



An evaluation of the Canadian Task Force on Preventive Health Care's 2021 knowledge translation activities

Prepared for the Canadian Task Force on Preventive Health Care

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Executive Summary



Background

We conducted an evaluation to assess the impact and uptake of the Canadian Task Force on Preventive Health Care's ('Task Force') clinical practice guidelines (CPGs), knowledge translation (KT) tools, and KT resources released between January and December 2021 and provide recommendations to enhance impact and uptake. The evaluation focused on the guideline and associated KT tools released in 2021 as well as guidelines and associated KT tools released in 2021 as used as guidelines in clinical practice.

Methods

This evaluation was guided by the RE-AIM evaluation framework, a framework for evaluating dissemination and implementation interventions. We examined data on key KT activities, and engaged primary care providers (PCPs) through both surveys and semi-structured interviews in English and French. Survey participants were recruited through advertisements promoted via Task Force communication channels (e.g., Task Force website, Task Force members' networks, newsletters, social media) and responses were analyzed in SPSS to determine response frequencies. Interview participants were identified through survey responses and transcripts were analyzed in NVIVO using framework analysis.

Results

The infographic on page A68 highlights notable findings related to KT activities in 2021. A total of 177 survey responses were included in the analysis. Survey results indicated that most participants were aware of the breast, cervical, and prostate cancer guidelines. About half of participants were aware of the newly released chlamydia and gonorrhea guideline. Self-reported screening practices had varying degrees of consistency with Task Force recommendations. Self-reported breast, cervical, and prostate cancer screening practices were all fairly consistent with Task Force recommendations, while self-reported chlamydia and gonorrhea screening practices were least consistent with Task Force recommendations.

We conducted 20 interviews with PCPs. During interviews, participants discussed factors that contribute to the trustworthiness of a guideline, including: evidence base, quality and strength of evidence, rigorous and transparent methods, and minimal or transparent conflicts of interest and perceived bias. When asked what influences guideline adoption and implementation, PCPs identified evidence level and strength of recommendation, consensus with local standards of practice, time constraints, and physician awareness, among other factors. Participants also offered suggestions for how the Task Force could improve reach and access of guidelines and tools, for example: increasing email alerts/reminders, app development, and website optimization.

Based on this evaluation, we identified <u>seven opportunities</u> for enhancing the impact and uptake of the Task Force's guidelines, KT tools, and resources:

- 1. Take a multipronged approach to KT tool dissemination (i.e., conferences, Tool Dissemination Pilot, and CPL Network)
- 2. Widely disseminate results from the Guideline Comparison Research Project
- 3. Increase dissemination and reminders of already released guidelines
- 4. Enhance Task Force French presence
- 5. Offer KT tools and other Task Force resources in a variety of formats and languages
- 6. Expand engagement activities to other PCPs and allied health professionals
- 7. Explore integration into EPRs and promote that Task Force guidelines are on QxMD



1.0 Background

Evaluating the Canadian Task Force on Preventive Health Care's ('Task Force') activities is a key objective of the Task Force and a provision of the contribution agreement between the Jewish General Hospital and the Public Health Agency of Canada. We conducted an evaluation to assess the impact and uptake of the Task Force's clinical practice guidelines (CPGs), knowledge translation (KT) tools, and KT resources released between January and December 2021. Specifically, this evaluation focused on the guideline (screening for chlamydia and gonorrhea) and associated KT tools related to the guideline released in 2021. The evaluation also included the following guidelines and associated KT tools that were released in previous years: screening for breast cancer (update) (2018), cervical cancer (2013), prostate cancer (2014) – these guidelines were included because they recommended a substantial change in clinical practice from previous guidelines for primary care practitioners (PCPs).

This report describes the results of this evaluation and identifies strengths of the Task Force's current KT efforts as well as opportunities for improvement.

2.0 Methods

This evaluation was guided by the RE-AIM evaluation framework,^{1,2} a framework for evaluating dissemination and implementation interventions that assesses 5 dimensions: reach, effectiveness, adoption, implementation, and maintenance.

We used the RE-AIM framework to assess two components of the Task Force's KT efforts:

- 1. The Task Force's **KT activities**, specifically, the types and quantity of materials produced, and how these were disseminated, and
- 2. The **uptake** of these materials by PCPs, namely, their awareness of materials, how they heard about them, and how they used or adopted them in practice.

2.1 KT Activities: Data collection and analysis

We evaluated the Task Force's KT dissemination and implementation activities by examining administrative data (e.g. webinar attendance, statements of work, google analytics, newsletter admin data, etc.), tracking documents (e.g. media tracking, presentation tracking, etc.), and reports on key KT activities (e.g. patient preferences exercises, usability testing reports, media reports, etc.), including efforts to engage knowledge users and research projects that supported the uptake of Task Force guidelines. These data are presented using descriptive statistics.

2.2 Uptake: Participant recruitment

We recruited PCPs to participate in online surveys and one-on-one telephone interviews to gain insight on the uptake of Task Force KT guidelines and tools.

Survey

We recruited survey participants by advertising through the following channels:

- Task Force website,
- Emails to the Task Force mailing list and recruitment database,
- Snowball sampling through Task Force members' networks,
- Task Force newsletter,
- Task Force social media accounts (Twitter, Facebook, and LinkedIn), and



 Stakeholder organization communications, including Nurse Practitioner Association of Canada, College of Family Physicians of Canada.

Interviews

At the end of the survey, we asked participants if they were willing to participate in an interview. Among participants who demonstrated interest in participating in an interview, we purposefully selected individuals to represent a range of demographic characteristics, including geographical diversity, years in practice, and self-reported gender identity.

2.3 Uptake: Data collection and analysis

Survey

We evaluated uptake of the guidelines by administering a survey offered in English or French to PCPs to assess self-reported current practices (e.g. how often participants screened patients for the topics in question); awareness and use of Task Force guidelines and KT tools (e.g. which Task Force KT guidelines, tools and resources were participants aware of and which did they use); and practice change (e.g. Have participants changed their practice to align with Task Force guidelines). The survey was administered online in English from January 7th to February 10th 2022, and in French from January 10th, to February 18th, 2022. Survey participants were entered into a draw to win an iPad. See pages A2–A33 for the survey.

Responses from the English and French surveys were aggregated and analyzed in SPSS³ to determine response frequencies.

IAM questionnaire

In 2021, we began supplementing findings with data from the Information Assessment Method (IAM) questionnaire, which evaluates relevance, cognitive impact, use, and health benefits of electronic knowledge resources⁴, including Task Force guidelines. This data was collected separately from the evaluation. Canadian Medical Association members access the questionnaire when accessing Task Force guidelines on the CMAJ website. Questionnaires for each guideline are available continuously and in English and French.

Responses for the chlamydia and gonorrhea screening guideline collected between April and September 2021 were analyzed in Excel⁵ to determine response frequencies.

Interviews

One KT Program research assistant and one research coordinator conducted one-on-one semistructured interviews via telephone with PCPs (30 – 60 min), to explore how they used guidelines and made preventive health care decisions. Interviews were offered in both English and French. Interviews were conducted between January 20th and February 25th, 2022, and continued until data saturation was reached. Interview participants were compensated \$100 for their time and were not eligible to enter the draw to win an iPad. <u>See pages A34–A36</u> for the interview guide.

Following participant consent, interviews were audio recorded and transcribed verbatim. A total of 20% of interview transcripts were double-coded by two researchers in NVIVO qualitative software using framework analysis. A meeting followed where discrepancies were discussed to refine the coding framework and inter-rater agreement was calculated^{6,7}. The remaining transcripts were single coded by two members of the research team.

3.0 Results



3.1 KT Activities

Results on the reach of Task Force KT activities are outlined below. Summary statistics are provided as presentation-ready tables and figures in the corresponding sections of the slide appendices (pages S1–S70). See page A68 for the infographic of 2021 annual evaluation highlights.

Guideline publications

The Task Force produced one new guideline in 2021: *Screening for chlamydia and gonorrhea*. This guideline was published in Canadian Medical Association Journal (*CMAJ*) online and print editions. <u>Pages S1–S4</u> presents the pre-release stakeholder engagement numbers, post-release dissemination activities and media hits for the 2021 chlamydia and gonorrhea guideline (and associated Clinician and Patient FAQ KT tools and infographic).

Guideline dissemination

In 2021, the Task Force conducted a number of activities to disseminate all of its guidelines and KT tools:

- Exhibiting at 4 conferences using a novel, virtual-only platform and promoting Task Force KT tools to a total of 543 delegates in comparison to 209 delegates in 2020.
- Maintaining and updating the Task Force website
- Making all Task Force guidelines and tools available on the CMAJ website in both English and French, and
- Making Task Force guidelines and materials available through mobile application *QxMD Calculate* and *Read*.

The Task Force routinely seeks endorsements for guidelines from the College of Family Physicians of Canada (CFPC) and the Nurse Practitioner Association of Canada (NPAC), in addition to topic-specific stakeholders. <u>Page S2</u> lists the endorsements received for the chlamydia and gonorrhea guideline released in 2021.

Additionally, guidelines and KT tools published in earlier years continued to be accessible through the *CMAJ* website, Task Force website, Prevention Plus, ECRI Guideline Trust, and QxMD mobile app. The KT tools pages on the Task Force website were viewed in French 16,664 times and 32,348 in English in 2021. See <u>page S16</u> for a breakdown of the most viewed guideline KT tool pages.

<u>Pages S5–S22</u> outline the 2021 dissemination activities for all Task Force guidelines, including all analytics Task Force website use.

ECRI Guidelines Trust

<u>ECRI Guidelines Trust</u> is a publically available, online repository of objective, evidence-based clinical practice guideline content. ECRI produces Guideline Briefs (a concise summary of the clinical practice guideline and recommendations) and TRUST (Transparency and Rigor Using Standards of Trustworthiness) Scorecards, rating how well the guidelines fulfill the Institute of Medicine (IOM) Standards for Trustworthy Guidelines. All Task Force guidelines included scored highly (58 or higher out of a possible 60). The 2021 chlamydia and gonorrhea guideline scored 60/60. The Guideline Briefs were viewed 394 times in 2021. See <u>page S21</u> for ECRI Scorecard and Guideline Brief details.



Prevention Plus

The Task Force continues to sponsor Prevention Plus, a continuously updated online repository of current best evidence to support preventive health care decisions. Task Force guidelines are disseminated through their searchable database and email alerts. See <u>page S22</u> for 2021 Prevention Plus details.

3.2 Dissemination

In 2021, the Task Force disseminated its messages through publications and media coverage, presentations, newsletters, videos, and social media (i.e. Twitter, Facebook, and LinkedIn).

Publications

In 2021, the Task Force published two peer-reviewed publications, which were the guideline on screening for chlamydia and gonorrhea in primary care for individuals not known to be at high risk in CMAJ and the associated systematic review in *Systematic Reviews*. See <u>page S24</u> for publication details.

As of March 2019, *Systematic Reviews* introduced a <u>Task Force Thematic Series</u> where all Task Force protocols and completed systematic reviews will be published. The Task Force published two protocols and two systematic reviews in this collection in 2021. See <u>page S25</u> for protocol and systematic review publication details.

Additionally, the Task Force contributes to an ongoing series of articles called "Prevention in Practice" in Canadian Family Physician (CFP). In 2021, the Task Force published three articles in this series. This series intends to equip PCPs with strategies on how to implement preventive health evidence into their work and engage in shared decision-making. See <u>page S26</u> for more details on the CFP article series.

Presentations and webinars

Task Force members delivered six presentations across Canada targeting primary care physicians in 2021; five presentations were at conferences and one was an invited speaker presentation. See <u>pages S27–S28</u> for a summary of the presentations.

Task Force also continued to engage stakeholders through webinars prior to guideline release. Stakeholders were identified by conducting a systematic internet search to identify key experts and key organizations within the guideline topic field. The Task Force delivered two pre-release stakeholder webinars for the chlamydia and gonorrhea guideline in 2021, engaging a total of 18 stakeholders in attendance. See <u>page S2</u> for stakeholder webinar details.

Media coverage

The chlamydia and gonorrhea guideline, released by the Task Force in April 2021 was a silver level guideline (of note, the Communications Team defines a silver level guideline as having some public interest and some potential to change practice). The guideline received over 150 media mentions and 5 media interview requests with Task Force members. CMAJ's April eTOC highlighted this guideline and was sent to 63,663 CMA members and 7728 non-members, with 2372 total clicks. It was highlighted on the CMAJ website the week of April 19 and was included in the journal's social media. It was the 12th most-read article in CMAJ for April 2021. For this guideline the Task Force developed a new, easy-to-read page targeted to the public: <u>https://canadiantaskforce.ca/public/</u>. See <u>pages S3-S4</u> for more details.

Overall, the Task Force received approximately 220 media mentions in 2021 including coverage of the chlamydia and gonorrhea guideline, breast cancer guideline, colorectal cancer guideline, prostate cancer guideline, preventive health, and other topics. Media coverage of the Task



Force increased in 2021 compared to 2020 (220 mentions versus 143). The Communications Team received 17 requests for interviews and information in 2021. Six requests were for interviews or information on the breast cancer guideline (mainly related to the Dense Breasts advocacy for mammograms), 5 for the chlamydia and gonorrhea guideline and 6 miscellaneous. See pages S29-32 for more details.

Newsletter and Social Media

In 2021, the Task Force communicated updates on its work, such as new guideline publications, through its quarterly newsletter, Twitter, LinkedIn, Facebook and Instagram (new in 2021) accounts. At the end of 2021, the quarterly newsletter had 4848 subscribers (e.g., PCPs, patient advocacy groups, regional health authorities). This represents a 19% increase in subscribers from the previous year. The chlamydia and gonorrhea guideline in April was the most read item in the 2021 newsletters/alerts, with an open rate of 45.4% and a click through rate (to an article) of 31%. There was also a low unsubscribe rate (ranging from 2 to 6 per issue).

The number of Task Force Twitter account followers increased from 808 at the end of 2020 to 914 at the end of 2021. Engagement (number of interactions such as likes, follows, comments, profile view) and overall impressions (number of people whose feed a Task Force tweet appeared in) decreased in 2021. This may be attributed to the continued impact of the COVID-19 pandemic, change in strategy, and the effect of losing the Task Force's incoming chair, Dr. Ainsley Moore. The Task Force focused primarily on Twitter for recruitment, announcements and Task Force news. The top tweet in 2021 was on October 18, for Women's History Month, with 48,400 impressions.

In 2021, the Task Force pivoted away from Facebook and LinkedIn to Instagram for the release of the chlamydia and gonorrhea guideline as Instagram is a popular platform with the under 30 target audience. The Task Force launched an "under 30" social media campaign on Twitter and Instagram to reach the target audience. Additionally, in 2021, with the launch of this guideline, the Task Force ran its first paid campaign in an effort to build awareness of the new guideline and increase followers. The English campaign garnered 141,759 impressions and the French generated 14,618.

See page S31 and S32 for 2021 newsletter and Twitter details.

Videos and other Materials

In 2021 the Task Force created a series of Animaker videos for the chlamydia and gonorrhea guideline targeted toward members of the public under 30 years of age (the age demographic of the guideline's population). The Task Force also created recruitment materials for new Task Force members, including updated website pages with graphics.

The Task Force has released several videos in previous years to support a number of guideline topics, available in both French and English. See <u>page S17</u> for more details on the Task Force's most viewed videos in 2021, compared to 2020.

3.3 Implementation

The Task Force continued to support guideline uptake through its implementation efforts which include the Clinical Prevention Leaders (CPL) Network and e-learning modules.

Clinical Prevention Leaders Network

Established in October 2017, the purpose of the CPL network is to promote the dissemination and uptake of Task Force guidelines and to address local barriers to guideline implementation



through educational outreach and other KT activities. The CPL network is a two-phase pilot project. Phase 1 and its evaluation were completed in 2020.

The CPL phase 1 pilot was successful in achieving the primary objectives of building capacity among PCPs in evidence-based medicine and knowledge translation and supporting the dissemination of Task Force guidelines and tools in primary care practice.

The outcome evaluation primarily revealed strengths of the CPL phase 1 pilot. CPLs reported higher ratings of knowledge and awareness of guideline development processes (including GRADE methodology), Task Force guidelines and tools and knowledge translation science at completion of the pilot than at baseline. CPLs also reported improved ratings of self-efficacy to discuss Task Force guidelines with colleagues and patients, to apply the recommendations in their own practice, to identify and address barriers to implementation, to serve in an education or leadership role and employ effective teaching strategies, to lead effective educational outreach, to assess local needs, and to engage in reflective practice at completion of the pilot than at baseline. Similarly, more CPLs reported using more Task Force guidelines and KT tools in their practice at the completion of the pilot than at baseline. The CPL phase 1 pilot program was also successful in building capacity among its members in evidence-based medicine and knowledge translation and supporting the dissemination and implementation of Task Force guidelines and KT tools.

The process evaluation revealed both strengths and challenges to the sustainability of the CPL program. One strength related to the implementation of the program was the amount and quality of outreach delivered. CPLs delivered 30 formal lecture style outreach sessions, engaged in informal conversations with colleagues, and provided 1:1 training for students. The KT tools and resources provided to CPLs were noted to be extremely helpful to facilitate these outreach sessions. Despite these successes, participant retention was a major challenge. The phase 1 pilot began with 13 members and ended with 7 members at conclusion of the two-year term; one CPL member joined the Task Force as a full time member before the two-year term had concluded. Participant attrition was most commonly due to lack of interest on specific topics, competing interests, and time constraints. Suggestions to improve the CPL program included providing additional education resources to ensure clarity of roles and responsibilities of the CPLs, shortening presentations and facilitating more time for interaction with participants and Task Force members, and providing tailored resources for the implementation of Task Force guidelines. Further, it is prudent to use an integrated, collaborative approach with CPLs in future to ensure outreach tasks and responsibilities are not burdensome and are feasible given competing priorities.

The Task Force will launch and evaluate a modified version of the CPL program (phase 2 pilot) in 2022 based on the results of the evaluation.

E-Learning modules

In 2017, the Task Force released two e-learning modules; one on obesity prevention and management and one on screening for cervical cancer. Each module was certified by the College of Family Physicians of Canada for up to one MainPro+ credit, however MainPro+ accreditation expired in September 2018 and July 2018 respectively. Only 14% (n = 19) of 2021 survey participants were aware of each of these e-learning modules, which is similar to previous years (see <u>page S66</u> for details).



3.4 Integrated knowledge translation

Integrated knowledge translation (iKT) is the process of engaging knowledge users throughout the research process to increase the benefit and potential impact of research findings⁸. The Task Force applied iKT principles by engaging patients and clinicians in the development of its guidelines and tools.

Task Force Public Advisors Network

In 2020, the Task Force started developing a new patient engagement initiative to ascertain patient values and preferences for guideline development. The Task Force Public Advisors Network (TF-PAN) is an initiative to encourage early and meaningful engagement of members of the public with the Task Force by seeking their input throughout the development and dissemination of Task Force guidelines. Unlike the traditional Task Force patient preferences model, TF-PAN members are provided background information on what the Task Force does and the types of methods/processes used to develop preventive health care guidelines in order to ensure informed participation in guideline development. TF-PAN members form a stakeholder consultation group and provide input on various phases of guideline development, as determined by the guideline Working Group chairs based on need and guideline context. The core TF-PAN group consists of about 20 members of the public and are trained in Task Force and preventive care theory. There is also expanded network members – over 75 members of the public who are not trained, but can still participate in ad hoc projects.

TF-PAN was launched in early 2021 and will be iteratively evaluated in 2022. See <u>page S34-S36</u> for more details.

Usability testing

Once KT tools were developed, knowledge users were provided with draft versions of the tools and asked to provide feedback on their usability. In 2021, no tools underwent usability testing.

3.5 Research projects

In 2021, the Task Force continued its work on several research projects to increase understanding of how best to support the uptake of Task Force guidelines and KT tools amongst PCPs and patients.

Stakeholder Councils

The Task Force developed a plan outlining the recommended methods for developing a Stakeholder Council, which will serve to engage and inform key stakeholders across provinces and territories in the processes of topic selection, development, and dissemination of Task Force guidelines and seek their input as appropriate. Since last year's evaluation, this project has undergone modifications following a needs assessment and discussions among the Task Force and with the Canadian Partnership Against Cancer (CPAC). This project will now be piloted as a more focused engagement initiative with one stakeholder (CPAC), and will be referred to as the "Cancer Screening Network Engagement Initiative." This project will expand to other stakeholders after the pilot phase.

CPAC-hosted Cancer Screening Networks (CSNs) facilitate implementation of high quality jurisdictional cancer screening programs. At present, the Task Force engages ad hoc with the CSNs. Given the variation in uptake of Task Force recommendations across Canada and given CSNs' unique links to cancer prevention policy and implementation across provinces and territories in Canada, they were identified as priority stakeholders for the Task Force. To that end, the plan proposes 2 activities to increase and standardize engagement activities between Task Force cancer Guideline Working Groups and the CSNs. Guideline Working Groups can



choose to take part in both, one, or neither of these activities: Activity 1: Invite respective CSN members to participate in external review process of systematic review protocols, systematic reviews, and guidelines; Activity 2: Attend and present on guidelines at respective CSN meeting.

Considering CSNs only exist for breast, cervical, colorectal and lung cancer, the scope of this engagement is limited to the guidelines that overlap with these cancer types (i.e., tobacco, lung cancer, cervical cancer guidelines, and any future guidelines that overlap with the CSN cancer types).

Once this plan is confirmed by the Task Force and CPAC, it will be enacted in 2022. See <u>page</u> <u>S39-S41</u> for more details.

Presenting GRADE guideline recommendation statements for clinical practice

The Task Force uses the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) system when creating guidelines. GRADE is an internationally recognized method for evaluating systematic review evidence for CPGs. Through previous annual evaluations and interactions with PCPs, the Task Force identified end-user challenges in understanding GRADE.

Beginning in 2015, the Task Force undertook a study to inform how to present recommendations for improved uptake among PCPs. The study led to three main suggestions:

- Increase awareness of the guideline development process and GRADE;
- Incorporate remarks and justification statements into recommendations, including an explanation or rewording of "weak recommendations" and explicit references to "shared decision-making"; and
- Include definitions of terms.

The Task Force applied these findings by changing recommendation wording from 'weak recommendation' to 'conditional recommendation', to improve understanding and facilitate implementation of guidelines, and emphasize the value that the Task Force places on shared-decision making. Conditional recommendations based on patient values and preferences require clinicians to recognize that difference choices will be appropriate for different patients, and those decisions must be consistent with each patient's values and preferences. These wording changes and revised definitions were updated on the Task Force website in 2018.

Results from the 2021 annual evaluation survey indicated that 27% of participants were aware of these recent language changes, and 42% of participants believed the language change from "weak" to "conditional" helps facilitate the implementation of recommendations where the balance between desirable and undesirable effects is small, the quality of evidence is lower, and there is more variability in the values and preferences of individuals. See <u>page S42</u> for more details.

AGREE-II Guideline Comparison Project

In 2019, the Task Force partnered with the SPOR Alliance and Institute of Medical Research to perform a quality assessment and comparison of selected Task Force guidelines with guidelines similar in scope according to their characteristics and methodological quality to identify the potential factors behind the differences in the recommendations from both groups.



The prioritized Task Force guidelines included in this comparison project are: Screening for Breast cancer (2018), Asymptomatic Bacteriuria in Pregnancy (2018), Abdominal aortic aneurysms (2017), Hepatitis C (2017), Lung cancer (2016), Colorectal cancer (2016), Developmental delay (2016), Prostate cancer (2014), and Cervical cancer (2013).

