh risks for the target population in a screening context.

### Sources

Norris SL, Burda BU, Holmer HK, et al. Author's specialty and conflicts of interest contribute to conflicting guidelines for screening mammography. *J Clin Epidemiol.* 2012;65(7):725-33.

Wilson JMG, Jungner G, World Health Organization. Principles and practice of screening for disease. <https://apps.who.int/iris/handle/10665/37650>. 1968. Accessed on May 31, 2023.

### Recommendation #8

#### Do not make recommendations without considering clinician's time

It is estimated that to provide care aligned with guidelines, family physicians would need over 24 hours a day for clinical work. Before proposing a new practice, consider the time required by clinicians to implement it (time needed to treat). Clinicians' time is a valuable resource and should be prioritized for activities with the most benefit for patients and the population. Practices requiring less time should be considered equally if benefits are comparable. Practices lacking evidence should not be recommended.

#### Sources

Johansson M, Guyatt G, Montori V. Guidelines should consider clinicians' time needed to treat. *BMJ*. 2023;380:e072953.

Korownyk C, McCormack J, Kolber MR, Garrison S, Allan GM. Competing demands and opportunities in primary care. *Can Fam Physician*. 2017;63(9):664-668.

Porter J, Boyd C, Skandari MR, Laiteerapong N. Revisiting the time needed to provide adult primary care. *J Gen Intern Med*. 2023;38(1):147-155.

### Recommendation #9

#### Do not make recommendations without emphasizing the importance of shared decision-making

It is often reasonable to consider different options, including the option of not proceeding with a test or treatment. This should be explicitly highlighted in recommendations. Shared decision-making tools inform patients about possible options, their benefits and potential risks, as well as the scientific uncertainty associated with recommendations. By improving risk perception and considering patient values, these tools enhance satisfaction with the decision-making process. Recommendations should be nuanced and allow clinicians to use shared decision-making with their patients.

#### Sources

Coronado-Vázquez V, Canet-Fajas C, Delgado-Marroquín MT, Magallón-Botaya R, Romero-Martín M, Gómez-Salgado J. Interventions to facilitate shared decision-making using decision aids with patients in primary health care: a systematic review. *Medicine (Baltimore)*. 2020;99(32): e21389.

Guyatt GH, Oxman AD, Schünemann HJ, Tugwell P, Knottnerus A. GRADE guidelines: a new series of articles in the Journal of Clinical Epidemiology. *J Clin Epidemiol*. 2011;64(4):380-2.

Légaré F, Adekpedjou R, Stacey D, et al. Interventions for increasing the use of shared decision making by healthcare professionals. *Cochrane Database Syst Rev*. 2018;7(7):Cd006732.

Morgan DJ, Scherer LD, Korenstein D. Improving physician communication about treatment decisions: reconsideration of "risks vs benefits". *JAMA*. 2020;324(10):937-938.

#### Recommendation #10

Do not forget to consider relevant stakeholders in a timely and proportionate manner when giving a recommendation or organizing continuous medical education

In 2016, family physicians represented only 17% of contributors to Canadian guidelines intended for frontline application. The proportion of nurses (5.7%) or pharmacists (3%) was even smaller. It is crucial that key parties affected by a practice guideline are integrated throughout the process to ensure recommendations are adapted to clinical realities. Reasonable and proportional representation is associated with more applicable recommendations. This also applies to scientific conferences, where the target audience should be adequately represented in the scientific committee and speakers.

#### Sources

Allan GM. Les lignes directrices en soins primaires devraient-elles être rédigées par des médecins de famille? OUI [Should primary care guidelines be written by family physicians? YES]. *Can Fam Physician*. 2016;62(9):708-10.

Norris SL, Burda BU, Holmer HK, et al. Author's specialty and conflicts of interest contribute to conflicting guidelines for screening mammography. *J Clin Epidemiol*. 2012;65(7):725-33.

#### Authors (in alphabetical order):

Samuel Boudreault, M.D. MSc  
Pascale Breault, M.D.  
Gylène Thériault, M.D.  
Marc-Antoine Turgeon, M.D. MBA  
René Wittmer, M.D.

#### Review committee (in alphabetical order):

Geneviève Bois, M.D.  
Camille Gagnon, PharmD MSc  
Arielle Mendel, M.D. MSc