The project methods and approach are described below:

- 1. Search and selection of related guidelines from the literature (non-Task Force) considering similar scope and similar settings, trying to match for time of publication.
- 2. Summary of guideline characteristics and main recommendations
- 3. Quality assessment of the guidelines (AGREE II)
- 4. Analysis of the differences between Task Force and non-Task Force guidelines (e.g., differences in scope, content, direction of the recommendations, and strength of the recommendations)

The project was completed in 2021; the final report concluded:

- Task Force guidelines were always the highest quality guideline for a disease/scope, with the exception of Hepatitis C
- The quality of the guidelines may explain the differences among the recommendations between Task Force guidelines and the non-Task Force guidelines, in four topics (Colorectal cancer, Prostate cancer, Abdominal aortic aneurysms, Asymptomatic bacteriuria in pregnancy).
- The remaining topics either had minor/no differences in the recommendations, or they were mostly explained by other factors including differences in the scope of the guideline (developmental delay), date of publication (cervical cancer), the relative value given by guideline panels to benefits/harms (breast cancer), lack of evidence for some key decisions recommended and the use of indirect evidence (lung cancer), and a combination of factors (quality, target/scope of evidence and date) (hepatitis C).

See pages A37–A67 for the final report.

3.6 Uptake

Survey

Participant demographics

A total of 291 participants completed the 2021 annual evaluation survey. After responses were removed that did not meet inclusion criteria, a **total of 177** were included in the analysis. Of the 177 included responses, 17 completed the survey in French and 160 completed the survey in English. In 2020, a total of 281 participants completed the annual evaluation survey: 12 completed the survey in French and 269 completed the survey in English.

Please note that not all questions were answered by all survey participants because the surveys used branching to guide participant responses (e.g., if participants did not know about a particular guideline, they were not asked further questions about it), and participants were not required to answer all questions. Additionally, some questions allowed participants to select more than one option; therefore, numbers may not add up to 177 within some categories.

Survey participants practiced in urban (65%, n = 101), suburban (20%, n = 31), and rural (22%, n = 34) settings. They represented twelve provinces and territories and a range of years of experience (i.e. from ≤ 5 to ≥ 41 years in practice). Approximately 69% (n = 108) of survey participants were women, 29% (n = 45) were men, and one participant was non-binary.



Respondents included primary care physicians (80%; n = 136), nurse practitioners (18%; n = 30), and residents (8%; n = 14). A total of 47% (n = 74) of survey participants had 5 or fewer years of practice. See <u>pages S44–S46</u> for participant demographics.

Chlamydia and gonorrhea screening (2021)

Awareness and use of Task Force guideline and tools

About half of participants (53%; n = 86) were aware of the chlamydia and gonorrhea screening guideline. Those who were aware were very satisfied with the guideline, rating it a mean of 5.9 \pm 1.2 out of 7 (where 7 represented being "very satisfied"). Less than half of participants (37%; n = 61) reported that they were following the Task Force chlamydia and gonorrhea guideline. Of the 86 participants who were aware of the guideline, 13% (n = 11) were aware of and reported using the clinician FAQ KT tool and 42% (n = 36) were aware but have not used the tool (see <u>page S49</u> for details on use and awareness of this and other tools).

Current practice

About one quarter of participants' self-reported screening practices for chlamydia and gonorrhea were consistent with Task Force recommendations (whether or not they followed the Task Force guideline). Specifically, 28% (n = 49) of participants reported that they annually screen sexually active individuals under 30 years of age who are not known to belong to a high-risk group for chlamydia and gonorrhea.

See <u>pages S47–S50</u> for more details on awareness and use of the Task Force chlamydia and gonorrhea screening guideline and tool and participant alignment with Task Force recommendations.

IAM questionnaire

Data were retrieved from total of 205 respondents. Of the 205 respondents, 60% (n = 124) reported that they learned something new from the guideline. No respondents disagreed with the content of the information presented in the guideline. A total of 88% (n = 181) reported the information was "totally relevant" or "partially relevant" for at least one of their patients. Of these respondents, 90% (n = 135) said they will, or they possibly will use this information for a specific patient.

Breast cancer screening (2018 update)

Awareness and use of Task Force guideline and tools

The majority of participants surveyed (88%; n = 142) were aware of the Task Force breast cancer screening guideline update that was released in 2018. These participants were somewhat satisfied with the guideline, rating it a mean of 5.6 ± 1.5 out of 7 (where 7 represented being "very satisfied"). More than one third of participants (42%; n = 69) said they primarily used the Task Force breast cancer screening guideline. Most other respondents (52%; n = 86) said they primarily followed provincial or territorial guidelines. Of the 142 participants who were aware of the guideline, 23% (n = 32) were aware of and reported using the breast cancer 1000-person KT tool and 43% (n = 61) were aware but had not used the tool (see <u>page S53</u> for details on awareness and use of this and other tools).

Current practice

Participants' self-reported screening practices for breast cancer were mostly consistent with Task Force recommendations (whether or not they followed the Task Force guideline). Specifically, 82% (n = 144) of survey respondents reported that they did not routinely screen



women aged 40–49 years and 90% (n = 158) reported screening women aged 50-60 every two to three years for breast cancer with mammography. 74% (n = 130) of participants reported that they did not routinely conduct clinical breast exams in their practice. 59% (n = 103) and 73% (n = 128) of participants indicated they routinely discuss the harms and benefits of breast cancer screening with patients between the ages of 40 - 49 and 50 - 69 years, respectively.

See <u>pages S51–S55</u> for more details on awareness and use of the Task Force breast cancer screening guideline and tools, and participant alignment with Task Force recommendations.

Cervical cancer screening (2013)

Awareness and use of Task Force guideline and tools

Most participants (88%; n = 143) were aware of the Task Force cervical cancer screening guideline. These participants reported that they were satisfied with the guideline, rating it a mean of 6.0 ± 1.1 out of 7. Approximately one-third of participants (34%; n = 57) indicated that they primarily used the Task Force cervical cancer screening guideline while more than half of respondents (61%; n = 102) primarily followed provincial guidelines. Of the 143 participants who were aware of the guideline, 22% (n = 32) were aware of and reported using the clinician algorithm KT tool and 38% (n = 54) were aware but have not used the tool (see <u>page S58</u> for details on awareness of this and other tools).

Current practice

Participants' self-reported screening practices for cervical cancer had varying degrees of consistency with Task Force recommendations (whether or not they followed the Task Force guideline). Specifically, 86% (n = 151) of survey respondents reported that they screened women aged 30–69 years every three years while only 64% (n = 112) reported that they did not routinely screen women under 25 years old. Approximately half of participants (62%, n = 108) reported discussing the harms and benefits of cervical cancer screening with patients aged 30–69 years.

See <u>pages S56 – S60</u> for more details on awareness and use of the Task Force cervical cancer screening guideline and tools, and participant alignment with Task Force recommendations

Prostate cancer screening (2014)

Awareness and use Task Force guideline and tools

Most participants (86%; n = 139) were aware of the Task Force prostate cancer screening guideline. These participants were somewhat satisfied with the guideline, rating it a mean of 5.7 \pm 1.4 out of 7. More than half of participants (66%; n = 110) reported primarily using the Task Force prostate cancer screening guideline, while the remaining respondents primarily followed provincial guidelines (23%; n = 38) or no guideline (7.2%; n = 12). Of the 139 participants who were aware of the guideline, 37% (n = 52) were aware of and reported using the prostate cancer 1000-person KT tool and 18% (n = 25) were aware but have not used the tool (see page S63 for details on awareness of this and other tools).

Current practice

Participants' self-reported screening practices for prostate cancer were fairly consistent with Task Force recommendations (whether or not they followed the Task Force guideline). Specifically, 86% (n = 144) of survey respondents reported that they did not routinely screen men younger than 55 years for prostate cancer with the PSA test. In addition, 67% (n = 112) of survey respondents reported that they did not routinely screen men aged 55–69 years with the PSA test. Less than half of participants (40%, n = 67 and 35%, n = 56) reported discussing the



harms and benefits of prostate cancer screening with patients aged 54 and younger, and 70 and older. More participants (71%; n = 119) reported having these discussions with patients aged 55 to 69.

See <u>pages S61–S65</u> for more details on awareness and use of the Task Force prostate cancer screening guideline and tools and participant alignment with Task Force recommendations.

Task Force resources

When asked whether they were aware of any of the Task Force resources, participants were most likely to identify the Task Force website (81%; n = 108), the Task Force newsletter (53%; n = 71), the Task Force CFP article series: 'Prevention in Practice' (40%; n = 54), and the QxMD app (36%; n = 48).

See page S66 for details on awareness of other Task Force resources.

When participants were asked how they accessed the Task Force KT tools, the most popular methods reported were visiting the Task Force website (94%; n = 121) and receiving copies of tools at conferences (50%; n = 34). Other participants accessed the KT tools by printing them from the website (31%; n = 21).

See page S67 for details on Task Force KT tool access.

Interviews

We conducted 20 interviews with PCPs from across Canada: 19 in English and 1 in French. These interviews explored four main themes:

- 1. How and what PCPs first learned about the Task Force, as well as how they heard about new or updated guidelines,
- 2. Sources PCPs used for screening and preventive health care recommendations,
- 3. How PCPs made the decision to adopt guidelines and
- 4. How PCPs implemented Task Force guidelines in their practice, including barriers and facilitators to implementing these guidelines

We chose participants with diverse demographic characteristics to participate in the interviews. Interview participants represented six provinces and territories. Ten participants identified as women (50%) and ten identified as men (50%). Participants ranged from 5 or fewer years of practice to 26 to 30 years of practice. 42% (n = 8) of interview participants had 5 or fewer years of practice. We interviewed seventeen (85%) primary care physicians and three (15%) nurse practitioners. See <u>pages S69 – S70</u> for interview participant demographics.

Theme 1: Reach and maintenance

We asked PCPs to describe how they were made aware of the Task Force, what types of information they first learned about the Task Force, and how they continue to learn about new or updated guidelines. Participants were also asked to provide suggestions on how the Task Force could improve its KT activities.

How PCPs were first exposed to the Task Force

Exposure type

Number of participants (N = 20)

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Residency	7	
Conferences	4	
Colleagues	4	
Medical school	2	
Other organizations' newsletter/email	2	
Recruited for previous interview	1	

Most interview participants first learned about the Task Force during their residency. Some participants were also made aware of the Task Force by attending a conference. Some participants remember interacting with representatives at the Task Force booth at conferences and receiving KT tools. Some participants' colleagues had recommended the Task Force as a source for screening information and guidelines. Participants also reported first learning about the Task Force through medical school, through other organizations' newsletters or emails, or through bring recruited for an interview.

"I think the first time is at a conference, probably about 10 years ago where I got one of the laminated handouts. I think it was probably prostate cancer or breast cancer and I really liked them." – P015

Types of information PCPs first learned about the Task Force

We asked participants to describe the types of information they learned about the Task Force when they were first exposed to the organization. Most participants noted that they learned that the Task Force was a useful resource for preventive healthcare guidelines in Canada. Others first learned about specific Task Force guidelines, typically breast cancer, prostate cancer, or hypertension.

"[The Task Force] is the premier organization for screening guidelines for family doctors in Canada." – P001

Continuous learning and maintaining practices

We asked participants to discuss how they stayed up to date with new guidelines and materials, as well as how they first learned about the most recent Task Force guideline, screening for chlamydia and gonorrhea.

Method for hearing about new or updated guidelines	Number of participants (N = 20)	% of participants
Email from Task Force	14	70%
Conferences	5	25%
Colleagues	4	20%
Personal Research	3	15%

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Updates from organizations (e.g. CFPC)	2	10%
Journals (e.g. CMAJ)	2	10%
Task Force Website	2	10%
Don't hear	2	10%
Podcasts	1	5%
Residency	1	5%

Most PCPs heard about new or updated guidelines through emails from the Task Force, conferences, and from colleagues. Once hearing about the guidelines, participants mentioned subsequently sharing and discussing this guideline with other colleagues. For example, one participant mentioned:

"We had focused on following the recommendations or the protocols through another...from the Ontario Public Health instead of the Task Force. Then, my group decided to sort of look more closely at it, and we...found the [Task Force] guideline much more helpful, much better for practice. So, I went onto the website and I downloaded the summary recommendations for clinicians, and that was the way in which we had a discussion and everybody decided to sort of follow those guidelines." – P009

PCPs also heard about guidelines through personal research (e.g., conducting searches periodically throughout the year to become aware of new or updated guidelines, to meet the needs of specific patients, or when they have specific questions about screening), updates from other organizations (e.g. CFPC), publications in journals (e.g. CMAJ), and from the Task Force website..

Participants frequently mentioned staying up to date using several sources. One participant mentioned:

"Well, I signed up for the Canadian Task Force newsletter, so that's usually how and also conferences, so when new guidelines are presented and then oftentimes through family medicine newsletters or podcasts." – P008

For the breast cancer (2018) guideline specifically, participants commonly heard about it through emails from the Task Force (n = 4) and personal research (n = 4). Participants also heard about this guideline through conferences (n = 2), visiting the Task Force website (n = 1) and through other organizations (n = 1). Participants commonly heard about the chlamydia and gonorrhea guideline through emails and newsletters from the Task Force (n = 7). Participants also heard about this guideline through personal research (n = 3) and colleagues (n = 2).

Theme 2: Perceived trustworthiness of guidelines

When participants were asked which sources they used or referred to for screening and preventive health recommendations, half of the participants named the Task Force as one of their main trustworthy sources. PCPs also cited specialist, disease-specific, provincial, and other national organizations as their trusted sources for guidelines.

Trusted Sources for Guidelines	Number of	ST. MICHAEL'S UNITY HEALTH TORONTO % of participants
	participants (N = 20)	
Canadian Task Force on Preventive Health Care	10	50%
Provincial bodies	9	45%
Disease-specific or specialist organizations	6	30%
Other national organizations (i.e. USPSTF)	6	30%

When asked to describe what makes a guideline trustworthy, participants referred to organization reputation and values, composition of guideline developers, quality and strength of evidence, guideline presentation and usability, and endorsements or partnerships:

Factors that influence guideline trustworthiness		
Factor	Number of participants (N = 20)	Description
Evidence base, quality and strength of evidence	12	Many PCPs noted that evidence-based guidelines influence guideline trustworthiness. In particular, recommendations based on quality evidence (i.e., randomized control trials etc.) were considered an important factor for helping PCPs evaluate trustworthiness of the guideline. Some participants also noted that the strength and grade of evidence was a key indicator of guideline trustworthiness, with strong, grade A recommendations being more trustworthy compared to weaker evidence. In addition, PCPs cited that recommendations developed using more up to date evidence makes the guideline more trustworthy.
orevidence		"So, you know, you're a research institution developing this, and if you get a strong recommendation or grade A recommendation, that's going to be based on trustworthy and controlled trials. So, I think that that makes a recommendation trustworthy. So, grade A strong recommendation based on a lot of data from an independent source. Less trustworthy would-be weak recommendations or some organization that could benefit like a pharmaceutical company or a company that sells screening resources." – P003



		Rigor and transparency in how the guidelines were
Rigorous and transparent methods	5	developed, and explanations for why certain recommendations or decisions were made impacted trustworthiness. PCPs mentioned that they trusted guidelines that provide clear explanations for the recommendations and those that have been peer- reviewed. <i>"Being backed by very robust research. I like how all the research is linked as well to how they got the guidelines. I like how the evidence is also ranked, whether at low certainty evidence or conditional</i>
		recommendation. I find that quite helpful." – P008
Minimal or transparent conflicts of interest and perceived bias (e.g. funding sources)	5	Participants noted that lack of conflicts of interest was an important influencer of guideline trustworthiness. They noted that unbiased guidelines which present all available evidence in support and against the recommendations are generally more trustworthy. PCPs also noted that they were more likely to trust independent organizations without external influence (e.g., influence from pharmaceutical companies or companies that sell screening resources).
Tunung Sources)		"Generally speakingit should be written in an unbiased way. It should be covering the latest papers. It should definitely be mentioning opposing views, and it should recognize a certain degree of uncertainty and ideally, it should be quantitative." – P006
Clear and practical	5	Guidelines that are clear, concise with adequate information and resources to support implementation were noted as important factors of trustworthiness. Some participants noted that guidelines written in plain language with clear recommendations contributes to trustworthiness.
		"Then it comes down to kind of basic things like no spelling errors, overall looks ok. So even just small thing like that help make a resource more credible." – P010
Composition of guideline developers (e.g. trustworthy members, relevant expertise of	4	Participants noted they trust organizations that involve a diverse panel of experts during the guideline development process. They noted that receiving multiple inputs from provincial bodies, disease-specific organizations, specialists and other experts adds to the trustworthiness of guidelines.
members, etc.)		<i>"I think it is trustworthy when you have multiple inputs for the guidelines if, for example, the Task Force guideline on prostate cancerwas made up of</i>



		national advisory, maybe national urologists society, cancer society, etc." – P007
Up to date	2	Additional considerations for trustworthiness included guidelines that were up to date. PCPs mentioned they would trust guidelines that were based on the most recent evidence, as demonstrated in the following quote:
		"Again, I think it came to updated information. Usually if it's newer and there is, you know, new evidence or improved research on the topic, I'll usually use the thing that's more up to date." – P015

Theme 3: Adopting guidelines When asked about the factors that influence guideline adoption, PCPs described several main decision-making factors that influence their decision to adopt or follow guidelines (see tables below).

Factors that influence decisions to follow guidelines		
Factor	Number of participants (N = 20)	Description
Evidence level and strength of recommendation	14	Participants indicated the strength and quality of evidence would impact their decision to follow a guideline. They reported being less inclined to follow weak recommendations or those based on low levels or quality of evidence.
Consensus with local standards of practice (e.g. provincial guidelines, employer guidelines)	12	Participants agreed that guidelines that are aligned with provincial, employer, or other guidelines are easier to adopt. The majority of participants tended to prioritize or adopt local standards of practice (e.g. provincial guidelines), because of reporting requirements from employers, to be consistent with their colleagues, or because they were using provincial resources. Many participants noted that Task Force guidelines aligned with provincial guidelines, but if there was a situation where they conflicted, they considered which one fit best for the population they were working with. A few participants noted that they follow a national guideline over a provincial guideline as illustrated in the quote below.



		"Being an academic center I would say we follow mostly national guidelines because those are things which students need to learn and follow, and that ends up being kind of the way that we practice. So, when things are conflicting, I usually go towards the bigger national body stuff because not only do our students see this on their exams, but it's also something that's probably uptaken more readily than other recommendations. Again, if I was really stumped or confused or someone had a super high risk and they just don't feel fit in that, we need to individualize more, then I would probably reach out to colleagues too, or even send a referral to a specialist
Colleagues or opinion leaders	9	if something just didn't seem right to fit with kind of a population level recommendation." – P002 Several participants described that interactions with colleagues were a critical component of their screening and preventive health care practice decisions and use of guidelines. Some participants said they were more likely to follow a guideline if the majority of their peers and colleagues, or leaders in the field, were using it. More specifically, one participant mentioned that many physicians follow the guidelines from their college, as seen in the quote below.
	"Majority of family physicians follow their colleges that they are members of or that provides them with evidence or policies or regulations, which you have to follow. For example, us, we follow the College of Family Physician. So, if the family physician sends out a new guideline, we look at those guidelines, we see once again, is it conducive to us? If not, then we don't go with it." – P009	
Patient Preferences	8	Many participants discussed the impacts patients have on decision-making to adopt a guideline and as influencers of practice change. If a patient's preferences still do not align with the guideline recommendations following a shared decision-making discussion, or a patient insists on a certain screening test, PCPs almost always noted that they would follow their patients' wishes regarding preventive care and screening, as long as it is safe. When there are conflicts between patient preferences and guidelines, many PCPs will refer to other guidelines for guidance as illustrated in the quote below.
		<i>"I'm in Ontario so I compare it to the Ontario cancer screening guidelines and then based on the patient's</i>



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		risk factors and their overall kind of health goals we come up with a plan that works for them in terms of combining the Ontario and the Task Force guidelines." – P010
Resources available	5	Participants mentioned that availability of resources (i.e., guidelines and tools) is crucial for both physicians and patients and that accessible resources give patients the option to modify care in an informed way.
Clinical judgement or experience	3	When faced with conflicting recommendations, many PCPs rely on their own clinical judgement to decide which guideline to adopt. This decision can also vary by patient. Previous experience (for example, not screening a patient who ended up having cancer) can influence practice change and guideline adoption.
Up to date evidence		Up to date evidence and references and date of guideline publication influence decisions to adopt guidelines. Participants were more likely to follow newer recommendations over older ones. This is illustrated in the quote below.
and guidelines 2	2	"So, a newer guideline, if it's more up to date and it changes and why, and also just the reputation of the source. So, you know, I use one source for many things and I find it trustworthy and up to date and reasonable, I'm more likely to follow that source than something that is not." – P0015
Reputation of guideline development organization	2	Some participants cited that they were more likely to follow recommendations from guideline development groups that they trust, or that their colleagues and other organizations support.

The table below outlines influencing factors that drive guideline <u>adoption</u> (e.g. who drives guidelines becoming practice), as identified by participants.

Influencers that drive guidelines becoming practice				
Influencers	Number of participants (N = 20)	Example		
Guideline development organizations	6	Several PCPs felt guideline development organizations (e.g., Task Force) impact which guideline recommendations become practice,		



		based on their dissemination and implementation efforts.		
Colleagues or leaders in the field	6	Colleagues were listed by several PCPs as influencers for guidelines becoming practice – PCPs were more likely to follow guidelines that many of their colleagues follow. Some looked to leaders in the field for advice on which guidelines to follow.		
Physicians themselves	5	Several participants saw individual practitioners as the main influencers for guidelines becoming practice, since they ultimately have autonomy over which guidelines they will follow.		
Government	5	Several PCPs felt the government played a large role in guidelines being implemented into practice, since they are often responsible for developing provincial guidelines.		
Specialists	4	Several felt specialists (e.g., endocrinologists, gynecologists) have a large impact on which guidelines become practice.		
Patients	3	A few PCPs felt patients influenced guidelines becoming practice, since they are the final decision-makers.		

Theme 4: Implementation

When asked to describe their screening and preventive health care practices, PCPs spoke about general supports and challenges to implementing guidelines. Along with how they engaged patients in discussions about preventive health care guidelines and recommendations.

4.1 Facilitators and barriers to guideline implementation

PCPs described factors that influence their ability to <u>implement</u> guidelines in their practice, after they have decided to adopt or follow a guideline (see table below).

Factor	Example
Time constraints (e.g. for looking up new guidelines, or having discussions with patients)	Participants described a lack of time as a biggest barrier to implementation. Lack of time was defined in several contexts: to have meaningful discussions with patients about the recommendations, to research new guidelines and recommendation, to read and appraise new guidelines, and to change their patients' behaviors and expectations. Of note, most other factors mentioned by PCPs (and that follow in this table) tie directly or indirectly into the factor of time constraints. "We follow the task force. I mean, a lot of clinicians are doing it a lotthere's a lot of guidelines out there, but they're very long. You know, they can be anywhere from 60 to 100 pages. Who has time for that? We

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	need something that's narrow, concise, something that provides us with good recommendations, good evidence base and so, I find that the task force does the job for us." – P009			
	"Certainly one barrier is ease of assimilation or incorporation into practice where things are always being updated and changing. Don't know if there's a way to make that easier or not. I suppose you can do like an annual snapshot of something." – P003			
	Participants reported that not being aware of new or updated guidelines is a barrier to implementation.			
Physician awareness	"So when I learn about the Task Force guidelines I immediately try to put into practice whatever the new recommendations are. So it's just about the awareness of it, as soon as I know that it has changed then I want to be able to implement it as soon as possible." – P013			
Clear and concise guidelines and resources	PCPs mentioned that having clear and concise guidelines and tools was a major facilitator to implementing guidelines. Physicians noted that because of their lack of time, having resources (KT tools) that are actionable, practical, and concise increased the likelihood of guideline implementation. <i>"I think the online tools are very useful, especially when you're sharing with patients. It makes the explanation a bit easier when you can show patients, you know, for example, the 1000-person tool or even the algorithm you can share with patient and the reasoning behind why or why not to screen." – P007</i>			
Provincial alignment	PCPs found it easier to implement guidelines that had consensus across multiple organizations (e.g. alignment with provincial recommendations helps facilitate implementation as recommendations may align with provincial reporting requirements). Having conflicting recommendations was cited as a barrier to implementation. <i>"I think it has to have a collaboration with the Ontario Public Health Organization. You know?there has to be a lot of alignment, I think, in between both."</i> – P009			
Large practice change required	Guidelines that recommended a large change in practice were cited as being more difficult to implement, compared to those with recommendations perceived as more feasible or practical. For example, if PCP's previous practice included regular screening for breast cancer, but a new guideline recommended against regular screening, this would require a large mindset and behaviour change for PCPs as well as patients, making it more difficult to implement. <i>"I think is when those resources just aren't available. So occasionally I've read a guideline. It will recommend doing a test but that test just isn't available in my area or as a family physician." – P011</i>			

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Evidence level and strength of recommendations	Some PCPs reported that guidelines that supported by higher levels of evidence are easier to follow. They felt higher levels of evidence lead to stronger recommendations, and they felt more confident in implementing the recommendations. Conversely, they were less likely to implement guidelines of low evidence levels or weak recommendations. <i>"I think the difficult ones are the ones where there is not a clear answer. If there is a weak recommendation and it requires more of a patient discussion and understanding of their goals and values and you know that guidelines is going to change for each patient."</i> – P012
Patient awareness and preferences	Participants discussed how patient preferences and awareness can be barriers to guideline implementation. Implementation can be more difficult when recommendations do not align with patient expectations, if patients have personal or family experience with the disease, or if patients are insistent on screening despite recommendations against doing so.
	"If they are swinging to the way of wanting more screening we discuss the pros and cons of that and if I feel like it's appropriate and we still order it, then we just go ahead and veer off the guideline with that caveat being known. If they are going, kind of, towards less screening then again it's the same thing. As long as they are aware of the potential risks of postponing or deferring or declining screening then again that's also their choice and that's ok and that doesn't mean that you cannot revisit it again at a future appointment. So I always just say that it's a guideline, right? It's not a prescription and so we discuss the guideline andit's there as a starting kind of discussion point for me." – P010
Complexity of recommendations	Recommendations that are in clear writing and concise, clearly outlining what the provider needs to do are easier to implement. Participants reported that complex or lengthy guidelines (e.g., complicated algorithms) are more difficult to implement. Participants also cited the simplicity of recommended actions as a facilitator (e.g. a guideline that recommends a simple test (urine) vs a more complex test (CT scan) is easier to implement.
	"I feel like if it's easy to understand it's easier to implement. I feel like when there is evidence to support it, that I can explain to my patients, it becomes easier to have those conversations with my patients. "– P013
Reminders/EMR integration	A few PCPs highlighted that reminders are helpful to help facilitate guideline implementation. For example having screening recommendations integrated as templates in EMR.
	"You should integrate it with the EMRs, so connect with the EMR providers and build them into the templates we use for screening for regular check-ups." – P001



4.2 How patients are engaged in discussions about preventive health care guidelines and recommendations

60 percent of participants (n = 12) described having shared decision making conversations with patients about a variety of preventive health topics. For example, one participant mentioned:

"Yeah, I would say it's 50/50. Patients often will come to us. I see patients that are my patients, but we also have walk-in patients that may come in and say, I want to be screened for this, etc... something that they've read about, something that they've heard about. Again, I'm very pro preventative screening...just ensuring that all of their kind of preventative screening is up to date from my regular patients....I often will share with patients what the recommendations are as well, "One, this agency may recommend this. This is what they recommend. Hey, there was this Canadian task force recommendation that came out. What would you like to do?" and I would share my recommendation as well, but certainly would leave it up to the patient as well, recognizing risk versus benefit and all of that." – P017

Common barriers to patient engagement that participants identified included disagreement across guidelines and conflicting recommendations and engaging patients who are used to outdated, more aggressive preventive care practices. One participant said:

"I think that the main difficulty would be... patients having things done one way for 30 years with a prior practitioner who maybe didn't use guidelines and didn't change their practice over time despite different guidelines and recommendations. So, I would say it would be patient hesitancy and patient background values and if you're just starting a new relationship, you know, they're going to want that prostate exam despite anything you can say until you're blue in the face." – P019

Most PCPs noted that they had used Task Force KT tools in the past. Several were not familiar with the term KT tool, but were able to describe the relevant tool. Most participants identified KT tools as useful facilitators for shared decision making conversations, most frequently referencing the 1000 person tool Task Force prostate cancer screening guideline tool.

"I do have the website saved on a web browser that I can bring up, and I also really like the laminated infographics and those ones I just keep by my desk or by the computer in the exam room that I can pull out and show people right away and I find I use those ones quite a lot. The most common one I use is the prostate cancer one." – P015

"I think a big thing is looking at the benefits and harms. So, I really like how...and I've used the thousand....that picture, that infographic a lot, because if you can actually pull it out with patients and show them, and if I can go through it with a patient and then talk about benefits and harms with that specific patient, then we can make a joint decision whether or not we don't want to screen or we do want to screen based on the knowledge." – P004

When asked what they would do if a patient's preferences differed from guideline recommendations, over half of participants said they would discuss the harms and benefits of each option, but ultimately all participants said they would follow whatever the patient decided. Most participants noted that after discussing the harms and benefits of a certain preventive health care topic, most patients will agree with or understand what was presented to them.

"So, we have a conversation with the patient and ultimately it's a....you know, as long as the patient is informed about the risks of over testing and overtreatment and if they still...insist, ...I think on the whole, it would be important also to comply with the patient's request." – P001



PCPs also identified nurses, pharmacists, and allied health professionals (e.g., physiotherapists, dieticians) as people who could assist with discussing screening and preventive health care with patients. They also described clinical and administrative assistants as being potential key supports as they are typically the first point of contact for most patients prior to an appointment.

"Yeah, I think definitely any of the allied health specialists can do it. So nurse, nurse practitioners, physician assistants. Often in clinics we have medial office assistants as well who could discuss some of those things prior to the start of the physician visit." – P012

Theme 5: Suggestions for improvement

Participants identified several suggestions for improving reach and access of Task Force guidelines and KT tools:

 Email alerts/reminders: About half of the participants (n = 10) suggested more consistent email updates, not only for new guidelines but also for guideline reminders, as PCPs may miss emails with their busy schedules. Some participants suggested providing annual summaries or snapshot emails to remind PCPs of important guideline recommendations each year. Participants highlighted that any email reminders or updates would need to be brief, clear, and user-friendly. For example, a few participants noted that including top updates or one-liners at the beginning of email reminders would be helpful.

"Maybe consistency with sending out emails, maybe every three or four times a year in emails, like all of the updates...or not even just the updates, all of the available guidelines that are available just to kind of remind us. Sometimes you skip over emails." – P017

2) App development: Some participants (n = 5) also suggested that the Task Force develop a user-friendly app for easier access to guidelines. PCPs noted that an app with push notifications to alert them of new guidelines would be helpful to be updated on new Task Force guidelines and implement those guidelines regularly in practice.

"I think having the app sort of push out notifications when there is a new update to a guideline would be helpful and then... if you put in the age of your patient and ...click on different risk factors it will actually give you all of the guidance or guidelines that are associated with that patient and so I would find that super helpful because if I have a 42 year old patient come who is a smoker and I just put that into the system it will tell me everything that I need" – P013

- 3) Website Optimization: Participants identified that navigating the Task Force website can be challenging and improvements could be made to improve usability of the Task Force website for providers (fewer clicks, PDF downloads). A few PCPs advocated for an easy website for patients to navigate, especially considering the shift toward online primary care caused by COVID-19.
- 4) Webinars/Learning sessions: One participant suggested the Task Force explore the idea of hosting interactive webinars/learning sessions for their guidelines for PCPs following guideline release. They mentioned that these webinars may motivate PCPs to take time to fully understand the background of the guideline and to receive targeted information on implementation.



"So, a good way, I think for the task force to reach a lot of the primary care doctors would be to offer an online educational seminar and if it is accredited by the college, even better...I mean, it would kind of force me to attend...if [the chlamydia and gonorrhea guideline] was available by invitation for a continuing educational seminar, let's say, it would kind of force me to attend, and then look it over." – P007

5) *KT Tools:* Some participants noted that KT tools are very helpful in their practice and suggested different formats for KT tools such as more algorithms, flow charts, and interactive tools could facilitate shared-decision making conversations with patients. Few participants also noted that having KT tools available in additional languages would promote diversity and accessibility of guidelines.

4.0 Limitations

The number of survey and interview participants who participated in the study was relatively small given the diverse Canadian context, and may not be representative of all PCPs in Canada. It is possible that a larger and more diverse sample would have produced different results. For example, PCPs may have been more likely to complete the survey or interview if they were aware of the Task Force and its guidelines. As such, these results may overestimate awareness of the Task Force and its guidelines and associated KT tools. Further, survey and interview recruitment took place during a COVID-19 pandemic peak when PCP time and resources were reduced. This may be a factor behind fewer survey and interview participants compared to the previous year.

We offered surveys and interviews in both English and French. Significantly fewer PCPs completed the survey in French (n = 17) compared to English (n = 160), and only 1 participant completed an interview in French, therefore the results of this evaluation may not represent the awareness and use of Task Force guidelines and KT tools among French-speaking PCPs.

The survey and interview data collected in this evaluation were based on participants' selfreported awareness and use of Task Force guidelines, KT tools, and KT resources. It is therefore possible that participants' responses were affected by social desirability and recall biases.

5.0 Recommendations

Based on this evaluation, we have identified <u>seven opportunities</u> for the Task Force to enhance the impact and uptake of the Task Force's guidelines, KT tools, and resources. The recommendations are presented from <u>least to most resource intensive</u> based on personnel and resource requirements and extent to which these activities may be at least partially underway.

- 1. Take a multipronged approach to KT tool dissemination (i.e., conferences, Tool Dissemination Pilot, and CPL Network)
 - Continue with virtual and in-person methods of promoting and distributing KT tools: traditionally, the Task Force's main avenue for KT tool distribution has been conferences (e.g., Family Medicine Forum). The COVID-19 pandemic has limited this form of dissemination as it was not possible to attend in-person conferences in 2020 or 2021 and 2022 will likely see a combination of in-person and virtual conferences.
 - **Disseminate tools through the Phase 2 CPL network pilot**: since CPLs will have established relationships with other clinicians and professional networks (e.g., Choosing Wisely Canada's networks) and supporting infrastructure, they could be an effective



avenue to distribute tools and support their uptake into practice. The Task Force could support CPLs in dissemination through providing education sessions on tool purpose and development process, shipping tools directly to CPLs and providing them with electronic PDF tool packages to distribute to their peers.

• **Continue with the Tool Dissemination Pilot:** the pilot, launched in 2021, has already disseminated 296 tool packages to PCPs across Canada. The results of the evaluation of this pilot (to be completed later in 2022), can inform continuation and tailoring of this project into 2022 and 2023.

2. Widely disseminate results from the Guideline Comparison Research Project

• Disseminate the results in publications, the Task Force website, newsletters, social media, conferences, and the CPL network: in 2021 the Guideline Comparison Research project was completed. This project performed a quality assessment and comparison of selected Task Force guidelines with other guidelines to identify the potential factors behind the differences in the recommendations. Similar to previous years, participants frequently mentioned that alignment of recommendations (particularly with provincial guidelines due to reporting requirements and provincial screening programs) facilitated guideline adoption and implementation, as well as contributed to guideline trustworthiness. As such, widespread dissemination of these results would allow PCPs to understand the differences in recommendations.

3. Increase dissemination and reminders of already released guidelines

- Hold webinars following guideline release: the Task Force traditionally holds prerelease stakeholder webinars for each guideline, however, participants suggested webinars *following* guideline release that are directed toward PCPs could increase dissemination and implementation. These webinars could provide an overview of the recommendations, methods, KT tools, and considerations for implementation. If possible, the webinars could provide PCPs with CME credits as it was suggested that PCPs are looking for opportunities to obtain CME credits. Additionally, following guideline release, the pre-release webinars could be posted to YouTube and widely disseminated.
- **Develop a speaker series:** sessions could be held several times throughout the year and focus on already released guidelines, popular guideline updates, new guidelines, and other topics of interest like shared decision making. The Task Force could also consider including these webinars as part of the CPL Network activities.
- Send PCPs more reminders: participants mentioned they would benefit from receiving more reminders about released guidelines and tools. Participants suggested more emails or newsletters (3-4 times per year) that highlight previously released guidelines or yearly "snapshots" summarizing existing Task Force guidelines should be sent to PCPs and posted on the Task Force website. Participants also mentioned it would be helpful if these could highlight any changes in recommendations compared to previous Task Force guidelines or other popular guidelines.
- **Expand Task Force's "public" website:** participants noted that it is helpful when Task Force materials are readily available to their patients. The Task Force could consider expanding its "public" website to include all published guidelines in a format accessible for non-clinicians.

4. Enhance Task Force French presence

• Actively build partnerships with French PCP and patient organizations: the Task Force engaged 17 French speaking PCPs as part of the annual evaluation. While this represents the greatest number of French speaking annual evaluation participants to



date, it still represents a small percentage of all participants. Recruitment difficulties may be influenced by a lack of Task Force partnerships with relevant French PCP organizations. French website and KT tool page views, as well as French podcast listens remain relatively low compared to English counterparts. The Task Force could engage with organizations like the Institut national d'excellence en santé et services sociaux (INESSS), Fédération des médecins omnipraticiens du Québec (FMOQ), and Patient Partenaire to improve trustworthiness and boost dissemination of Task Force guidelines, KT tools, and engagement opportunities among the French-speaking Canadian population.

- **Recruit French-speaking PCPs through conferences:** the Task Force could recruit for the annual evaluation and other engagement activities through the French conference that the Task Force attends annually (Médecins francophones du Canada). The Task Force could message conference attendees directly with a personalized message to gauge interest and collect contact information.
- Maintain a general French PCP recruitment list: the Task Force currently maintains a general PCP recruitment list, though language is not specified. The Task Force could consider building a general recruitment list for French speaking PCPs.
- Develop a French CPL network to facilitate these activities.

5. Offer KT tools and other Task Force resources in a variety of formats and languages

- Offer tools in additional formats: participants indicated that the KT tools are helpful but that an increased variety of formats for each guidelines (e.g., algorithms, flow charts, interactive tools, in addition to the more common FAQs and 1000 person tools) could increase implementation and shared decision making.
- Offer tools in additional languages: some participants noted that having KT tools available in additional languages (beyond English and French) would promote accessibility. Although participants did not suggest specific languages, the Task Force could consider surveying PCPs and patients to determine which languages would be most useful in the next evaluation.

6. Expand engagement activities to other PCPs and allied health professionals

• Crosscutting the recommendations, expand target audience of engagement activities: participants noted that other PCPs and allied health professionals (e.g., nurses, pharmacists, physiotherapists, dietitians) play an important role in screening discussions with patients. Participants also noted that clinical and administrative assistants are potential key supports as they are typically patients' first point of contact. Engaging these individuals could equip them to support in screening discussions.

7. Explore integration into EPRs and promote that Task Force guidelines are on QxMD

- **Develop a tool for EPRs:** consistent with previous years, participants emphasized that integration of guidelines into EPRs could improve adoption. Developing a tool for EPRs has remained an ongoing discussion in the Task Force, however considering there may currently be more stability in the EPR market, this may presently be more feasible.
- Increase promotion of guideline availability on QxMD: participants suggested that guideline and KT tool availability on mobile applications improve reach and access. Task Force guidelines and KT tools continue to be accessible on the QxMD mobile app, although this was not widely known among participants. The Task Force has previously attempted to develop and maintain their own app, but has experienced challenges related to the scope of those projects and resource demands. If the Task Force considers developing their own app again in the future, they could draw on the United States Preventive Services Task Force's (USPSTF) app "USPSTF Recommendations



(ePSS)" for format inspiration as participants mentioned the format is easy to navigate and helpful.



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2021 Guideline Publications

Guideline publications *Chlamydia and Gonorrhea* **Pre-release: Stakeholder engagement**

Released April 2021



• Engaged 60 stakeholders

- 15 generalist organizations
- 23 disease-specific organizations
- 4 clinical experts
- o 3 peer reviewers
- 15 usability testing participants
- Hosted 2 guideline preview webinars on April 13th and April 16th, 2021
 - Presented by Dr. Ainsley Moore
 - Attendance: 18 stakeholders

Endorsements and Statement of Support





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Guideline publications *Chlamydia and Gonorrhea* **Post-release: Dissemination & media**

Dissemination	Chlamydia and Gonorrhea Total	Esophageal Adenocarcinoma Total**
CMAJ journal subscribers (received guideline)	63,663	64,363
CMAJ guideline downloads*	14,036 (EN)	22, 844 (EN)
	3,609 (FR)	852 (FR)
Task Force website English page visits	4,183	2,484
Task Force website French page visits	353	286
Podeast plays	1,957 (EN)	1,854 (EN)
Podcast plays	1,562 (FR)	1,629 (FR)
Media		
Media Mentions	150	23
Interview requests with Task Force members	5	1
Altmetric score	60	60
Citations	3	2



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Inspired Care. Inspiring Science. *English & French (if available), Full & PDF totals calculated from CMAJ public article metrics **Metrics included from 2020 annual evaluation for comparison purposes Note: Numbers are based on data from January 1, 2021 to December 31, 2021. Media data are based on media reports from the Task Force communications team
Guideline publications Chlamydia and Gonorrhea Post – release: Dissemination & media

<u>Highlights:</u>

- CMAJ's April eTOC highlighted the C&G guideline
 - Sent to 63,663 CMA members and 7728 non-members, with 2,372 total clicks
- It was the 12th most read article in CMAJ for April 2021





Guideline Dissemination

Guideline dissemination Virtual Conferences & Engagement

Conference	Dates	Location	Delegates attended	Task Force booth attendees	1:1 Interactions	Tool Downloads
Annual Rural and Remote Medicine Course - Take 2! 2021	Apr 22-24, 2021	Virtual	-	125	6	12
Choosing Wisely National Meeting 2021	May 12-13, 2021	Virtual	1,018	211	-	119
Congrès annuel de médicine 2021	Oct 29-30, 2021	Virtual	-	90	4	-
Family Medicine Forum (FMF) 2021	Nov 10-13, 2021	Virtual	-	117	1	1,764



Guideline dissemination Task Force website annual users





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Guideline dissemination Task Force website annual page views



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Guideline dissemination Task Force website sessions by new and returning users



New and returning user sessions



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Note: The data reported is combined for both the English and French website platforms. 2019 values may be reduced due to errors with analytics data collection between January 2019 and March 2019

Guideline dissemination Top 10 most viewed Task Force website pages

Top 10 Pages (Year 2021)



Unique Pageviews Page Views



Guideline dissemination Annual guideline page views (Task Force English website)







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Note: The breast cancer guideline update webpage data was unavailable for the month of Dec.2018

Guideline dissemination Average guideline page views (Task Force French website)





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Note: Date for the French website platform is only available from 2017 onwards. Note: The breast cancer guideline update webpage data is unavailable for the month of Dec.2018

Guideline dissemination Top 5 Task Force website user locations

Top 5 cities	Sessions
Toronto	16,266
Montreal	15,751
Calgary	6,931
Ottawa	7,651
Edmonton	4,690

Note: The data reported is combined for both the English and French website platforms.



Guideline dissemination Task Force English website guideline page views after release

Guideline Page Views from Release



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Guideline dissemination Task Force website users before and after guideline releases





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Guideline dissemination **KT Tool Page Views**

• Total KT tool page views in 2021: 49, 012 (66 % English; 34% French)

Top 10 Most Viewed KT Tool Pages in 2021				
Guideline	ΤοοΙ	English	French	Total tool page views
Diabatas Type 2 (2012)	Clinician FINDRISK	1072	7207	8279
Diabetes, Type 2 (2012)	CANRISK	1665	441	2106
Prostate Capacit (2014)	Harms & Benefits	4457	390	4847
Prostate Cancer (2014)	Clinician FAQ	1637	260	1897
Hypertension (2012)	Clinician Algorithm	1773	1520	3293
Breast Cancer (2018)	1000-person	1923	244	2167
Colorectal Cancer (2016)	Clinician Recommendation Table	1849	347	2196
Cervical Cancer (2013)	Clinician Algorithm	1959	215	2206
	Patient Algorithm	1288	118	1406
Chlamydia & Gonorrhea (2021)	Clinician FAQ	1557	168	1725



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Guideline dissemination 2021 YouTube Video Views

Top 10 Most Viewed Videos (2021)	# YouTube Views 2021	2021 Views
Prostate Cancer—Video for Physicians (2014)	716	213
Cancer Screening	448	621
La chlamydia et la gonorrhée	329	N/A
Cancer du poumon - Vue d'ensemble, facteurs de risque et dépistage - Vidéo 1 (2018)	295	134
Breast Cancer—Screening Guideline Video (2011)	250	211
Lung Cancer - Overview, risk factors & screening - (Part 1 of 3)	218	222
Dépistage du cancer	208	63
Chlamydia and Gonorrhea	99	N/A
Peut-on avoir un faux positif au test?	78	N/A



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Guideline dissemination QxMD: Calculate

- Calculate by QxMD is a free digital application
- Clinical calculator & decision support tool for clinicians worldwide
- Task Force account offers guidelines and accompanying resources

Task Force account		
Total users in 2021	11,696	
New users	85.1%	
Returning users	14.9%	
Total sessions 2021	28,144	



Guideline dissemination **QxMD: Read**

- Read by QxMD is a paid digital application
- Personalized medical & scientific library for Canadian users
- Task Force account offers guideline publications

Task Force 2021 account					
Total impressions	24,015	96% email 4% feed			
Total views	99	81% abstract views 19% paper views			
Total shares	1	100% email 0% Twitter 0% Facebook			
	Physician	70.23%			
Professions	Resident	15.08%			
1 10163310113	Nurse Practitioner	9.33%			



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Guideline dissemination

CMAJ – Task Force guideline downloads and podcast plays

Guideline topics (Release Year)	2021 CMAJ downloads*	Citations (Scopus)	Podcast Plays
Chlamydia & Gonorrhea (2021)**	17,645	3	1,958
Esophageal Adenocarcinoma (2020)	19,376	4	2,296 (ENG); 2,026 (FR)
Thyroid Dysfunction (2019)	25,585	9	2,393 (ENG); 2025 (FR)
Asymptomatic Bacteriuria (2018)	28,652	15	1,816
Breast cancer (2018)	51,824	70	2,077 (ENG); 1,735 (FR)
Impaired Vision (2018)	13,358	6	1,534
Abdominal Aortic Aneurysm (2017)	34,774	19	1,602
Hepatitis C (2017)	41,653	41	1,477
Tobacco in children (2017)	20,449	4	1,103
Colorectal cancer (2016)	79,739	126	1,698
Developmental delay (2016)	35,205	31	1,489
Lung cancer (2016)	50,073	78	1,448
Adult Obesity (2015)	58,452	96	1,051
Child Obesity (2015)	47,027	61	1,033
Cognitive impairment (2015)	36,493	42	1,330
Prostate Cancer (2014)	90,521	111	-
Adult Depression (2013)	45,335	132	-
Cervical Cancer (2013)	101,057	126	-
Type 2 Diabetes (2012)	76,045	81	-



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Dissemination ECRI: 2021 Scorecard and Brief Page Views

Guideline	Score (/60)	Total Hits 2021
Chlamydia & Gonorrhea (2021)*	60	89
Esophageal Adenocarcinoma (2020)	60	42
Thyroid Dysfunction (2019)	59	25
Asymptomatic Bacteriuria (2018)	59	33
Breast Cancer (2018)	58	33
Impaired Vision (2018)	59	18
Abdominal Aortic Aneurysm (2017)	59	7
Hepatitis C (2017)	59	4
Tobacco in Children and Youth (2017)	59	26
Colorectal Cancer (2016)**	59	52
Developmental Delay (2016)**	58	25
Lung Cancer (2016)**	60	19
Cognitive Impairment (2015)**	58	21



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*Chlamydia & Gonorrhea guideline was released in April 2021, therefore the total downloads represents only nine months of downloads

**Retired from the EGT website in December 2021, no longer met the 5-year currency criterion.

Dissemination Prevention Plus: 2021 Registrants and Accesses

 Prevention Plus is sponsored by the Task Force, and is a continuously updated repository of current best evidence from research to support preventive health care decisions

2021 Quarter	# of registrants	Number of Logins	Number of Page clicks	Total Website Searches	Article Accesses	Clicks on External links
Q1	66	155	1822	42	558	1592
Q2	73	169	2633	79	737	2103
Q3	74	76	1423	7	290	1323
Q4	74	97	1647	1	592	1647



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Dissemination

Dissemination Publications: Guidelines

Publication	Dates	Source	Туре
Recommendation on screening for chlamydia and gonorrhea in primary care for individuals not known to be at high risk	April 19, 2021	CMAJ	Peer Reviewed
Recommandation relative au dépistage de la chlamydia et de la gonorrhée en soins primaires chez les personnes non connues comme appartenant à un groupe à risque		CMAJ	Peer Reviewed



Dissemination Publications: Protocols and Systematic Reviews

Publication	Dates	Source	Accesses
Screening for the prevention and early detection of cervical cancer: protocol for systematic reviews to inform Canadian recommendations	January 2, 2021	Systematic Reviews	3464
Fall prevention interventions for older community- dwelling adults: systematic reviews on benefits, harms, and patient values and preferences	January 9, 2021	Systematic Reviews	6455
Screening for depression in children and adolescents: a protocol for a systematic review update	January 12, 2021	Systematic Reviews	8039
Screening for chlamydia and/or gonorrhea in primary health care: systematic reviews on effectiveness and patient preferences	April 19, 2021	Systematic Reviews	1753



Dissemination

Publications: "Prevention in Practice" article series

- CFP print subscribers as of January 2021:
 - o Canadian: 33891
 - United States: 617
 - o Foreign: 515

Article topics	Published
Preventive screening in women who have sex with women	November 2021
Improving preventive screening with Indigenous peoples	August 2021
Too soon or too late?	February 2021



Dissemination **2021 Conference Presentations by Task Force members:**

Month	Title	Location	Presenters
April	Canadian Task Force: Evidence-based Preventive Care in 2020	Rural and Remote Medicine Course	Guylene Theriault, Roland Grad
April	What is the best-evidence based preventive screening strategies for Esophageal Adenocarcinoma (among patients with GERD), Thyroid Dysfunction, and Depression in Pregnancy and Postpartum?	63rd Annual Scientific Assembly Manitoba College of Family Physicians	Ahmed Abou- Setta
April	What is the Best Evidence-Based Preventive Screening Strategies for Esophageal Adenocarcinoma (among Patients with GERD) and Thyroid Dysfunction?	63rd Annual Scientific Assembly Manitoba College of Family Physicians	Ahmed Abou- Setta



Dissemination 2021 Conference Presentations by Task Force members continued

Month	Title	Location	Presenters
April	Evidence-based preventive care in 2021	Society of Rural Physicians of Canada Annual Meeting	Guylene Theriault, Roland Grad
October	Task Force: Hits, misses, and why are you so angry?	Practical Evidence for Informed Practice	Scott Klarenbach

2021 Invited Speaker Presentations by Task Force members:

Date	Title	Location	Presenters
October	Canadian Task Force on Preventive Health Care Presentation to Public Health Residents	University of Ottawa	Eddy Lang



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Dissemination Media: 2021 Highlights

- Media coverage of the Task Force increased in 2021 over 2020 (approximately 220 mentions versus 143).
- The C&G guideline news release was distributed through CMAJ channels and Eurekalert
 - C&G generated at least **150 items** in the media
- Media coverage of the Task Force increased in 2021 over 2020 (approximately 220 mentions versus 143).
- With the launch of the chlamydia and gonorrhea guideline, we also ran our first paid campaign in an effort to build awareness about the new guideline and increase followers.
 - The English campaign garnered 141,759 impressions and the French generated 14,618.



Dissemination Media Coverage

- Media coverage of the Task Force increased in 2021 over 2020 (approximately 220 mentions versus 143).
 - More than 150 mentions of the C&G guideline in Canadian, international and medical media outlets.
 - About 70 Task Force mentions of breast cancer, colorectal cancer, preventive health, prostate cancer and other topics.
 - Breast cancer continued to generate coverage, mainly related to the Dense Breasts advocacy for mammograms
- We received approximately **17 requests** for interviews and information in 2021 (compared with 6 in 2020).
 - Chlamydia and gonorrhea guideline (5 requests), breast cancer
 (6), miscellanous (6)

*Note: Totals are approximate as tracking methods differ and monitoring services do not pick up mentions in languages beyond English and French



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Dissemination Task Force Newsletter

- **19% increase** in newsletter subscribers from 3952 (December 31, 2020) to 4848 (December 31, 2021)
- The C&G guideline in April was the most read item in the 2021 newsletters/alerts, with an open rate of 45.4% and a click through (to an article) of 31%
- Low unsubscribe rate (ranging from 2 to 6 per issue), which is below average



Dissemination Task Force Social Media

- Twitter followers increased to **914** (from 808) by end of December 2021
- Engagement and overall impressions decreased in 2021.
 - This can be attributed to the continued impact of the pandemic, change in strategy and the effect of losing the Task Force's incoming chair, Dr. Ainsley Moore.
- In 2021, with the launch of the chlamydia and gonorrhea guideline, we also ran our first paid campaign in an effort to build awareness about the new guideline and increase followers. The English campaign garnered 141,759 impressions and the French generated 14,618.
- The top tweet in 2021 was on October 18, for Women's History Month, with 48,400 impressions.





Integrated Knowledge Translation

TF-PAN – **Background**

- The Task Force Public Advisors Network (TF-PAN) is an initiative to encourage early and meaningful engagement of members of the public with the Task Force by seeking their input throughout the development and dissemination of Task Force guidelines
- This approach is a departure from the Task Force's traditional patient
 preferences model
- In 2020, the KT team developed the TF-PAN for use in guideline development going forward



TF-PAN – Membership

• Core TF-PAN group (N = 20)

 Trained, participate in community juries

- Expanded TF-PAN group (N > 75)
 - Not trained, interested in participating in Task Force KT projects





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TF-PAN – Activities

At <u>minimum</u>, we engage members in three ways:

- 1. Participate in welcome orientation session
- 2. Participate in the training sessions
- 3. Participate in at least two Community Jury sessions per year
- Members may optionally participate in other activities, such as:
 - Dissemination activities: providing input on media materials, identifying channels and networks for dissemination, or sharing materials through their own channels and networks etc.



Integrated knowledge translation Usability testing – <u>2020*</u>

• Usability testing was completed for 2 KT tools (2 guideline tools):

Guideline	ΤοοΙ	Clinician participants	Patient participants
Chlamydia & Gonorrhea	Clinician FAQ & Patient FAQ	8	7

*Note: In 2021, no tools underwent usability testing.







Research Projects

Overview of the Stakeholder Council Project

Objective: to serve as a means to engage and inform key stakeholder organizations and individuals throughout the development and dissemination of guidelines and seek their input as appropriate

- Based on initial phases of this project, conversation among the Task Force, and with Canadian Partnership Against Cancer (CPAC), the initiative has evolved
- Now to be piloted engaging the CPAC-hosted Cancer Screening Networks (CSNs)
- Engagement with wider group of stakeholders to follow


Stakeholder Council Project: Rationale – CSN engagement

- To be piloted as focused engagement initiative with CPAC-hosted CSNs
- CSNs facilitate implementation of high quality jurisdictional cancer screening programs
- CSNs identified as priority stakeholders for the Task Force
- At present, Task Force engages ad hoc with CSNs



Stakeholder Council Project: Approach – CSN engagement

 Proposing 2 activities to increase and standardize engagement between Task Force cancer GL WGs and CSNs

Activity 1: Inviting CSN members to participate in external review process
 Activity 2: Attending and presenting on GL at CSN meeting

- GL WGs can choose to take part in both, one, or neither of these activities
- CSNs exist for breast, cervical, colorectal and lung cancer; scope of this engagement therefore limited to the GLs that overlap with these cancer types



Research Projects **Presenting GRADE guideline recommendation statements**

2021 Annual Evaluation Survey Results				
Question <u>% Aware</u> of recent language				
(N = 168)	change			
Are you aware of the Task Force's recent language change	27%			
from 'weak' to 'conditional' recommendations?	(n = 46)			

Question (N = 168)		%No	% Not Sure
Does the language change from "weak" to "conditional" help facilitate the implementation of recommendations where the balance between desirable and undesirable effects is small, the quality of evidence is lower, and there is more variability in the values and preferences of individuals?	42% (n = 71)	17% (n = 29)	41% (n = 68)





Survey Results



required to answer questions.



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2021

• Awareness and use of Task Force guideline

Chlamydia and gonorrhea guideline	2021 Responses	
% of respondents aware of Task Force guideline	53% (N = 162)	
% who primarily use Task Force guideline (over other guidelines or no guidelines)	37% (N = 167)	
Satisfaction with guideline (out of 7)	5.9 ± 1.2 (N = 83)	



• Practice change and intent to change

Screening for chlamydia and gonorrhea guideline	Responses	
% who changed their practice to specifically align with	40%	
Task Force guideline since its release	(N = 83)	
% whose practice was already consistent with the Task	35%	
Force guideline	(N = 83)	
# who intend to change their practice / # who indicated they have not changed their practice	2/21	



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Awareness and use of Task Force KT tools among participants who are aware of the guideline (N = 86)





Current practice

Task Force recommendation	Respondents reported that practice aligned with Task Force recommendations (N = 176)
We recommend opportunistic screening of sexually active individuals under 30 years of age who are not known to belong to a high-risk group, annually, for chlamydia and gonorrhea at primary care visits, using a self- or clinician-collected sample (Conditional recommendation; very low-certainty evidence).	28%



2018

• Awareness and use of Task Force guideline

Breast cancer guideline	2021	2020	2019	2018
	Responses	Responses*	Response*	Responses*
% of respondents aware of Task Force guideline	88%	90%	84%	75%
	(N = 162)	(N = 271)	(N = 263)	(N = 244)
% who primarily use Task Force guideline (over other guidelines or no guidelines)	42% (N = 166)	44% (N = 268)	38% (N = 263)	49% (N = 199)
Satisfaction with guideline (out of 7)	5.6 ± 1.5	5.9 ± 1.2	5.8 ± 1.3	5.8 ±1.1
	(N = 133)	(N = 241)	(N = 223)	(N = 140)

*These results were retrieved from the Task Force 2020 Annual Evaluation reports



• Practice change and intent to change

Breast cancer guideline	2021 Responses	2020 Responses*	2019 Responses*	2018 Responses*
% who changed their practice to specifically align with Task Force guideline since its release	41% (N = 137)	29% (N = 239)	32% (N = 223)	49% (N = 125)
% whose practice was already consistent with the Task Force guideline	53% (N = 137)	57% (N = 239)	51% (N = 223)	44% (N = 125)
# who intend to change their practice / # who indicated they have not changed their practice	2/9	13/35	6/38 (22 were undecided)	3/6



* These results were pulled from the Task Force 2018, 2019, 2020 Annual Evaluation report



Awareness and use of Task Force KT tools among participants who are aware of the guideline (N = 142)





• Current practice

Task Force recommendation	Respondents aligned with Task Force practice recommendations 2021	2020 Alignment*	2019 Alignment*	2018 Alignment*
For women aged 40–49, we recommend not routinely screening with mammography	82%	80%	78%	87%
	(N = 176)	(N = 289)	(N = 263)	(N = 243)
For women aged 50-69 years, we recommend screening with mammography every 2-3 years	90%	90%	90%	89%
	(N = 176)	(N = 289)	(N = 263)	(N = 198)
We recommend not routinely performing a clinical breast exam alone or in conjunction with mammography to screen for breast cancer	74% (N = 176)	78% (N = 289)	76% (N = 263)	75% (N = 199)



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• Current practice

Patient age group	Respondents who routinely discuss the harms and benefits with patients in each age group (N = 176)	2020 Responses* (N = 288)	2019 Responses* (N = 263)	2018 Responses* (N = 244)
39 and younger	12%	18%	23%	15%
40 to 49	59%	64%	67%	54%
50 to 69	73%	75%	75%	74%
70 to 74	47%	55%	51%	45%
75 and older	22%	29%	33%	19%



St. Michael's Inspired Care. Inspiring Science. Note: Numbers may not add up to the total as PCPs could provide multiple responses, or select none of the options.

*These results were retrieved from the Task Force 2018, 2019, 2020 Annual Evaluation report

S55



• Awareness and use of Task Force guideline

Cervical cancer	2021	2020	2019	2018	2017
guideline	Responses	Responses*	Responses*	Responses*	Responses*
% of respondents aware of Task Force guideline	88% (N = 162)	87% (N = 271)	83% (N = 263)	82% (N = 244)	89% (N = 198)
% who primarily use Task Force guideline (over other guidelines or no guidelines)	34% (N = 166)	32% (N = 268)	23% (N = 263)	29% (N = 199)	22% (N = 167)
Satisfaction with guideline (out of 7)	6.0 ± 1.1	6.0 ± 1.1	5.9 ± 1.1	6.0 ± 0.9	6.3 ±1.0
	(N = 128)	(N = 233)	(N = 218)	(N = 155)	(N = 146)



St. Michael's Inspired Care. Inspiring Science. *These results were retrieved from the Task Force 2017, 2018, 2019, 2020 Annual Evaluation report



Practice change and intent to change

Cervical cancer guideline	2021 Responses	2020 Responses*	2019 Responses*	2018 Responses*	2017 Responses*
% who changed their practice to specifically align with Task Force guideline since its release	45% (N = 137)	34% (N = 232)	42% (N = 218)	58% (N = 143)	61% (N = 113)
% whose practice was already consistent with the Task Force guideline	40% (N = 137)	47% (N = 232)	37% (N = 218)	25% (N = 143)	27% (N = 113)
# who intend to change their practice / # who indicated they have not changed their practice	6/21	12/44 (19 were undecided)	11/45 (18 were undecided)	3/13	**



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**This question was not asked in the 2017 annual evaluation survey







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• Current practice

Task Force recommendation	Respondents aligned with Task Force practice recommendations 2021	2020 Alignment*	2019 Alignment*	2018 Alignment*	2017 Alignment*
For women aged 30 to 69, we recommend routine screening for cervical cancer every 3 years	86% (N = 175)	91% (N = 283)	82% (N = 263)	87% (N = 200)	92% (N = 167)
For women aged 24 or younger, we recommend not routinely screening for cervical cancer	64% (N = 176)	58% (N = 283)	47% (N = 263)	51% (N = 243)	45% (N = 197)



• Current practice

Patient age group	Respondents who routinely discuss the harms and benefits with patients in each age group 2021 (N = 175)	2020 Responses* (N = 282)	2019 Responses* (N = 263)	2018 Responses* (N = 200)
19 and younger	13%	18%	27%	22%
20 to 24	49%	55%	68%	60%
25 to 29	63%	71%	73%	64%
30 to 69	62%	71%	73%	65%
70 and older	21%	27%	28%	21%

Note: Numbers may not add up to the total as PCPs could provide multiple responses, or select none of the options.

*These results were retrieved from the Task Force 2018, 2019, 2020 Annual Evaluation report



S60

2014

• Awareness and use of Task Force guideline

Prostate cancer	2021	2020	2019	2018	2017
guideline	Responses	Responses*	Responses*	Responses*	Responses*
% of respondents aware of Task Force guideline	86%	82%	84%	81%	88%
	(N = 162)	(N = 271)	(N = 263)	(N = 244)	(N = 198)
% who primarily use Task Force guideline (over other guidelines or no guidelines)	66% (N = 166)	66% (N = 268)	59% (N = 263)	59% (N = 199)	55% (N = 166)
Satisfaction with guideline (out of 7)	5.7 ± 1.4	5.7 ± 1.2	5.5 ± 1.4	5.7 ± 1.1	5.6 ±1.5
	(N = 124)	(N = 219)	(N = 220)	(N = 158)	(N = 149)

*These results were retrieved from the Task Force 2017, 2018, 2019, 2020 Annual Evaluation report



• Practice change and intent to change

Prostate cancer guideline	2021 Responses	2020 Responses*	2019 Responses*	2018 Responses*	2017 Responses*
% who changed their practice to specifically align with Task Force guideline since its release	42% (N = 133)	38% (N = 217)	36% (N = 220)	53% (N = 143)	47% (N = 118)
% whose practice was already consistent with the Task Force guideline	47% (N = 133)	51% (N = 217)	37% (N = 220)	41% (N = 143)	36% (N = 118)
# who intend to change their practice / # who indicated they have not changed their practice	0/15	6/11 (3 are undecided)	15/28 (11 are undecided)	2/8	**



*These results were retrieved from the Task Force 2017, 2018, 2019, 2020 Annual Evaluation reports **This question was not asked in the 2017 annual evaluation survey

S62

Awareness and use of Task Force KT tools among participants who are aware of the guideline (N = 139)





Current practice

Task Force recommendation	Respondents aligned with Task Force practice recommendations 2021	2020 alignment*	2019 alignment*	2018 alignment*	2017 alignment*
For men aged 54 or younger, we recommend not screening for prostate cancer with the prostate- specific antigen test	86% (N = 168)	86% (N = 281)	81% (N = 263)	88% (N = 199)	84% (N = 167)
For men aged 55–69 years, we recommend not screening for prostate cancer with the prostate- specific antigen test	67% (N = 168)	89% (N = 281)	66% (N = 263)	79% (N = 243)	84% (N = 31)



2014

Current practice

Patient age group	Respondents who routinely discuss the harms and benefits with patients in each age group 2021 (N = 167)	2020 Responses* (N = 281)	2019 Responses* (N = 263)	2018 Responses* (N = 200)
54 and younger	40%	50%	49%	49%
55 to 69	71%	80%	79%	76%
70 and older	34%	44%	51%	38%

Note: Numbers may not add up to the total as PCPs could provide multiple responses, or select none of the options.

*These results were retrieved from the Task Force 2018, 2019, 2020 Annual Evaluation reports



Survey Task Force Resources Awareness

Task Force Resources	% PCPs Aware (N = 134)
Task Force Newsletter	53%
Task Force Twitter Account	7%
Task Force Website	81%
Lung Cancer Screening Video	13%
QxMD Calculate Mobile Application	36%
Task Force Cervical Cancer Screening e-learning module	14%
Task Force Obesity Prevention and Management e-learning module	14%
Task Force CFP article series: 'Prevention in Practice'	40%
Prevention Plus	7%
Task Force Podcasts	15%
ECRI	4%



Survey Task Force KT Tool access

	% of PCPs that use this source to access KT tools					
Source	2021	2020	2019 (N = 263)	2018 (N = 200)		
Website	94% (N = 129)	94% (N = 217)	75%	71%		
Printed copies (conferences)	50% (N = 68)	70% (N = 128)	23%	33%		
Printed copies (personal)	31% (N = 68)	39% (N = 128)	21%	22%		
Printed copies (CMAJ)	10% (N = 68)	18% (N = 128)	11%	12%		
QxMD	2% (N = 129)	8% (N = 217)	6%	6%		
Tool dissemination pilot (digital)	2% (N = 129)	*	*	*		
Tool dissemination pilot (print)	9% (N = 68)	*	*	*		



*This question was not asked in the 2018, 2019, 2020 annual evaluation surveys as the tool dissemination pilot was launched in 2021



Interview Demographics







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Appendices

Ab	br	evia	itio	ns

Canadian Family Physician
College of Family Physicians Canada
Canadian Medical Association Journal
Canadian Partnership Against Cancer
Clinical practice guidelines
Clinical Prevention Leaders
Cancer Screening Networks
Computed tomography
Electronic medical record
Family Medicine Forum
Fédération des médecins omnipraticiens du Québec
Grading of Recommendations, Assessment, Development and Evaluation
Integrated knowledge translation
Institut national d'excellence en santé et services sociaux
Institute of Medicine
Knowledge translation
Nurse Practitioner Association of Canada
Primary care practitioner
Prostate-specific antigen
Canadian Task Force on Preventive Health Care
Task Force Public Advisory Network
United States Preventive Services Task Force



Survey

Task Force 2021 Annual Evaluation

Start of Block: Screening Survey

Q1 Thank you for your interest in the Canadian Task Force on Preventive Health Care Annual Evaluation!

Please answer the following questions to determine your eligibility to participate.

 Q2 What is your profession? (Select all that apply)

 Primary care physician

 Nurse practitioner

 Nurse

 Resident

 Medical student

 Allied health care professional (e.g. physiotherapist, occupational therapist, physician assistant)

 Researcher

 Other, please specify:

 Skip To: Q5 If What is your profession? (Select all that apply) = Medical student

 Skip To: Q5 If What is your profession? (Select all that apply) = Allied health care professional (e.g. physician assistant)

Skip To: Q5 If What is your profession? (Select all that apply) = Nurse

Page Break -



Q3 I have conflicts of interest relating to Task Force clinical practice guidelines (e.g., owning shares in a company that sells screening tests).

◯ Yes

🔾 No

Skip To: Q5 If I have conflicts of interest relating to Task Force clinical practice guide Yes	lines (e.g., owning sh =
Page Break	

Q4 Are you practicing primary care in Canada?

◯ Yes

🔿 No

Skip To: Q5 If Are you practicing primary care in Canada? = No Skip To: End of Block If Are you practicing primary care in Canada? = Yes

Page Break

Q5 Thank you for your interest in participating in the Canadian Task Force on Preventive Health Care (Task Force) annual evaluation. Unfortunately you are not eligible to participate in this study. If you would like to receive newsletters and announcements from the Task Force, please <u>click here</u> to enter your contact information and be added to our listserv.

Page Break —

End of Block: Screening Survey

Start of Block: Letter of Information

Q6 Letter of information and consent to participate (click here to view the full version) The Canadian Task Force on Preventive Health Care ("Task Force") is an organization funded by the Public Health Agency of Canada (PHAC) to develop clinical practice guidelines that support primary care



providers in delivering preventive health care. We are currently conducting an evaluation of the Task Force's activities in 2021 to assess the reach and uptake of these clinical practice guidelines in primary care settings. You are invited to participate in our evaluation because you are a primary care practitioner in Canada who may have experience with the Task Force's clinical practice guidelines. During the survey, you will be asked about your knowledge and perceptions of the Task Force's clinical practice guidelines, tools, and resources, and barriers/facilitators for clinical practice guideline implementation in your clinic.

We estimate the survey will take you 20-30 minutes.

If you have any questions, concerns, or technical difficulties, please contact the study Research Coordinator, Harleen Buttar, at Harleen.Buttar@unityhealth.to. If you wish to withdraw your consent to participate at any time, simply stop answering the questions and close your browser. Any information collected up to the point that you withdraw will be used. You may skip questions you prefer You will have the opportunity to enter a draw for an iPad. Draw entry is at the end not to answer. of the survey. Contact information provided for the draw will not be linked to survey answers The results of this evaluation will be circulated to the Task Force and collaborating provided. organizational partners. The results of this evaluation may also be presented at conferences, seminars or other public forums, and published in journals. We will not be using direct quotes from the surveys. We will publish our results in aggregate form only - you will not be identified by name anywhere. If you have any concerns about this study, you may contact the Unity Health Research Ethics Board at 416-864-6060 Ext. 2557.

X-

Q7 Do you consent to participate in the Task Force 2021 annual evaluation survey?

O I consent to participate in the annual evaluation survey

O I **do not** consent to participate in the annual evaluation survey

Skip To: End of Survey If Do you consent to participate in the Task Force 2021 annual evaluation survey? = I do not consent to participate in the annual evaluation survey

End of Block: Letter of Information

Start of Block: Current preventive health care practices

Q8 Please respond to the following questions based on your **current preventive health care practices**.



Please note that preventive health care practices, which include screening, target those **who are asymptomatic and not identified as high risk**.

Q9 How often do you screen for chlamydia and gonorrhea for sexually active individuals under 30 years of age who are not known to belong to a high-risk group?

	\bigcirc	Screen	the	patient	every	year
--	------------	--------	-----	---------	-------	------

- Screen the patient every two years
- O Screen the patient every three years
- Screen the patient every four years
- O Do not routinely screen the patient
- O Other: _____

Q10 How often do you screen for **breast cancer** with <u>mammography</u> in a person aged 40 to 49 years?

Screen the patient every year	ar
-------------------------------	----

- O Screen the patient every two years
- Screen the patient every three years
- O Screen the patient every four years
- O Do not routinely screen the patient
- Other: _____

A5


Q11 How often do you screen for breast cancer with mammography in a person aged 50 to 69 years?

- O Screen the patient every year
- Screen the patient every two years
- O Screen the patient every three years
- Screen the patient every four years
- O Do not routinely screen the patient
- Other:

Q12 How often do you screen a person for breast cancer by conducting a clinical breast exam?

- Screen the patient every year
- Screen the patient every two years
- Screen the patient every three years
- O Screen the patient every four years
- O Do not routinely screen the patient
- O Other: _____



Q13 With which patient age groups do you routinely discuss the harms and benefits of **breast cancer screening**? <u>Select all that apply</u>.

39 and younger
⁴⁰ 40 to 49
50 to 69
⁷⁰ to 74
75 and older
\bigcirc \bigotimes I do not routinely discuss the harms and benefits of screening for breast cancer with patients
Page Break
Q14 How often do you screen for cervical cancer in a person younger than 25 years old?
O Screen the patient every year
 Screen the patient every year Screen the patient every two years
 Screen the patient every two years
 Screen the patient every two years Screen the patient every three years



Q15 How often do you screen for cervical cancer in a person aged 25 to 29 years?

- O Screen the patient every year
- Screen the patient every two years
- Screen the patient every three years
- Screen the patient every four years
- O Do not routinely screen the patient
- Other: _____

Q16 How often do you screen for cervical cancer in a person aged 30 to 69 years?

- O Screen the patient every year
- Screen the patient every two years
- Screen the patient every three years
- O Screen the patient every four years
- O Do not routinely screen the patient
- O Other: _____



Q17 With which patient age groups do you routinely discuss the harms and benefits of **cervical cancer screening**? <u>Select all that apply</u>.

19 and younger
20 to 24
25 to 29
□ 30 to 69
70 and older
\bigcirc \bigotimes I do not routinely discuss the harms and benefits of screening for cervical cancer with patients
Page Break
Q18 How often do you screen for prostate cancer with the <u>PSA test</u> in a person younger than 55 years old?

\bigcirc Screen the patient every year
\bigcirc Screen the patient every two years
\bigcirc Screen the patient every three years

- \bigcirc Screen the patient every four years
- O Do not routinely screen the patient
- Other: _____



Q19 How often do you screen for prostate cancer with the PSA test in a person 55 to 69 years old?

○ Screen the patient every year
○ Screen the patient every two years
\bigcirc Screen the patient every three years
○ Screen the patient every four years
\bigcirc Do not routinely screen the patient
O Other:

Q20 With which patient age groups do you routinely discuss the harms and benefits of **prostate cancer screening**? <u>Select all that apply.</u>

 $^{
m J}$ 54 and younger

^J 55 to 69

^J 70 and older

 \bigcirc I do not routinely discuss the harms and benefits of screening for prostate cancer with patients

Q21 The CTFPHC grades recommendations as either "strong" or "conditional" according to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system.

The Task Force previously used the term "weak recommendation", but has replaced this with the term "conditional recommendation", to improve understanding and facilitate implementation of guidance, based on feedback from clinician knowledge users.

"Conditional recommendations" result when the balance between desirable and undesirable effects is



small, the quality of evidence is lower, and there is more variability in the values and preferences of individuals.

$X \rightarrow$
Q22 Are you aware of the recent change of language from "weak" to "conditional"?
○ Yes
○ No
<i>X</i> →
Q23 In your experience, does the language change from "weak" to "conditional" help facilitate the implementation of recommendations where the balance between desirable and undesirable effects is small, the quality of evidence is lower, and there is more variability in the values and preferences of individuals?
○ Yes
○ No
◯ Not sure

Q24 (Optional) Please describe any additional thoughts you have on how the wording used to describe 'conditional' or 'weak' recommendations may impact implementation.



End of Block: Current preventive health care practices

Start of Block: Use and satisfaction with guidelines

Q25 For the following preventive health topics, please indicate whether you primarily use provincial/territorial or national clinical practice guidelines.

Q26 Chlamydia and gonorrhea screening

○ Task Force national guideline
Other national guideline
O Provincial/terrirotial
O Other guideline:
O I do not follow a guideline
Q27 Breast cancer screening
C Task Force national guideline
O Other national guideline:
O Provincial/territorial
O Other guideline:
\bigcirc I do not follow a guideline



Q28 Cervical cancer screening
○ Task Force national guideline
O Other national guideline:
O Provincial/territorial
O Other guideline:
O I do not follow a guideline
Q29 Prostate cancer screening
◯ Task Force national guideline
O Other national guideline:
O Provincial/territorial
O Other guideline:
O I do not follow a guideline
Page Break



Q30 We will now ask you some questions about the Canadian Task Force for Preventive Health Care (Task Force) guidelines, tools, and resources.

$X \rightarrow$					
Q31 Are you aware of Task Force clinical practice guidelines?					
I am aware of Task Force screening guidelines					
I am not aware of Task Force screening guidelines					
Skip To: End of Block If Are you aware of Task Force clinical practice guidelines? = I am not aware of Task Force screening guidelines					
X÷					
Q32 Which Task Force clinical practice guidelines are you aware of? Select all that apply.					
Chlamydia and gonorrhea screening					
Breast cancer screening update (released December 2018)					
Cervical cancer screening					
Prostate cancer screening					
Page Break					
Carry Forward Selected Choices from "Which Task Force clinical practice guidelines are you aware of? Select all that apply."					
$X \rightarrow$					

Q33 How satisfied are you with the following Task Force guideline recommendations?



- 1 Not at all satisfied
- 4 Neither satisfied nor dissatisfied
- 7 Very satisfied.

	1	2	3	4	5	6	7
Chlamydia and gonorrhea screening							
Breast cancer screening update (released December 2018)							
Cervical cancer screening							
Prostate cancer screening							

Q34 Please provide any explanation or comments for your dissatisfaction with Task Force guideline recommendations.

Page Break _____



If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Chlamydia and gonorrhea screening

Q35 Have you changed your practice to align with the Task Force chlamydia and gonorrhea screening guideline since its release in 2021?

• Yes, I have changed my practice to align with the Task Force chlamydia and gonorrhea screening guideline

No, I have not changed my practice to align with the Task Force chlamydia and gonorrhea screening guideline

O My practice was already consistent with the Task Force chlamydia and gonorrhea guideline (e.g. my practice was already consistent with the Task Force recommendations when this guideline was released, or I began practising after the guideline was released and I've always followed the Task Force recommendations)

Display This Question:

If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Breast cancer screening update (released December 2018)

Q36 Have you changed your practice to align with the Task Force breast cancer guideline update since its release in 2018?

• Yes, I have made changes in my practice to specifically align with the Task Force breast cancer screening guideline

• No, I have not made changes in my practice to specifically align with the Task Force breast cancer screening guideline

My practice was already consistent with the guideline (e.g. I began practicing after the guideline was released and I've always followed the Task Force recommendation, or my practice was already consistent with the Task Force recommendations when this guideline was released)



If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Cervical cancer screening

X→

Q37 Have you changed your practice to align with the Task Force cervical cancer screening guideline since its release in 2013?

○ Yes, I have changed my practice to align with the Task Force cervical cancer screening guideline

No, I have not changed my practice to align with the Task Force cervical cancer screening guideline

My practice was already consistent with the guideline (e.g. my practice was already consistent with the Task Force recommendations when this guideline was released, or I began practising after the guideline was released and I've always followed the Task Force recommendation)

Display This Question:

If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Prostate cancer screening

X -

Q38 Have you changed your practice to align with the Task Force prostate cancer screening guideline since its release in 2014?

○ Yes, I have changed my practice to align with the Task Force prostate cancer screening guideline

○ No, I have not changed my practice to align with the Task Force prostate cancer screening guideline

O My practice was already consistent with the Task Force prostate cancer guideline (e.g. my practice was already consistent with the Task Force recommendations when this guideline was released, or I began practising after the guideline was released and I've always followed the Task Force recommendations)



If Have you changed your practice to align with the Task Force chlamydia and gonorrhea screening gui... = No, I have not changed my practice to align with the Task Force chlamydia and gonorrhea screening guideline

Or Have you changed your practice to align with the Task Force breast cancer guideline update since... = No, I have not made changes in my practice to specifically align with the Task Force breast cancer screening guideline

Or Have you changed your practice to align with the Task Force cervical cancer screening guideline s... = No, I have not changed my practice to align with the Task Force cervical cancer screening guideline

Or Have you changed your practice to align with the Task Force prostate cancer screening guideline s... = No, I have not changed my practice to align with the Task Force prostate cancer screening guideline

Q39 The following table lists the Task Force screening guidelines for which you indicated you have <u>not</u> made changes in your practice to specifically align with the Task Force recommendations. Do you <u>intend</u> to make practice changes to align with any of the following Task Force guidelines?

Display This Choice:

If Have you changed your practice to align with the Task Force breast cancer guideline update since... = No, I have not made changes in my practice to specifically align with the Task Force breast cancer screening guideline

Display This Choice:

If Have you changed your practice to align with the Task Force cervical cancer screening guideline s... = No, I have not changed my practice to align with the Task Force cervical cancer screening guideline

Display This Choice:

If Have you changed your practice to align with the Task Force esophageal adenocarcinoma screening g... = No, I have not made changes in my practice to specifically align with the Task Force esophageal adenocarcinoma screening guideline

Display This Choice:

If Have you changed your practice to align with the Task Force breast cancer guideline update since... = No, I have not made changes in my practice to specifically align with the Task Force breast cancer screening guideline



	l <u>intend</u> to align my practice with this Task Force guideline	l <u>do not intend</u> to align my practice with this Task Force guideline	I haven't decided yet
Display This Choice: If Have you changed your practice to align with the Task Force breast cancer guideline update since = No, I have not made changes in my practice to specifically align with the Task Force breast cancer screening guideline	0	0	\bigcirc
Chlamydia and gonorrhea			
Display This Choice: If Have you changed your practice to align with the Task Force cervical cancer screening guideline s = No, I have not changed my practice to align with the Task Force cervical cancer screening guideline	0	\bigcirc	0
Cervical cancer			



Display This Choice:

If Have you changed your practice to align with the Task Force esophageal adenocarcinoma screening g... = No, I have not made changes in my practice to specifically align with the Task Force esophageal adenocarcinoma screening guideline

Prostate cancer

Display This Choice:

If Have you changed your practice to align with the Task Force breast cancer guideline update since... = No, I have not made changes in my practice to specifically align with the Task Force breast cancer screening guideline

Breast Cancer

End of Block: Use and satisfaction with guideline	End	of Block:	Use and	satisfaction	with guideline
---	-----	-----------	---------	--------------	----------------

Start of Block: Tools and resources

Display This Question:

If Are you aware of Task Force clinical practice guidelines? != I am not aware of Task Force screening guidelines

Q39 Are you **aware of** or **have you used** any of the the clinical practice guidelines? Select all that apply.

following Task Force tools that accompany

A20



If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Chlamydia and gonorrhea screening

Q40 Chlamydia and gonorrhea screening tools

	I am aware of this tool	I have used this tool
Clinician FAQ		
Patient FAQ		
Infographic		

Display This Question:

If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Breast cancer screening update (released December 2018)

Q41 Breast cancer screening update (2018) tools

	I am aware of this tool	I have used this tool
1000-person tool		
1000-person tool, age 40-49		
1000-person tool, age 50-59		
1000-person tool, age 60-69		
1000-person tool, age 70-74		



If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Cervical cancer screening

Q42 Cervical cancer screening tools

	I am aware of this tool	I have used this tool
Clinician algorithm		
Clincian FAQ		
Patient algorithm		
Patient FAQ		
	1	

Display This Question:

If Which Task Force clinical practice guidelines are you aware of? Select all that apply. = Prostate cancer screening



Q43 Prostate cancer screening to	ools	
	I am aware of this tool	I have used this tool
Clinician FAQ		
Patient FAQ		
1000-person tool		
Infographic		
CTFPHC prostate-specific antigen screening video		
Q44 How do you access the T	ask Force tools? Select all that a	apply.
Q44 How do you access the T	ask Force tools? Select all that a	apply.
Q45 Digital		
\square I view them on the Task F	orce website	
I view them on the Task F being updated. Our guideline	orce mobile app (Please note: Tanta and tools are now included in the	ask Force mobile app is no longer he app QxMD Calculate.)
I view them on the QxMD	mobile app	
I received them through the through the second s	ne Knowledge Translation (KT) T	ool Dissemination Pilot



Q46 Print
I printed copies for myself
I have printed copies that came with my CMAJ publication (<i>Please note: printed copies of CTFPHC tools are no longer sent with CMAJ publications, as of 2018</i>)
I received laminated copies at a conference (i.e. FMF, MFC)
\square I received them through the Knowledge Translation (KT) Tool Dissemination Pilot
Q47 Other

Page Break







Page Break
Q50 Did you take part in any of the following Task Force activities in 2021? Select all that apply.
Q51 An interview or focus group to give your feedback on a draft tool (e.g. usability testing)
Q52 2020 annual evaluation interviews or survey Ves
○ No
Q53 Guideline stakeholder webinars Chlamydia and gonorrhea
Q54 Clinical Prevention Leaders (CPL) Network training sessions Yes No



Q55 Online	topic suggestion process
◯ Yes	
\bigcirc No	
Page Break	

Q56 Please provide any additional comments or feedback you have on the Task Force guidelines, tools, or resources.

End of Block: Tools and resources

Start of Block: Demographics

Q57 What	is your gender?		
◯ Male	e		
◯ Fem	nale		
○ Non-	-binary		
	er to self-describe	 	
O Prefe	er not to say		



- Q58 In which province or territory do you practice?
 - O British Columbia
 - O Alberta
 - Saskatchewan
 - O Manitoba
 - Ontario
 - O Quebec
 - O New Brunswick
 - O Nova Scotia
 - O Newfoundland
 - O Prince Edward Island
 - O Yukon
 - Northwest Territories
 - O Nunavut



Q59 How old are you?

20 to 29

- O 30 to 39
- 40 to 49
- 50 to 59
- O 60 to 69
- \bigcirc 70 to 79
- \bigcirc 80 or older

Q60 How many years have you been practicing?

○ 5 or fewer

O 6 to 10

- O 11 to 15
- 16 to 20
- O 21 to 25
- O 26 to 30
- \bigcirc 31 to 35
- O 36 to 40

○ 41 or more



Q61 What	is your clinical setting? Select all that apply.
Urbai	n
Subu	rban
Rural	
Other	r, please specify:

Q62 What language do you primarily practice in (select all that apply)?

English	
French	
Mandarin	
Cantonese	
Punjabi	
□ Spanish	
Other(please specify):	



Q63 What is your clinic type? Select all that apply.

^{__]} Hospital-based

- Community-based
- ^J Multidisciplinary clinic
- ^J Physician group clinic
- Single practitioner clinic
- Other, please specify: _____

Q64 How did you hear about this survey?

- O Task Force Newsletter
- O Task Force website
- O Task Force Twitter account
- O Task Force LinkedIn account
- Task Force Instagram account
- Task Force Facebook account
- 🔘 Email
- Friend/colleague

O Other (please describe); _____

Page Break -



Q65 Are you willing to participate in a one hour follow-up interview? The interview will ask you about your experiences with the Task Force and about how you use guidelines in your practice. If you complete an interview, you will receive a \$100 honorarium. If you do not want to participate in the interview, you can enter a draw for an iPad.

Yes, I will participate in an interview	\bigcirc	Yes, I	will	participate	in an	interview
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💛 No, I	am not	willing	to	participate	ın	an	Interviev	V

Page Break

Q66 Would you like to be entered into the draw to win an iPad? The winner will be drawn randomly in Spring 2022. Your contact information will be kept confidential.

◯ Yes

O No

Q67 The Canadian Task Force on Preventive Health Care has a mailing list that we use to send occasional emails about our work, including guideline and tool updates. We also send emails to the mailing list to recruit primary care practitioners to review tools and provide input into our research projects. Would you be interested in being added to our mailing list?

◯ Yes

🔿 No

Page Break -

Display This Question:

If Are you willing to participate in a one hour follow-up interview? The interview will ask you abou... = Yes, I will participate in an interview



Q68 Thank you for completing the survey and agreeing to a follow-up interview! Please <u>click</u> <u>herehttps://knowledgetranslation.qualtrics.com/jfe/form/SV_37spGx7AIHB28fQ</u>to provide your contact information so that we can contact you to schedule an interview. Your contact information will be kept confidential.

Display This Question:

If Would you like to be entered into the draw to win an iPad? The winner will be drawn randomly in S... = Yes And The Canadian Task Force on Preventive Health Care has a mailing list that we use to send occasion... = Yes

Q69 Thank you for completing the survey. Please <u>click here</u>to enter a draw to win an iPad. The draw will happen in Spring 2022. Your contact information will be kept confidential.

Display This Question:

If Would you like to be entered into the draw to win an iPad? The winner will be drawn randomly in S... = No And The Canadian Task Force on Preventive Health Care has a mailing list that we use to send occasion... = Yes

Q70 Thank you for completing the survey.

Please<u>https://knowledgetranslation.qualtrics.com/jfe/form/SV_6Kyv6VhICELIBylclick here</u>to be added to our email list. Your contact information will be kept confidential.

Page Break -----

Q71 Please share widely! We appreciate your support! If you know any primary care practitioners who would be interested in participating in this survey, <u>please send them to our website</u>.

Page Break

Q72 Thank you! If you have any questions, please contact Harleen Buttar, Research Coordinator, at

End of Block: Demographics

Harleen.Buttar@unityhealth.to



Interview Guide

Note to the interviewer: Before the interview, you will need:

- Summary of the interviewee survey responses about CTFPHC guidelines they know about and use, and their preference for provincial vs. national guidelines
- Summary of CTFPHC recommendation statements

Intro [~5 min]

Thank you for agreeing to speak with us. My name is [name] and I am a [title] with the Knowledge Translation Program at St. Michael's Hospital in Toronto. We are evaluating the 2021 activities of the Canadian Task Force on Preventive Health Care. As part of this evaluation, we are conducting interviews with practitioners about your experiences with the Task Force.

Today's interview will ask you about:

- Your knowledge and perceptions of the Task Force
- Your use of Task Force clinical practice guidelines, tools, and resources
- How preventive health care decisions get made
- How preventive health care happens in your practice

Do you have any questions?

[*If participant asks for more information: 'The Task Force develops and disseminates evidence-based guidelines on preventive health services for primary care practitioners. The survey you completed, as well as this interview, are a part of the annual evaluation of Task Force 2021 activities, and the feedback you provide will helps us to improve the Task Force's impact and identify new opportunities. As a primary care practitioner, we are interested in your knowledge of, and experiences with, the Task Force, how you use guidelines in your practice, as well as what factors influence preventive health care in your practice']

I will now go over the interview agreement.

- Your participation in this interview is voluntary.
- You can choose not to participate or you may withdraw at any time, even after the interview has started.
- This interview is confidential.
- We will record this interview.
- We will summarize the interview results. Summary results may be included in presentations and publications. Quotes from your interview may also be used. Any quotes or summary results will be de-identified.
- If you would like a report of the results, we can provide you with a summary when our analysis is complete.

Do you have any questions?

Do you agree to the interview and to the audio recording?



I will now turn on the audio recorder.

START RECORDING

Today is [date] and I am conducting Task Force [year] evaluation interview number [number].

Note to interviewer: The headings are for your use only. What appears in brackets is the construct from RE-AIM we are targeting with the questions.

Introduction to the Task Force (Factors affecting Reach) [~5 -10 min]

- How did you first learn about the Task Force?
 - Probes: Were you exposed to the Task Force in medical school or your residency training? If so, what did they teach?
- How do you typically hear about new or updated guidelines?
 - Are you familiar with the Task Force's most recent guideline (screening for chlamydia and gonorrhea, released April 2021)? If so, how did you hear about this guideline?
 - Are you aware of the 2018 Breast Cancer UPDATE (as opposed to the 2013 original guideline). How long did it take you to become aware?

Experiences with Task Force over time (Effectiveness, factors affecting Adoption) [~5 -10 min] (Note to interviewer: For this area of questioning, important to consider survey results – esp. which guidelines they use.)

- Describe the extent to which you use/follow recommendations from the Task Force?
 - Do you intend to change your practice to follow any recommendations from the Task Force, and if so, how do you intend to change your practice?
- When did you first start following recommendations from the Task Force? [*if they do follow TF guidelines]
- Could you describe how you make decisions on which recommendations to use/follow?
 - Probe: When a new Task Force recommendation comes out, how do you make a decision on whether or not to follow it?
- What influences your decision to change your preventive health care practices, such as screening?
 - Probe: Can you describe any instances where you changed your practice because of Task Force recommendations?
 - Probe: Have you ever started following a Task Force recommendation and then stopped?
 - Probe: What made you decide to stop? OR What could make you decide to stop following a recommendation?

Guideline decision making (Effectiveness, factors affecting Adoption) [~ 5 – 10 min]

- From your perspective, where is the main decision-making power for guideline uptake? Who are the influencers that drive guidelines becoming practice?
 - Probe: The practitioner, colleagues, the practice, leaders in the profession, the professional organization, the government, the public?



- What makes a guideline trustworthy?
 - Probes: What are your trusted sources for guidelines?
 - Probe: In your opinion, how does Task Force compare to other sources for guidelines?
 - Probe: Is Task Force trustworthy? Why or why not?
- What makes a guideline easier to implement?
 - Probe: What makes it difficult to implement?
- When you have multiple sources of conflicting information on a preventive health care topic, how do you evaluate which information to follow?
 - Probe: (Note to interviewer: For this probe, important to consider survey responses.) Think about a topic where the Task Force and provincial guidelines are different. How did you decide which recommendations to follow?

Engaging patients (Factors affecting Implementation) [~ 5 – 10 min]

- In your work setting(s), how are patients engaged in discussions about preventive health care? (if at all?)
 - Probe: How do you engage patients in discussions specifically about Task Force recommendations?
 - Probe: (Do you use Task Force KT tools?) How do you use Task Force KT tools?
 - What do you do if a patient's preferences do not align with a Task Force recommendation (e.g. the Task Force recommends you do not screen for prostate/breast cancer, but the patient is asking for screening).
- In your work setting(s), who else do you think could engage patients in discussions about Task Force recommendations? (*for example nurse practitioners, nurses, specialists etc.*)
 - a) Probe: How do you think that would work? What support would those people need to engage patients successfully?
 - b) Probe: Are there any other members of your health care team who engage patients in these discussions?

Accessing Task Force materials (Suggestions for improving Reach and Implementation) [~5 – 10 min]

- How can the Task Force improve your access to the recommendations and tools?
 - a) What are the current barriers, if any?
 - b) What are some recommendations the Task Force could consider to make it easier to access these guidelines/tools?

Final thoughts and thank you

• Do you have anything else you would like to share?

Thank you so much for taking the time to share with us today. We will be processing and mailing your compensation soon. Please know that the payment processing can take a few weeks. If you have any questions about the evaluation, or any other thoughts come up following today's interview, you can contact Nilram Jalilian, who emailed you to set up this interview.



Canadian Task Force for Preventive Health Care (CTFPHC) guidelines' quality assessment and comparison with other guidelines with similar scope

Prepared By:

Ivan D. Florez, University of Antioquia, Colombia / McMaster University, Canada, on behalf of the research team from the UNED (contracted by SPOR Evidence Alliance) Contact: ivan.florez@udea.edu.co; florezid@mcmaster.ca

Note: The SPOR Evidence Alliance contracted Ivan D. Florez team to develop the current project. The SPOR Evidence Alliance is supported by the Canadian Institutes of Health Research (CIHR) under Canada's Strategy for Patient-Oriented Research (SPOR) Initiative.

Research Team

This project was prepared by the research team from the *Unidad de Evidencia y Deliberación para la toma de decisiones en Salud* (UNED) from Universidad de Antioquia, Medellin, Colombia

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Abbreviations and acronyms

AAA:	Abdominal Aortic Aneurism
AAFP:	American Academy of Family Physicians
AB-HS:	Alberta Health Service (Alberta Provincial Genitourinary Tumour Team)
ACP:	American College of Physicians
ACS:	American Cancer Society
BC:	British Columbia Guidelines
CASL:	Canadian Association for the Study of the Liver
CAR:	Canadian Association of Radiology
CCO/PEBC:	Cancer Care Ontario's Program in Evidence-based Care
CDC:	Centers for Disease Control and Prevention
CSVS:	Canadian Society of Vascular Surgery
CTFPHC:	Canadian Task Force on Preventing Health Care
CUA:	Canadian Urological Association
FIT:	Fecal immunochemical test
gFOBT;	guaiac fecal occult blood test
HCV:	Hepatitis C Virus
IDSA:	Infectious Diseases Society of America
TOP:	Toward Optimized Practice Clinical Practice Guidelines
USPSTF:	U.S. Preventive Services Task Force.
V&P:	Values and Preferences
Y:	Years

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CTFPHC Guidelines Comparison Project

Introduction

The Strategy for Patient-Oriented Research (SPOR) Evidence Alliance is a Canada-wide alliance of researchers, healthcare providers, patients, policy makers and other knowledge users. The SPOR Evidence Alliance was established to provide national coordination and project management in support of knowledge synthesis, clinical practice guideline development, relevant knowledge translation, and patient-oriented research.

The Canadian Task Force on Preventing Health Care (CTFPHC) develops preventive health care guidelines for primary care practitioners on a variety of topics. The CTFPHC produces on average three guidelines per year, following a systematic methodology with input from task force members, patients, content experts and different stakeholders. The CTFPHC has requested the SPOR Alliance to perform a quality assessment and comparison of selected CTFPHC guidelines with guidelines from national or international organizations (non-CTFPHC) on specific topics.

Objective

The objective of this project was to compare a set of selected guidelines from the CTFPHC with national and international guidelines similar in scope, according to their characteristics and methodological quality to identify the potential factors behind the differences in the recommendations from both groups.

Methodology

This project involved four stages: 1) Guidelines' selection process; 2) Summary of guidelines' characteristics and main recommendations from guidelines; 3) Quality assessment of the guidelines (both CTFPHC and non-CTFPHC); and 4) Analysis of the differences between CTFPHC and non-CTFPHC guidelines.

Guidelines' selection process

The CTFPHC prioritized and requested an evaluation of the following guidelines:

- Colorectal cancer (2016)¹
- Breast cancer (2018)²
- Cervical cancer (2013)³
- Prostate cancer $(2014)^4$
- Lung cancer $(2016)^5$
- Abdominal Aortic Aneurysms (2017)⁶
- Hepatitis C (2017)⁷
- Asymptomatic Bacteriuria in Pregnancy (2018)⁸

• Developmental delay (2016)⁹

Additionally, the CTFPHC was interested in evaluating and comparing their guidelines (CTFPHC) with guidelines similar in scope and settings (non-CTFPHC). As per request, our team developed a systematic search of guidelines that could be "matched" to the CTFPHC guidelines. We conducted focused literature searches in ECRI- National Guidelines' Clearinghouse, Pubmed and in Canadian and/or American specialty and professional societies related to each one of the nine topics of the CTFPHC topics. We selected and prepared a list of 88 guidelines as candidates to be compared with the CTFPHC guidelines trying to match as much as possible the scope and the date of publication. We categorized them in three categories: Canadian, US, and International Guidelines. Appendix 1 presents the full list of candidate guidelines.

The CTFPHC used the list candidate guidelines to conduct a survey among the Task Force members to select the most appropriate guidelines for comparison. This process was designed and conducted by the CTFPHC team. Finally, a list of 24 non-CTFPHC guidelines was selected and sent to our team. We, therefore, evaluated and compared the 9 CTFPHC guidelines with the selected comparators. In total, 33 guidelines were included in our analyses.

Summary of guidelines' characteristics and main recommendations

We reviewed all the documents related to the included guidelines (including appendices and/or supplementary files). Independently and in duplicate, two experienced reviewers extracted relevant information from each guideline such as: scope, year of publication, scope, use of GRADE approach to summarize the evidence and develop the recommendations from both guidelines' groups CTFPHC and Non-CTFPHC. We also extracted a summary of the evidence of effectiveness and the harms, and the additional considerations to develop the recommendations, such as values and preferences recommendations, costs/resources considerations, and feasibility and applicability considerations for each recommendation.

Quality assessment of the guidelines

We assessed the quality of the guidelines with the AGREE II instrument¹⁰. AGREE II is a validated instrument composed by 23 items grouped under 6 domains and one final item to evaluate the overall quality of the CPG. The domains are *Scope and Purpose* (3 items), *Stakeholder Involvement* (3 items), *Rigour of Development* (8 items), *Clarity of Presentation* (3 items), *Applicability* (4 items), and *Editorial Independence* (4 items). For each item, each appraiser scores based on the statement, using a Likert scale from 1 ((Strongly disagree) to 7 (Strongly agree). A score between 2 and 6 was assigned when the item did not meet the full criteria or considerations. A score was assigned depending on the completeness and quality of reporting, following AGREE II manual indications.
Each CPG was evaluated by two experienced assessors who independently provided their scores. When items' scores from both reviewers differed by 2 points or less in the Likert scale, we calculated the scores per domain following the recommendations by the AGREE collaboration. Namely, the domain scores were calculated by summing up all the scores of the individual items in a domain and by scaling the total as a percentage of the maximum possible score for that domain. When the difference among the scores assessors was 3 or more points, the disagreement was resolved by consensus. Final scores per domain were calculated, i.e., each CPG obtained 6 scores that ranged from 0 to 100%. All the assessments will be performed using the AGREE-PLUS online tool (http://www.agreetrust.org/resource-centre/agree-plus/).

For this project we selected a cut-off for high-quality CPGs of 60% or more, to determine the highest quality for each domain. Moreover, the cut-offs for low and moderate quality were set in <40%, and 40%-59%, respectively. Although to facilitate results presentation, we used a colour-coded display using green as high quality, yellow as moderate quality and red as low-quality guidelines.

Analysis of the differences between CTFPHC and non-CTFPHC guidelines

We present a narrative summary of the differences in recommendations, among the guidelines of the same scope based on the comparison descriptive analyses and the quality assessment. We performed a descriptive analysis trying to explain the differences in the recommendations, considering differences in terms of the characteristics of the guidelines (e.g., year of publication, organization,) use of GRADE, conflicts of interests), quality of the evidence that supports the recommendations, strength and direction of the recommendations, consideration of costs and resource implications, considerations of values and preferences, and the quality of the guidelines (AGREE scores, with emphasis on the rigor of development domain).

Results

Guidelines and comparators

We analyzed 9 CTFPHC guidelines and compared them to 24 non-CTFPHC guidelines (See table 1). Five of the CTFPHC guidelines are focused on the screening for the early detection of cancer (colorectal, breast, cervical, prostate and lung cancer). The screening for colorectal cancer guideline¹ was published in 2016 and was compared with three guidelines: the U.S. Preventive Services Task Force (USPSTF)¹¹, the Cancer Care Ontario/Program in Evidence Based Care (CCO/PEBC)¹², the Toward Optimized Practice Clinical Practice Guidelines from Alberta (TOP)¹³, and the British Columbia Guidelines (BC-Guidelines)¹⁴. The screening for breast cancer guideline² was published in 2018 and was compared to three guidelines: the USPSTF¹⁵, American Cancer Society (ACS)¹⁶, and TOP¹⁷. The screening for cervical cancer guideline³ was published in 2013 and was compared with the USPSTF¹⁸, the TOP¹⁹ and the American Academy of Family Physicians (AAFP)²⁰

guidelines. Prostate cancer guideline⁴ was published in 2014, and was compared with USPSTF²¹, Canadian Urological Association (CUA)²² and Alberta Health Services (AB-HS)²³. Lastly, the screening for lung cancer guideline⁵ was published in 2016 and it was compared with the USPSTF²⁴, the Cancer Care Ontario/Program in Evidence Based Care (CCO/PEBC)²⁵, and the Canadian Association of Radiologists (CAR)²⁶ guidelines.

The remaining four guidelines were focused on non-cancer screening, including the detection of infectious diseases (hepatitis C and asymptomatic bacteriuria), a vascular disorder (abdominal aortic aneurysm) and a neurocognitive disorder (developmental delay and the early detection of autism disorder). The screening for hepatitis C guideline⁷ was published in 2017 and was compared with guidelines from the USPSTF²⁷, the Center for Disease Control and Prevention (CDC)²⁸, and the Canadian Association for the Study of the Liver (CASL)²⁹. The screening for asymptomatic bacteriuria in pregnancy guideline⁸ was published in 2018 and it was compared with the Infectious Diseases Society of America (IDSA) guideline³⁰. The screening for abdominal aortic aneurysms guideline⁶ was published in 2017 and it was compared with the USPSTF³¹ and the Canadian Society for Vascular Surgery (CSVS)³² guidelines. Lastly, the screening for developmental delay guideline⁹ was published in 2016 and it was compared with the USPSTF³³ guideline only.

General characteristics of the guidelines and quality assessments

Guidelines' main characteristics are detailed in table 1. Additional guidelines information is provided in appendices. Appendix 2 presents each guideline recommendation with the evidence summary of effectiveness and harms, and the reported literature that supports the recommendations. Appendix 3 presents each guideline with the additional factors considered for developing the recommendations, values and preferences, costs and feasibility/acceptability issues.

Quality assessments per AGREE II domain are presented in appendix 4. <u>In all the diseases/scopes</u>, <u>except for hepatitis C and breast cancer</u>, the CTFPHC guideline was judged to be the highest quality guideline, based on the rigor of development domain. For hepatitis and breast cancer, the guidelines with the highest domain 3 scores were the CDC (90%) and the ACS (guidelines obtained a higher score in the mentioned domain).

Recommendations from each guideline are displayed and compared in table 2. For each CTFPHC guideline recommendation recommendations from non-CTFPHC guidelines are presented. Table 2 also presents the AGREE II scores per domain for each guideline. Color codes per domain show the three categories: high (green), moderate (yellow) and low quality (red).

Analysis of the differences in the recommendations among the guidelines

Table 2 presents each topic covered and the recommendations provided by the guidelines along with the quality assessment. The last two columns of the table display the similarities and differences among the guidelines per topic and the potential explanations for disagreements among them.

For colorectal cancer, 5 guidelines were analyzed (CTFPHC, USPSTF, CCO/PEBC, TOP and BC). The CCO/PEBC guideline did not consider screening in their scope and therefore, although its quality was assessed, it was not analyzed. We found that the guideline from CTFPHC was the best and the only one categorized as of high-quality. CTFPHC conducted a deeper analysis of the evidence (establishing differences in the strength of the recommendation by age subgroups and prioritizing direct over indirect evidence for gFOBT, to recommend this test as an alternative), and a systematic consideration of values and preferences and costs (which allowed the panel to recommend FIT as an additional alternative). Lower-quality guidelines (TOP and BC) did not provide a strength of recommendations and did not explicitly consider other factors to develop their recommendations. USPSTF was a moderate quality guideline with some differences with CTFPHC such as in the age subgroups, in the frequency of the recto-sigmoidoscopy and the recommendation of FIT. In summary, a higher quality guideline produced by the CTFPHC was found to be related to the considerations of factors to support the recommendation (Values and preferences and costs) and to a deeper analysis of the evidence (i.e., subgroups, and direct evidence).

In breast cancer, we found that three of the four guidelines (CTFPHC, USPSTF and ACS, not TOP) were judged to be of high quality. Guidelines agreed on not recommending screening in women <40 or 45y, and on recommending it for women aged 50-74y. Guidelines, however, differed in the age thresholds for the screening, in the strengths of some recommendations and in the frequency for screening. In summary, guidelines quality did not play a major role in explaining the differences among ACS, CTFPHC and USPSTF as the three of them were of high quality. The low certainty of the evidence supporting the breast cancer screening creates a scenario in which the recommendations may vary depending on additional contextual factors, in this case values and preferences, costs (efficiency) and feasibility played a role in explaining differences.

For cervical cancer screening, we analyzed four guidelines (CTFPHC, USPSTF, TOP and AAFP). The first three guidelines focused on screening while the AAFP guideline focused on diagnosis and treatment of cervical cancer. CTFPHC was the only one considered as of high quality (Score domain 3 was 75%), while the USPSTF was considered as moderate quality, and TOP as low quality. The three guidelines agreed on recommending screening for women 25-65y. Minor differences were found in younger ages, and in the strength of the recommendation. In summary, quality of guidelines cannot explain the differences among the guidelines, in part because the highest quality guideline (CTFPHC) is the least recent guideline, and we found that key evidence on women <30y was missed by this guideline, potentially influencing final guideline recommendations. Date of publication seems to be the main role in explaining differences among the guidelines.

For prostate cancer guidelines, we evaluated the CTFPHC and four more guidelines (USPSTF, ACP, CUA and Alberta). All but the CTFPHC were considered of moderate (USPSTF ACP and CUA) and low (Alberta) quality. Guidelines agreed on most of the recommendations, with some

disagreements in terms of strength of the recommendations and in age ranges. These differences can be explained by the quality of the guideline, the uncertainty of the evidence and the benefits/harms balance analysis. The high-quality guideline (CTFPHC) made an analysis of the benefits/harms (considered many false positives of the prostate-specific antigen and the harms derived from the biopsy derived from those false positives) and found no impact on mortality with screening (55-70y). Moreover, moderate quality guidelines (ACP and USPSTF) recommend individualized decisions according to patients' preferences. Lastly, low-quality guidelines (CUA and AB) relied more on the life expectancy rather than on the quality of the evidence.

The lung cancer screening guidelines (CTFPHC, USPSTF and CAR) provided similar recommendations with differences in their age limits and in when to stop the screening (CTFPHC suggests stopping after three negative results). The CCO/PEBC guideline suggested by the CTFPHC did not have recommendations for lung cancer screening, only diagnosis and treatment, and therefore it was not analyzed. CTFPHC and USPSTF guidelines were judged as of high quality; the CTFPHC guidelines had the highest quality scores, and CAR was judged as a low-quality guideline. The high agreement among guideline recommendations can be explained by two factors: high-quality evidence used by all the guidelines (NLST trial), and one guideline (CAR) used the other two guidelines (CTFPHC and USPSTF) as an evidence/information resource. In summary, guideline quality did not play a major role in explaining the differences in the recommendations. CTFPHC and USPSTF were of high quality and CAR, although of low quality, used information from CTFPHC and USPSTF to develop their recommendations. The lack of appropriate evidence to support certain decisions (e.g., when to stop screening) opened the scenario to heterogeneity (three consecutive screenings vs no limit), while introduction of indirect evidence (i.e., modelling studies) allowed some differences in age limits.

Regarding hepatitis C guidelines, we analyzed four guidelines (CTFPHC, USPSTF CDC and CASL). All guidelines (except USPSTF that was judged as a moderate-quality guideline), were judged as of high quality. We found that CTFPHC was the only one that recommended against screening of non-high-risk individuals. Differences among guidelines may partially explain differences in the recommendations for three reasons: the evidence's target (direct evidence in CTFPHC vs indirect in the rest), the evidence quality assessment (CTFPHC considering the low quality, vs the rest not considering the low quality), values/preferences, feasibility/acceptability, and costs considerations (only in CTFPHC), and the date (CTFPHC search on 2016, while USPSTF in 2020, considering treatment evidence).

The screening for abdominal aortic aneurysm was covered by three guidelines: CTFPHC, USPSTF and the CSVS guidelines. In general, recommendations are very similar. Quality varied among them. CTFPHC was the only high-quality guideline, while the USPSTF was judged as of moderate quality and the CSVS as a low-quality guideline. The USPSTF made different recommendations; they did not recommend screening in women with no smoking history. Guidelines' quality does not explain the differences in the recommendations. However, quality may explain the differences in the strength in the recommendations. CTFPHC and to a lesser degree the USPSTF, acknowledge the uncertainty when considering the evidence and provide a "weak" or "B" recommendation; CSVC (low quality guideline), on the other hand, provides a strong recommendation.

For asymptomatic bacteriuria in pregnancy, we analyzed two guidelines (CTFPHC and IDSA). Both guidelines were considered high quality with the CTFPHC guideline having better scores. Both guidelines recommended screening pregnant women. Differences are related to the strength of recommendations and different evidence focus (CTFPHC considered direct evidence of effectiveness comparison of screening vs no screening, which was scarce and of low quality, while IDSA considered evidence from antibiotic treatment vs no treatment, not direct evidence of screening vs no screening). Thus, the higher quality guideline conducted a deeper evidence assessment explain the differences in the strength of the recommendations.

Lastly, for developmental delay we analyzed two guidelines (CTFPHC and USPSTF). Both were judged as high quality with CTFPHC having higher scores. Both guidelines had important differences including their scope, recommendations and the evidence that was considered. The CTFHC guideline's scope focused on screening to identify any developmental delay. Meanwhile, the USPSTF guideline is focused on detecting autism disorder. This, in turn, explains differences in the evidence considered: CTFPHC focused on evidence about screening while USPSTF focused on identifying tools focused exclusively on autism. In the end, CTFPHC recommend against (considering the low-quality evidence of the screening tool) and USPSTF did not provide a recommendation. In summary, the scope and purpose of the guidelines was the major factor to explain the differences in the recommendations.

Conclusions

Guidelines developed by the CTFPHC were found to be of high quality. In all the cases (nine topics), except for lung cancer and hepatis C screening guidelines, the CTFPHC was the highest quality guideline for a particular disease/scope. Our in-depth analysis of the guidelines and their recommendations considering their quality, the assessed evidence, the analysis of the benefits and harms balance, the considerations of values and preferences, costs and applicability and feasibility issues, among others, yielded some potential explanations to the identified differences. The quality of the guidelines as defined by the AGREE instrument assessment may explain the differences in the recommendations between CTFPHC guideline and the non-CTFPHC guidelines, in 4 topics (Colorectal, prostate, abdominal aortic aneurism, asymptomatic bacteriuria in pregnancy). The rest of the topics either had minor differences in the recommendations, or the differences were mostly explained by other factors such as differences in the scope of the guideline (developmental delay), in the date of publication (cervical cancer), in the relative value given by guideline panels (Breast cancer), lack of evidence for some key decisions recommended and the use of indirect evidence (lung cancer) or a combination of factors (hepatitis C).

Table 1. General characteristics of guidelines

1.1. Colorectal cancer

Guidelines' organization/a uthor	Title	Publicati on year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for colorectal cancer in primary care	2016	Mar 2016	Canada	Screening	Yes	Public Health Agency of Canada and the Canadian Institutes of Health Research	None declared.	https://www.cmaj.ca/co ntent/cmaj/188/5/340.f ull.pdf
USPSTF	Screening for Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement	2002	Jun 2016	United States	Screening for asymptomatic patients over 50 years old for CRC	No	The USPSTF is an independent, voluntary body. The U.S. Congress mandates that the Agency for Healthcare Research and Quality support the operations of the USPSTF.	All authors have completed and submitted the ICMJE Form for Disclosure of	https://jamanetwork.co m/journals/jama/fullart icle/2529486
ССО	Guideline for referral of patients with suspected colorectal cancer by family physicians and other primary care providers	2014	Aug 201	Canada/ Ontario	Family physicians and other primary care providers	No	The work of the PEBC is supported by the Ontario Ministry of Health and Long- Term Care through CCO, and the PEBC is editorially independent from its funding source.	None declared	https://www.ncbi.nlm.ni h.gov/pmc/articles/PM C4131960/pdf/060071 7.pdf
ТОР	Colorectal cancer screening: clinical practice guideline. Edmonton, AB: Toward Optimized Practice.	2013	Jan 2020	Canada/ Alberta	Asymptomatic men and women of all ages	No	Cancer Control Alberta operating budget	Conflicts of interests disclosed following G- I-N principles	http://www.topalbertado ctors.org
BC Guidelines	Colorectal Screening for Cancer Prevention in Asymptomatic Patients	2013	Jun 2016	Canada	Detection of colorectal cancer and adenomas in asymptomatic patients, aged \geq 19 years.	No	Not mentioned	Not mentioned	https://www2.gov.bc.ca/ assets/gov/health/pract itioner-pro/bc- guidelines/colorectal_s creening.pdf

1.2 Breast Cancer

Guidelines organization/ author	Title	Publicatio n year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
CTFPHC	Recommendations on screening for breast cancer in women aged 40–74 years who are not at increased risk for breast cancer	2018 Jan 2017		Canada	This guideline updates the task force's previous recommendations for primary care providers on breast cancer screening for women aged 40 to 74 years who are not at increased risk of breast cancer.		The Public Health Agency of Canada.	None declared.	https://www.cmaj.ca/con tent/cmaj/190/49/E1441. full.pdf
USPSTF	Screening for Breast Cancer: U.S. Preventive Services Task Force Recommendation Statement	2016	Feb 2016	United States	Asymptomatic women 40 years or older who do not have preexisting breast cancer or a previously diagnosed high-risk lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation or a history of chest radiation		The USPSTF is an independent, voluntary body. The U.S. Congress mandates that the Agency for Healthcare Research and Quality support the operations of the USPSTF.	CoI disclosed	https://www.acpjournals .org/doi/10.7326/M15- 2886
ACS	ACS Releases Guideline on Breast Cancer Screening // Breast Cancer Screening for Women at Average Risk. 2015 Guideline Update From the American Cancer Society	2015	Sept 2015	United States	Not mentioned	No	Not mentioned	Not mentioned	https://www.aafp.org/af p/2016/0415/p711.pdf https://jamanetwork.com /journals/jama/fullarticle /2463262
TOP	Breast Cancer Screening	2013	Not stated	Canada/ Alberta	Asymptomatic women of all ages	No	Not mentioned	Not mentioned	https://actt.albertadoctor s.org/CPGs/Lists/CPGD ocumentList/Breast- <u>Cancer-Screening-</u> CPG.pdf
BC-Guidelines	Colorectal Screening for Cancer Prevention in Asymptomatic Patients	2013	Jun 2016	Canada	Detection of colorectal cancer and adenomas in asymptomatic patients, aged \geq 19 years.	No	Not mentioned	Not mentioned	https://www2.gov.bc.ca/ assets/gov/health/practiti oner-pro/bc- guidelines/colorectal_scr eening.pdf

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1.3 Cervical Cancer

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for cervical cancer	2013	Apr 2012	Canada	Screening for cervical cancer in Canada	Yes	Funding for the Canadian Task Force on Preventive Health Care is provided by the Public Health Agency of Canada and the Canadian Institutes of Health Research.	None of the members of the guidelines writing group (listed at the end of the article) have declared competing interests.	https://www.cmaj.ca/con tent/185/1/35
USPSTF	Screening for Cervical Cancer USPreventive Services Task Force Recommendation Statement	2018	Feb 2017	United States	Update the US Preventive Services Task Force (USPSTF) 2012 Recommendation on screening for cervical cancer.	Yes	The USPSTF is an independent, voluntary body. The US Congress mandates that the Agency for Healthcare Research and Quality (AHRQ) support the operations of the USPSTF.	All authors have completed and	https://jamanetwork.com /journals/jama/fullarticle /2697704
ТОР	Cervical Cancer Screening Clinical Practice Guideline	2016	Not stated	Canada	The recommendations reflect the CTFPHC guidelines published in 2013 as well as cervical cancer screening approaches in other jurisdictions across Canada and elsewhere.	No	Not stated	No information	https://actt.albertadoctor s.org/CPGs/Lists/CPGD ocumentList/Cervical- <u>Cancer-Screening-</u> <u>CPG.pdf#search=cervic</u> al
AAFP	Cervical Cancer: Evaluation and Management	2018	2017	USA	Not specified	No	Not stated	Author disclosure: No relevant financial affiliations.	https://www.aafp.org/af p/2018/0401/p449.html

1.4 Prostate Cancer

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for prostate cancer with the prostate-specific antigen test	2014	Aug 2014	Canada	Provide recommendations on screening for prostate cancer using the PSA test with or without digital rectal examination in men in the general population.	Yes	Funding for the Canadian Task Force on Preventive Health Care is provided by the Public Health Agency of Canada and the Canadian Institutes of Health Research	None of the authors (members of the guideline writing group) have declared competing interests.	https://www.cmaj.ca/con tent/186/16/1225
ACP	Screening for Prostate Cancer: A Guidance Statement From the Clinical Guidelines Committee of the American College of Physicians	2013	Aug 2012	United States	Guidance statement to critically review available guidelines to help guide internists and other clinicians in making decisions about screening for prostate cancer	No	Financial support for the development of this guideline comes exclusively from the ACP operating budget	relevant CoIs.	https://www.acpjournals .org/doi/full/10.7326/00 03-4819-158-10- 201305210- 00633?url_ver=Z39.88- 2003𝔯_id=ori:rid:cro ssref.org𝔯_dat=cr_pu b%20%200pubmed
Alberta Provincial Genitourinary Tumour Team	Prostate Cancer	2015	Dec 2014	Canada / Alberta	Guideline to describe the appropriate management and follow up strategies for prostate cancer.	No	No information	relationships with	https://www.albertahealt hservices.ca/assets/info/ hp/cancer/if-hp-cancer- guide-gu004- prostate.pdf
CUA	Canadian Urological Association recommendations on prostate cancer screening and early diagnosis	2017	Feb 2017	Canada	Provide guidance on the current best prostate cancer screening and early diagnosis practices and to provide information on new and emerging diagnostic modalities.	Yes	No information	The authors report no competing personal or financial interests	https://cuaj.ca/index.php /journal/article/view/488 <u>8</u>
USPSTF	Screening for Prostate Cancer USPreventive ServicesTaskForce Recommendation Statement	2018	Jul 2017	United States	To update the 2012 USPSTF recommendation on prostate-specific antigen (PSA)– screening for prostate cancer and subsequent treatment of screen-detected prostate cancer.	Yes	The USPSTF is an independent, voluntary body. The US Congress mandates that the Agency for Healthcare Research and Quality (AHRQ) support the operations of the USPSTF.	handled following	https://jamanetwork.com /journals/jama/fullarticle /2680553

1.5 Lung Cancer

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for lung cancer	2016	Jan 2016	Canada	This guideline is intended to provide primary care providers and policymakers with guidance on screening for lung cancer, and replaces the previous 2003 Canadian Task Force on Preventive Health Care recommendations.	Yes	Funding for the Canadian Task Force on Preventive Health Care is provided by the Public Health Agency of Canada. The Cancer Risk Management Model has been made possible through a financial contribution from Health Canada, through the Canadian Partnership Against Cancer.	Competing interests: None declared.	https://canadiantaskforce .ca/guidelines/published- guidelines/lung-cancer/
USPSTF	Screening for Lung Cancer: U.S. Preventive Services Task Force Recommendation Statement	2013	Dec 2012	United States	Focused on the evaluation for lung cancer screening in asymptomatic persons who are at average or high risk for lung cancer (current or former smokers) in improving health outcomes.		The USPSTF is an independent, voluntary body. The U.S. Congress mandates that the Agency for Healthcare Research and Quality support the operations of the USPSTF.	COIs declared	https://doi.org/10.7326/ M13-2771
CCO/PEBC	Referral of Suspected Lung Cancer by Family Physicians and Other Primary Care Providers	2019	May 2018	Canada /Ontario	This report focuses on patients presenting to primary care with signs or symptoms of lung cancer. Screening studies were excluded because they include asymptomatic patients.	No	The PEBC is a provincial initiative of Cancer Care Ontario supported by the Ontario Ministry of Health and Long-Term Care through Cancer Care Ontario. All work produced by the PEBC is editorially independent from its funding source.	CoIs declared. One author declared receiving grant from CCO, and another author received a grant from BrachyVisionTM for lung cancer brachytherapy.	https://www.cancercareo ntario.ca/en/guidelines- advice/types-of- cancer/216
CAR	Canadian Association of Radiologists: Guide on Computed Tomography Screening for Lung Cancer	2016	Not stated	Canada	These guidelines are meant to be recommendations based on the literature currently available, regarding the best practice to carry out lung cancer screening.	No	This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.	No information	<u>http://dx.doi.org/10.101</u> 6/j.carj.2017.01.002

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1.6 Hepatitis C

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on heptatitis C screening for adults	2017	Sept 2016	Canada	The recommendations are intended to provide clinicians and policymakers with guidance on screening asymptomatic Canadian adults for HCV	Yes the Public Health Agency of Canada		Competing interest: none declared	https://www.cmaj.ca/con tent/cmaj/189/16/E594.f ull.pdf
USPSTF	Screening for Hepatitis C Virus Infection in Adults: U.S. Preventive Services Task Force Recommendation Statement		Sept 2019	USA	To update its 2013 recommendation, the USPSTF commissioned a review of the evidence on screening for HCV infection in adolescents and adults.	No	US Preventive Services Task Force	CoI disclosed	https://jamanetwork.com /journals/jama/fullarticle /2762185
CDC	Recommendations for the Identification of Chronic Hepatitis C Virus Infection Among Persons Born During 1945–1965	2012	Jul 2011	USA	Evaluate the effect of a birth-year based testing strategy versus the standard of care for identification of HCV infection b) HCV testing (versus no testing) among adults at average risk for infection who were born during 1945–1965	Yes	CDC	CoIs disclosed-No members' activities were restricted based on the information disclosed.	https://www.cdc.gov/m mwr/pdf/rr/rr6104.pdf
CASL	The management of chronic hepatitis C: 2018 guideline update from the Canadian Association for the Study of the Liver	2018	Oct 2017	Canada	to assist physicians and other health care professionals in the management of adult patients with chronic HCV infection. it makes recommendations on the assessment, evaluation and management (treatment) in many specific scenarios and risk based considerations		Canadian Association for the Study of the liver	All members signed a commitment and competing interest statement. Individuals with relevant disclosure were not excluded form voting recommendations. Association's executive evaluate the presence of commercial bias. No funding was provided to the panel	https://www.cmaj.ca/con tent/190/22/E677

1.7. Asymptomatic Bacteriuria in pregnancy

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for asymptomatic bacteriuria in pregnancy	2018	Oct 2017	Canada	provides patients, clinicians and policymakers with guidance on screening for asymptomatic bacteriuria in pregnancy	Yes	the Public Health Agency of Canada	competing interest: none declared	https://www.cmaj.ca/con tent/cmaj/190/27/E823.f ull.pdf
IDSA	Clinical Practice Guideline for the management of asymptomatic bacteriuria: 2019 update by the infectious disease society of America	2018	Jun 2017	USA	to provide evidence-based guidance on the screening and treatment of ASB in populations where ASB has been identified as common or potentially detrimental. Pregnant and non-pregnant women, child and other high-risk population for ABS		IDSA	CoI disclosed. Nine authors declared financial conflicts with industry one-time	https://www.idsociety.or g/practice- guideline/asymptomatic- bacteriuria/

1.8 Abdominal Aortic Aneurysm

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for abdominal aortic aneurysm in primary care	2017	Jan 2017	Canada	This guideline presents recommendations on AAA screening in asymptomatic adults for primary care providers.	Yes	Public Health Agency of Canada.	No relevant financial Cols declared No other competing interests were declared.	https://www.cmaj.ca/con tent/cmaj/189/36/E1137. full.pdf
CSVS	2018 Screening for abdominal aortic aneurysms in Canada: Review and position statement from the Canadian Society of Vascular Surgery	2018	Not stated	Canada	Not mentioned	Yes	Not mentioned	NONE (all authors)	https://vascular.ca/resour ces/Documents/Clinical- Guidelines/FINAL- 2018-CSVS-Screening- Recommendations.pdf
USPSTF	Screening for Abdominal Aortic Aneurysm: U.S. Preventive Services Task Force Recommendation Statement	2014	Sept 2013	United States	These recommendations apply to asymptomatic adults aged 50 years or older.	No	The USPSTF is an independent, voluntary body. The U.S. Congress mandates that the Agency for Healthcare Research and Quality support the operations of the USPSTF.	COI disclosed; No relevant declared.	https://jamanetwork.com /journals/jama/fullarticle /2757234

1.9. Developmental Delay

Guidelines organization/ author	Title	Publication year	Date last search	Country/ province	Scope	Use of GRADE Yes/No	Funder	Conflicts of interests' disclosure	Link to the guideline
СТҒРНС	Recommendations on screening for developmental delay	2016	Sep 2015	Canada	This guideline presents evidence-based recommendations for primary care providers on screening for developmental delay in children aged one to four years with no apparent signs of such delay in primary care settings.	Si	Funding for the Canadian Task Force on Preventive Health Care is provided by the Public Health Agency of Canada and the Canadian Institutes of Health Research. The views of the funding bodies have not influenced the content of the guideline.	Competing interests: None declared.	https://canadiantaskforce .ca/guidelines/published- guidelines/developmenta I-delay/
USPSTF	Screening for Autism Spectrum Disorder in Young Children	2016	Aug 2014	USA	This recommendation applies to children who have not been diagnosed with ASD or developmental delay and for whom no concerns of ASD have been raised by parents, other caregivers, or health care professionals.	Νο	The USPSTF is an independent, voluntary body. The US Congress mandates that the Agency for Healthcare Research and Quality (AHRQ) support the operations of the USPSTF.	CoIs declared.	https://www.uspreventiv eservicestaskforce.org/u spstf/recommendation/a utism-spectrum- disorder-in-young- children-screening

Table 2. Guidelines' quality and recommendations' analyses

Guidelines	Target	Recomendations		AGI	REE D	omain	scores		Analysis and differences	Explanations	
Organizatio n	population		1	2	3	4	5	6	among guidelines		
Screening fo	or Colorectal (Cancer									
2016 Adults 60-74y 2016 Adults 50-59y		Recommends screening with FOBT (gFOBT or FIT) every two years or flexible sigmoidoscopy every 10 years. (Strong recommendation) Recommends screening with FOBT (gFOBT or FIT) every two years or flexible sigmoidoscopy every 10 years. (Weak recommendation)	100 %	58%	70%	97%	77%	67%	Similarities All guidelines agree: Not Rec. screening in >75y All guidelines Rec. screening between 50-75y, not in <50y	Guidelines differed in their quality. CTFPHG and USPSTF were considered of high qualit while TOP and BC were judged as of low quality. Guidelines agreed on the age period of recommendations: 50-70y or 75y period. However, there were differences in the recommendations for the other age ranges, strength and screening methods, seem to be explained by values/preferences, costs considerations, and evidence analyses as described below:	
USPSTF 2016	Adults 50-75y	Recommends screening using FOBT, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years. The risks and benefits of these screening							frequency allowing the panel to recommend Sigmoidoscopy every 10y, while USPSTF recs is based on indirect evidence (modelling studies) Age groups: CTFPHC: Strong Rec. 60-74y; Weak Rec. 50-60y (subgroups based on effectiveness & safety evidence)	 -V&P were considered by CTFPHC, not by to other guidelines and may explain difference (not clear their influence, though). - Costs consideration by CTFPHC explain the in Canada FIT is considered and recomment (not by USPSTF) -Clear differentiation in Recs' strength by ag groups due to benefit/harms evidence analysis 	
	Adults 76-85y	methods vary. (A recommendation). The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual	94%	33%	63%	92%	6%	92%	USPSTF also Rec. individual decision in 76-85y Rest of guidelines Recs for 50-70 or 75y group, No subgroups in this group; and no recs in >75y Recommendations' strength CTFPHC: Different strengths by age subgroups (see above)	 per subgroups (CTFPHC), not in the rest of guidelines Evidence supports the frequency (every 10 for sigmoidoscopy (in CTFPHC, not analyzin other guidelines) Evidence shows FIT accuracy is better that gFOBT (all guidelines cover this) but no differences in the recommendations on the states in the recommendations on the states in the recommendations on the states in the recommendations. 	
		one, taking into account the patient's overall health and prior screening history (C recommendation).							USPSTF: Rec. "A" for 50-75y TOP, BC, USPSTF: No Rec. Strength <i>Screening Frequency:</i> CTFPHC: every/2y; USPSTF: Not stated; TOP & BC: 2y <i>Evidence analysis:</i> CTFPHC analyses differences: gFOBT and sigmoidoscopy with direct evidence on mortality. FIT no direct, but with better accuracy than gFOBT. No direct evidence	 tests in two guidelines (USPSTF, CTFPHC and recommendation of FIT, no gFOBT, in other two (BC and TOP). CTFPHC was judged to be of high-quality USPSTF of moderate quality and the rest o low quality In summary a higher quality was found to related to the considerations of additional factors to support the recommendation and deeper analysis of the evidence (i.e., 	
CCO/PEBC 2014	Adults	<i>NOTE: This guideline does not address colorectal cancer screening for asymptomatic patients.</i>	83%	58%	45%	64%	17%	63%	head-to-head. <i>Costs</i> : CTFPHC only one that considered, and found economic analyses that support FIT as cost-effective <i>V/Preferences</i> : CTFPHC considered V&P not the rest	subgroups, and direct evidence).	

TOP 2013	Adults 50-74y	Screening is recommended with the FIT Screen with FIT everyone to two years If the FIT result is positive, promptly refer for a colonoscopy. Use local CRC screening or endoscopist, depending on available resource (Recommendations without strength)	33%	19%	23%	81%	19%	29%
BC 2016	Adults ≥19y	FIT every 2 years for average-risk individuals. Colonoscopy every 10 years is an acceptable alternative to FOBT for screening (Recommendations without strength)	72%	3%	7%	75%	8%	0%

Screening for Breast Cancer

CTFPHC 2018	Women 40-49y	the decision to undergo screening is conditional on the relative value a woman places on possible benefits and harms from screening (Conditional recommendation).	86%	72%	78%	97%	98%	100%	<u>Similarities.</u> Age Guidelines agree on not recommending in <40 or 45y Benefit/harms analysis (evidence) is in favor in >50y, and against, in <50y (both CTFPHC and USTSPF)	Guidelines agree on not recommending screening in women <40y, and on recommending it between in women 50-74y. Guidelines differ in the age thresholds, and in strengths. All guidelines (CTFPHC, USPSTF and ACS), except by TOP were judged to be of high quality. Some possible explanations to the
	Women 50-69y	2-3 years; the decision to undergo screening is conditional on the relative value that a woman places on possible benefits and harms from screening (Conditional recommendation).							Strength CTFPHC & USPSTF recommendations are conditional or "B". No strength provided in ACS, TOP. Frequency:	differences among them can be: - Available evidence (of low to very low quality/certainty) provide some support to screening in 50-69y. This, plus other factors detailed below explain a conditional or B recommendation in favor of the screening I
USPSTF 2016	Women 50-74y Women 40-49y Women ≥75y	Recommends biennial screening mammography for women aged 50 to 74 years. (B recommendation) The decision to start screening mammography in women prior to age 50 years should be an individual one. Women who place a higher value on the potential benefit than the potential harms may choose to begin biennial screening between the ages of 40 and 49 years. (C recommendation) The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening mammography in women aged 75 years or older. (I statement)	69%	53%	75%	100%	46%	92%	-CTFPHC & USPSTF biennial <u>Differences</u> Ages - CTFHC: does no recommend in <50y - USPSTF recommends making individual decisions (personal preferences) in 40-50y - ACS: 40-45: offered as individual decision; 45-55y: Annual screening; ≥55y Biennial (no limit) -TOP: Recommends 50-74y; and individualized decisions for remaining age periods <i>Frequency:</i> -ACS annually, while the rest, biennial.	 CTFPHC, USPSTF and ACS. TOP guideline has no clear evidence synthesis process but uses the CTFPCHC to inform their recommendations. Benefit and harms balance analysis explain how CTFPHC do not recommend screening in women <50y, and USPSTF states that it should be an individual decision. Although both seem different recommendations, this scenario is common when evidence is of low certainty. Both are very close in the decision spectrum and differences are explained by differences in the values. CTFPHC gave more value to the potential harms (False positives of screening and very large number needed to screen), while USTFP gave more value to the small benefit (stating that patients need to give more value to this). Differences in frequency may be due to more value put into lives gained than into efficiency in the ACS case, in comparison to the other guidelines which recommended biennial (CTFPHC, USPSTF). ACS authors used a

ACS 2015		 Women with an average risk of breast cancer should undergo regular screening mammography starting at age 45 years. (Strong Recommendation). Women aged 45 to 54 years should be screened annually. (Qualified Recommendation) Women 55 years and older should transition to biennial screening or have the opportunity to continue screening annually. (Qualified Recommendation) Women should have the opportunity to begin annual screening between the ages of 40 and 44 years. (Qualified Recommendation) Women should continue screening mammography as long as their overall health is good, and they have a life expectancy of 10 years or longer. (Qualified Recommendation) The ACS does not recommend clinical breast examination (CBE) for breast cancer screening among average-risk women at any age. (Qualified Recommendation) 	100%	94%	89%	86%	38%	64%	 modelling article that showed that the screening would be more efficient when implemented biennial, but more lives gaine when done annually. V&P were considered by CTFPHC, and b ACS, not the rest of guidelines. In CTFPH there was a literature review, while in ACS there were two patients' representatives in panel. This could have influenced towards conditional Rec, in 50-74y, and no recommendation in other ages (CTFPHC). Patients' values analysis identified that sor women may prefer not to screen considering the potential associated harms. In ACs the direct impact of values on the final decisio was not clearly explicit. USPSTF did not consider Values/preferences. Costs not systematically considered in CTFPHC, but the screening was not conside a financial threat. No systematic costs anal in the rest the Feasibility factor moved the strength or recommendation from C to B (USPSTF) because of potential financial barriers; Wh the CTFPHC guideline., the panel consider screening a feasible and acceptable interve by women In summary, guidelines quality did not pla major role in the differences among ACS, CTFPHC and USPSTF guidelines, as with some differences, the three of them were on high quality. The low certainty of the evide
	Women 40-49y	(No strength). The balance of benefits and risks is not great enough to recommend routine screening. Consider woman's preference whether to start screening (No strength).	61	33%	10%	97%	10%	8%	supporting the screening creates a scenario which the recommendations may vary depending on additional contextual factors, this case values and preferences, costs (efficiency) and feasibility played a role in explaining differences
	Women 50-74y Women ≥75y	Screening recommended every two years (No strength). Consider individual health factors and woman's preference to continue screening (No strength).							explaining unterences

Screening for Cervical Cancer

СТГРНС	Women <20y	Recommends not routinely screening for cervical							Similarities.	Guidelines for cervical screening provide
2013		cancer. (Strong recommendation)								mostly similar recommendations. They all
	Women 20-24y	Recommends not routinely screening for cervical							Age	agreed on screening for women 25-65y. Minor
		cancer. (Weak recommendation)	1000/	170/	750/	620/	020/	83%	 CTFPHC & USTPF agree on 	differences were found in younger ages, and in
	Women 25-29y	Recommends routine screening for cervical cancer	100%	1/%	15%	03%	92%	83%	recommending 25-69y	the strength of the recommendation. Guidelines
		every 3 years. (Weak recommendation)							- All guidelines agree on not recommending	differ I their quality. CTFPHC was the only
	Women 30-69y	Recommends routine screening for cervical cancer							in <20y	one considered as of high quality, USPSTF as
		every 3 years (Strong recommendation)								with moderate quality and TOP as low quality.

	Women ≥70y & good prior screening (i.e., 3 neg. Pap. in 10 years)	Recommends that routine screening may stop. For all other women 70 years of age or older, we recommend continued screening until 3 negative test results have been obtained. (Weak recommendation)							 ->70y, all guidelines, either do not recommend or recommend stopping. - Strength - Strong or "A" recommendation across the 	Potential explanations for disagreement can be explained by differences in evidence sources and date of publication -Effectiveness evidence to support screening in
USPSTF 2018	Women <21y Women 21-29y Women 30-65y	years with cervical cytology alone. (A recommendation) Recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing plus cytology	89%	28%	59%	94%	33%	100%	30-70y age range. V&P, costs, feasibility assessments -There was not a systematic V&P, cost- effectiveness or feasibility assessments in any of guidelines <u>Differences</u> Age	<25years is definitely lacking. USPSTF based its recommendation on modelling studies (indirect evidence) Rest of Guidelines rely on the evidence of the balance benefit/harms in favor of the screening in women ≥25y, since in younger the higher rate of false positives (FP) leads to unnecessary colposcopies Differences in the strength of recommendation for women<30y (recommendation "A" by
	Women >65y + good prior screening, not at high risk	(co-testing) Recommends against screening for cervical cancer (D recommendation)							 USPSTF recommends screening in women 21-29y, CTFPHC does not recommend in <25y TOP only in women >25y or sexually 	USTPF, and Weak by CTFPHC) may be explained by differences in the analyzed evidence /due to date of publication). CTFPHC found moderate quality of evidence of high
TOP 2016	Women <21y Women sexually active (Currently or past). Women ≥70 adequately screened and choose to stop	Do not screen (No Strength) Screen asymptomatic average risk women who are or have ever been sexually active. Start after three years from onset of sexual activity or age 25, whichever is later. (No Strength) Do not screen (No Strength)	67%	31%	17%	72%	27%	0%	active (regardless of age) ->70y: not recommended (USPSTF), and only if 3 neg. results obtained (CTFPHC) Strength (different systems) - <30y CTFPHC: Weak while USPSTF recommends "A" - <20y strong recommendation against (CTFPHC) and "D" recommendation	number of false positives in the latter, while in USPSTF, authors analyzed evidence from trials and cohort studies indicating a significant risk of identifying CIN+3. This evidence was not captured by CTFPHC as it was almost all of it published between 2012-2018 (Ogilvie 2015,2017, 2018, Leinonen 2012, Canfell 2017, Zorzi 2017), after CTFPHC search dates.
AAFP 2018	Not applicable	This guideline focuses on the diagnosis and treatment of cervical cancer, does not cover screening recommendations	0%	0%	14%	36%	0%	21%	against (USPSTF) - TOP does not provide recs. strength Note: AAFP guideline scope did not include cervical cancer screening in its scope	In summary, quality cannot explain the differences among the guidelines, in part because the highest quality guideline (CTFPHC) is the less recent guideline and we found that key evidence on women <30y was missed by this guideline, potentially influencing final guideline recommendation- Date of publication seems to be the main role in explaining differences

Screening for Prostate Cancer

CTEDUC	Mag. 155	D				1			01	C .: 1.1:
CTFPHC	Men <55y	Recommends not screening for prostate cancer with							Similarities	Guidelines agreed on most of the
2019		the prostate-specific antigen (PSA) test. (Strong								recommendations, with some disagreements in
		recommendation)							- <50-55y and >70y, agreement among	terms of strength of the recommendations and
	Men 55–69y	Recommends not screening for prostate cancer with	92%	4.40/	660/	94%	620/	710/	guideline not recommending the screening.	in age ranges. These differences can be
		the PSA test. (Weak recommendation)	92%	44 %	00%	94%	02%	/1%	Evidence shows small to no benefit in this	explained by the quality of the guideline, the
	Men≥70y	Recommends not screening for prostate cancer with							age ranges	uncertainty of the evidence and the
		the PSA test. (Strong recommendation; low-								benefits/harms balance analysis as is described
		quality evidence).							- Guidelines did not explicitly consider	below.
USPSTF 2018	Men≥70y	Recommends against PSA-based screening for							costs or feasibility/acceptability issues in	
		prostate cancer (D recommendation)							their development	- High quality guideline (CTFPHC) makes
	Men 55-69y.	The decision to undergo periodic prostate-specific								analysis of the benefits/Harms, against the
		antigen (PSA)-based screening for prostate cancer	58%	33%	59%	6%	83%	50%	Differences:	screening (large FP and harms) and found no
		should be an individual one. Clinicians should not								impact on mortality with screening (55-70y).
		screen men who do not express a preference for							Recommendation:	
		screening (C recommendation)								

ACP 2013	Men 50y and >69y, or life expect. <10y Men 50-69y	Recommends that clinicians should not screen for prostate cancer using the prostate-specific antigen test in (No strength) Recommends that clinicians inform men between the age of 50 and 69 years about the limited potential benefits and substantial harms of screening for prostate cancer. Recommends that clinicians base the decision to screen for prostate cancer using the prostate-specific antigen test on the risk for prostate cancer, a discussion of the benefits and harms of screening, the patient's general health and life expectancy, and patient preferences. Recommends that clinicians should not screen for prostate cancer using the prostate-specific antigen test in patients who do not express a clear preference for screening. (No strength).	17%	19%	40%	8%	88%	17%	 55-69y CTF does not recommend (weak); USPSTF and ACP suggest individualized decision (informing patients about benefits and harms). Ages CUA & Alberta-HS: recommend offering PSA to any men with life expectancy 10y, not very clear but seems to be for 55y only (CUA) and >50y (AB). Also suggest stop at 70y (recommendation C) USPTD and ACP guidelines do not provide a recommendation against screening in men <50y Strength: ACP and AB-HS do not provide strength 	 - AB-HS and CUA rely mostly on life expectancy to offer screening and suggest an individualized decision. - Moderate quality guidelines (ACP) do not use strength and rely in individualized decisions - Lower quality guidelines (CUA and AB-HS) provide recommendations that are not very clear on age ranges and rely more on life expectancy than in ages. In summary, the quality of the guidelines played a role in explaining the differences among the recommendations, with high quality guideline
CUA 2017	Men with life expectancy > 10 years Men >50y or >45y + high risk Men electing to undergo PSA screening	The CUA suggests offering PSA screening to men with a life expectancy greater than 10 years. The decision of whether or not to pursue PSA screening should be based on shared decision- making after the potential benefits and harms associated with screening have been discussed (; Grade of recommendation: B) For men electing to undergo PSA screening, we suggest starting PSA testing at age 50 in most men and at age 45 in men at an increased risk of prostate cancer (Grade of recommendation: C) Suggests that the age at which to discontinue PSA screening should be based on current PSA level and life expectancy. a. For men aged 60 with a PSA <1 ng/ml, consider discontinuing PSA screening (Grade of recommendation: C). b. For all other men, discontinue PSA screening at age 70 (Grade of recommendation C) c. For men with a life expectancy less than 10 years, discontinue PSA screening Grade of recommendation: C).	83%	31%	32%	0%	17%	50%	 Most weak/low strength, except ACP that provides B, CTFPHC provide strong in <55 and >70y V&P CTFPHC and USPSTF considered patients V&P, CU and AB-HS did not 	(CTFPHC), considering additional factors and balancing benefits and harms and conducting a more detailed assessment of the evidence.
AB-HS 2015	Men between the ages of 50 and 75 years with at least ten years life expectancy	Fit men between the ages of 50-75 years with at least ten years life expectancy should be made aware of the availability of PSA as a detection test for prostate cancer; they should also be aware of the potential benefits and risks of early detection so they can make an informed decision as to whether to have the test performed. (No strength).	89%	33%	20%	23%	100 %	67%		
Screening for	or Lung Cance	er								
CTFPHC 2016	Adults 55-74y	Recommends screening for lung cancer among adults aged 55 to 74 years with at least a 30 pack- year smoking history, who smoke or quit smoking less than 15 years ago, with low-dose computed	97%	94%	91%	100%	100%	92%	<u>Similarities</u>	Guidelines had high similarities in the recommendations. CTFPHC and USPSTF guidelines were judged as of high quality,

	Adults, other ages, no risk factors for lung cancer All Adults	tomography (LDCT) every year up to three consecutive years. Screening should only be done in health care settings with access to expertise in early diagnosis and treatment of lung cancer. (Weak recommendation). Recommends not screening all other adults, regardless of age, smoking history or other risk factors, for lung cancer with low-dose CT. (Strong recommendation) Recommends that chest radiography, with or without sputum cytology, not be used to screen for lung cancer. (Strong recommendation, low- quality evidence).							 All guidelines agree on recommending in high-risk individuals aged 55-75y and in the frequency: every year All guidelines based their recommendation on the NLST trial (which studied population 55-74y) CTFPHC and USPSTF agree on stopping after 15y without smoking Although not directly interchangeable CTFPHC and USPSTF somehow agree on the strength of the recommendation (weak and "B") All guidelines also agree on the method: 	being CTFPHC the one with the highest quality scores. This high agreement among guidelines can be explained by two factors: a high-quality evidence used by all the guidelines (NLST trial) and that one guideline (CAR) used the other two guidelines (CTFPHC and USPSTF) as an evidence/information resource. Minor differences in age limit and in providing additional recommendations (e.g., X-ray) can be explained by several reasons, including V&P considerations (CTFPHC) and the scope of the evidence analyzed, as explained below.
USPSTF 2013		Recommends annual screening for lung cancer with low-dose computed tomography in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery. (B Recommendation)	89%	14%	77%	97%	54%	96%	Low dose CT <u>Differences:</u> Age:	 Regarding the scope of the evidence, as described the NLST was the main evidence source. This trial analyzed adults 55-74y. However, USPSTF used modeling studies to predict the benefits and harms of screening programs that use different screening intervals. The model predicted benefits when screening is extended to 80y. In terms of when to stop the screening the differences between CTFPHC and USPSTF are
CAR 2017	Not specified	We recommend screening patients who have a 1.5% or higher risk of developing lung cancer over the next 6 years. We recommend routine annual screening for high-risk patients until such time as they no longer meet eligibility criteria. In addition, screening should be discontinued in those who develop health problems that substantially limit life expectancy or would preclude curative treatment. (No strength).	100%	67%	48%	100%	65%	100%	last smoking. Evidence and recommendations - CAR used a model for risk prediction & used recommendations and information from other CPGs (i.e., CTFPHC, USPSTF) - CTFPHC recommends against chest radiography and against screening in other	not directly related to the evidence. There is no evidence to determine the best time to stop. CTFPHC took a conservative approach and stopped after three negative results. Although not explicit, this difference might be explained by different developer values (Different values from CTFPHC and USPSTF panels as the former decided to be conservative, maybe
CCO/PEBC 2019	Not applicable	This guideline does not provide recommendations for patients in a screening program.	50%	67%	81%	25%	63%	42%	 populations. This, because they searched and analyzed chest radiography evidence which was of low quality and found no impact on cancer mortality and there are significant false positives. Rest of guidelines do not mention X-ray and do not recommend against other screening populations <i>V&P</i> CTFPHC did a systematic review of V&P and conducted focal groups. Rest of guidelines did not consider V&P <i>Costs</i> CTFPHC: used a cost-effectiveness analysis (Coffin 2015) to support their recommendation; USPSTF: did not consider costs; CAR: did an economic model, from NLST data <i>Note: CCO/PEBC guideline scope did not include lung cancer screening in its scope</i>	giving more value to the balance benefit/harms and reducing irradiation) - Evidence and benefits/harms balance on chest radiography was considered by CTFPHC, which explains why this recommendation exists while USPSTF and CAR guidelines did not cover this (CAR guideline scope was specific about screening with LDCT) In summary, guidelines quality did not play a major role in explaining the differences. CTFPHC and USPSTF were considered of high quality and CAR, although of low quality, used information from CTFPHC and USPSTF (sort of a recommendations' endorsement) to develop their recommendations. The lack of appropriate evidence to support certain decisions (e.g., when to stop screening) open the scenario to some heterogeneity in the recommendations and the introduction of indirect evidence (i.e., modelling studies), allowed some differences in age limits (USPSTF). Considerations of V&P and costs, although varied and might be one of the main

		differences between guidelines (CTFPHC
		systematically considered both, and USPSTF
		did not) did not explain the minor differences
		in the recommendations because both factors
		ended up supporting the final recommendation
		(in favor of screening)

Screening for Abdominal Aortic Aneurysm

CTFPHC 2017	Men aged 65 to 80 years Men older than 80 years Women 65-80 with history of smoking or CV disease	Recommends one-time screening with ultrasonography for AAA (Weak recommendation) Recommendation) Suggests a one-time screening ultrasound (Weak recommendation)	92%	81%	76%	97%	85%	92%	Similarities - CTFPHC, USPSTF & CSVS recommend one time screening all men 65-80y with ultrasound - CTFPHC and USPSTF provide weak/low strengths/ CSVS provides strong recommendation - CTFPHC and CSV to women only if smokers or CV risk.	CTFPHC was the only high-quality guideline, while the USPSTF was judged as of moderate quality and the CSVS as a low-quality guideline. In general, guidelines' recommendations are very similar. Differences are given by USPSTF guideline which does not recommend screening in women with no smoking history. Quality does not explain the differences in the
USPSTF 2014	Men 65 to 75 years Women aged 65 to 75 year	Recommends 1-time screening for AAA with ultrasonography who has ever smoked. Recommends that clinicians selectively offer screening for AAA who have never smoked (B recommendation) Concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for AAA in women who have ever smoked. Recommends against routine screening for AAA in women who have never smoked. (C recommendation)	83%	22%	54%	97%	17%	93%	<u>Differences</u> -USPSTF: recommends for men smokers and for no smokers to offer. Does not recommend to women (not conclusive, although it seems to be a negative recommendation) -CTFPHC considered V&P (local) and Cost-effectiveness analyses	recommendations (very similar). But it may explain the differences in the strength of the recommendations. CTFPHC, and in less degree the USPSTF, acknowledges the uncertainty when considering the evidence; CSVC (low quality guideline), provides a strong recommendation without a systematic evidence quality assessment. In summary, differences in the quality of the guidelines explain the differences in the strengths
CSVS 2018	Men between 65-80 years of age Women 65-80y with smoking history/CV dis.	Recommends a one-time screening ultrasound (Strong recommendation) Suggests a one-time screening ultrasound (Weak recommendation	11%	14%	29%	86%	13%	96%		of the recommendations with a more conservative approach: weak or "B" recommendation from high-to-moderate quality guidelines vs. a strong recommendation from a low-quality guideline.

Screening for Hepatitis C

CTFPHC	Adults	Recommends against screening for HCV in adults							Similarities	All guidelines (except USPSTF that was judged
2017		who are not at elevated risk (Strong	63%	46%	75%	100%	61%	72%	-Recommendation only for high-risk	as a moderate-quality guideline) were judged
		recommendation)							individuals (CTFPHC, CDC and CASL)	as of high quality. Guideline differed
USPSTF 2020	Adults(18-79y)	For adults aged 18 to 79 years: Grade B	61%	170/	500/	0.40/	14%	750/		significantly in the recommendations.
		Screen adults for hepatitis C virus (HCV) infection.	01%	1/%	50%	94%	14%	15%	Differences	Differences in evidence analyses may explain
CDC 2012	Adults	In addition to testing adults of all ages at risk for							Recommendations	differences for three reasons: the evidence's
		HCV infection, CDC recommends test:							-USPSTF recommend screening in all	target, quality assessment, date of
		a) Adults born during 1945–1965 should receive							adults	publication/search, values/preferences
		one-time testing for HCV without prior							Strengths	analyses, costs considerations, feasibility, and
		ascertainment of HCV risk (Strong	64%	58%	90%	95%	56%	88%		acceptability
		Recommendation, Moderate Quality of							-CDC: strong in favor, CASL: 2A in favor	
		Evidence), and b) All persons identified with HCV							- USPSTF B (in favor)	Target: CTFPHC focused on direct evidence
		infection should receive a brief alcohol screening							V&P	(Direct evidence comparing screening vs no
		and intervention as clinically indicated, followed								screening, which was absent). Rest of

		by referral to appropriate care and treatment services for HCV infection and related conditions							- CTFPHC considered local patients' values and preferences (from literature and Local	guidelines on indirect evidence: Increase in prevalence, and evidence of diagnostic
CASL	Adults	To increase the identification of the large proportion of persons living with undiagnosed HCV, we recommend that screening be both risk-based and target the birth cohort of individuals born from 1945 to 1975, which currently encompasses the majority of persons chronically infected with HCV in Canada (class of recommendation: 2a)	89%	95%	39%	95%	50%	25%	analysis); -USPSTF & CASL: V&P not considered; CDC: QoL measured for patients that had screening+ treatment (increased QoL), but no specific V/P analyzed Costs/resources -CTFPHC: one local BIA (AB); CASL: One CADTH CEA; CDC: 2 CEA, USPSTF did not consider Feasibility/Acceptability & Equity (FAE): - Considered by CTFPHC (support negative recommendation) - USPSTF: Nothing; CDC & CASL: No specific Analysis of the FAE considerations	accuracy (Anti-HCV tests followed by HCV RNA assay). Quality assessment: CTPHC judged the evidence as low quality (accuracy); USPSTF didn't explicitly judged it and used the magnitude without quality assessment Date: CTFPHC date 2016 vs USPSTF 2019. USPSTF introduced more evidence of treatment efficacy to justify their decisions Values and preferences: Considerations of V/P and feasibility, acceptability, and equity analyses, may have also explained a negative recommendation in CTFPHC guideline (V/P analyses did not favor the screening) which was not considered by other guidelines Costs, Feasibility, equity, and acceptability. consideration in CTFPCH guideline played a role in the recommendation against. Large resources needed if implemented, and barriers for implementing the screening and treatment of detected cases (high treatment costs), and the possibility of increasing inequalities if recommended, influenced the panel to develop a negative recommendation. Lastly, acceptability would be low by some provinces' governments. These (Costs, values, feasibility, equity, acceptability) were not considered I the other guidelines In summary, quality of the guidelines may explain some differences (e.g., the differences between USPSTF a moderate quality guideline, vs CTFPHC, ahigh-quality guideline, due to lack of consideration of the former of key factors: values/preferences, costs, equity, acceptability, and feasibility)

Screening for Asymptomatic Bacteriuria in pregnancy

CTFPHC 2018	Pregnant women	Recommends screening pregnant women once during the first trimester with urine culture for				_			Similarities	Both guidelines (CTFPHC and IDSA) were considered of high quality with CTFPHC
2018	women	asymptomatic bacteriuria (Weak							Recommendation: CTFPHC/IDSA: Similar	having better scores. Both guidelines
		recommendation)							recommendation	recommend screening pregnant women, and
										both were of high quality. Differences are
									Differences	related to the strength of recommendations and
										different considerations of evidence, and values
									Evidence of effectiveness	
									CTFPHC: Low quality evidence of	- Differences in evidence assessment
									Screening vs no screening	(effectiveness and harms); CTFPHC
									IDSA: Moderate quality evidence (Antibiotic vs placebo to prevent	considered direct evidence of effectiveness comparison of screening vs no screening
			89%	75%	77%	100%	63%	100%	pyelonephritis & preterm birth)	(Scarce and of very low quality), while IDSA
									Harms	considered evidence or antibiotic treatment vs
									CTFPHC: Analyzed for Screening-	no treatment of patients with antibiotics
									intervention (low Quality)	(considered as moderated although the original
									IDSA: Analyzed for antibiotics in Patients	source, a Cochrane review, labeled the
									with AB (not for screening) (Moderate	evidence as low to very low quality; i.e., there
									Quality described, but Evidence source -	was a disagreement between the Cochrane
									Cochrane- seems Low)	review quality assessment and the guideline
									<i>Strength:</i> Weak (CTFPHC); Strong (USPSTF)	assessment). - Differences in recommendations strengths
									V&P	difference may be related to the differences in
									CTFPHC: Considered V&P(Local), in favor	the focus of the evidence considered: CTFPHC
IDSA 2018	Pregnant	Recommends screening for and treating ASB							of screening; while IDSA only indirectly	considered direct evidence: Screening
	women	(Strong recommendation)							considered (panel views), in favor of	+treatment vs. IDSA considered as evidence
									screening. In both cases V&P supported	the impact of antibiotic treatment on outcomes,
									screening.	not the evidence of the screening as an
									Costs/resources:	intervention) (see above).
									CTFPHC: Costs' evidence sought, not	
			80%	67%	69%	05%	27%	46%	found	In summary, although both guidelines were of
			0770	07 /0	0770	JJ 70	2770	4070	IDSA: Not explicitly considered	high quality, CTFPHC had better scores and did a deeper analysis of the evidence quality of
										a screening intervention while USTPF only
										analyzed the evidence of the antibiotic
										intervention. This explains the differences in
										the strength of both recommendations:
										CTFPHC (weak), IDSA (Strong)
L										· · · · ·
Screening for	developmental d	lelay								

CTFPHC	Children 1-4y	Recommends against screening for developmental					_		Similarities.	Both guidelines (CTFPHC and USPSTF) were
2016		delay using standardized tools in children aged one								judged as of high quality with CTFPHC having
		to four years with no apparent signs of							No similarities found	higher scores. Both guidelines have important
		developmental delay and whose parents and								differences including scope, recommendations
		clinicians have no concerns about development							Differences	and the evidence that was considered.
		(Strong recommendation; low quality evidence)							- · ·	
									Recommendations	- CTFHC's scope focused on Developmental
			97%	92%	92%	100%	75%	96%	-CTFPHC: Recommends against screening;	delay screening, while USPSTF in detecting
			21.70		2.0	20070		2070	USPSTF: Does not provide recommendation	autism disorder. This, in turn, explains differences in the evidence considered to
									Strength	support the recommendation. CTFPHC focuse
									-CTFPHC: Strong against; USPSTF: does	on evidence about screening while USPSTF
									not provide	focused on autism-specific evidence. Evidence
									Evidence	specific about screening tools to identify
									CTFPHC mod and low-quality evidence,	autism disorder which was not found.
									with surrogate outcomes (identification),	
USDETE 2016	Varma ahildaan	Concludes that the current evidence is insufficient							and with no difference in important	- Considering the low-quality evidence of no
USFS1F 2010	roung children	to assess the balance of benefits and harms of							outcomes (developmental delay and oral	differences between screening vs not screening
		screening for ASD in young children for whom no							tests)	the poor performance of the AQS test (high
		concerns of ASD have been raised by their parents							Tools Diagnostic accuracy poor	false positives rates) the CTFPHC decided not
		or a clinician. (I statement)							performance (high FP rates) (mainly: Ages	to recommend screening; Meanwhile, the
									and Stages Questionnaire -AQS)	USPSTF did not identify evidence for their
									USPSTF: Did not identify evidence. Their	scope, thus, they opted for not providing
									search was focused only on specific tools	recommendation (I-Statement)
									for Autism disorder. <i>Harms</i> .	T
									CTFPHC. High number of false positives,	In summary, guidelines quality did not explain the differences in the recommendations. The
									which could lead to anxiety and labelling	scope and purpose of the guideline is the majo
			94%	33%	75%	86%	58%	93%	USPSTF: Potential harms include	factor for explaining the differences in the
									misdiagnosis and the time, effort, and	recommendations
									anxiety associated with further testing after	
									a positive screening result	
									V&P	
									CTFPHC no V&P evidence	
									USPSTF: Not considered	
									Costs	
									CTFPHC: not systematically addressed	
									USTPF: Not evaluated for screening but for	
									treatments	

Guidelines developers/organizations (Alphabetical order): AAFP: American Academy of Family Physicians; AB-HS: Alberta Health Service (Alberta Provincial Genitourinary Tumour Team); ACP: American College of Physicians; ACS: American Cancer Society; BC: British Columbia Guidelines; CASL: Canadian Association for the Study of the Liver; CAR: Canadian Association of Radiology; CCO/PEBC: Cancer Care Ontario's Program in Evidence-based Care; CDC: Centers for Disease Control and Prevention; CSVS: Canadian Society of Vascular Surgery; CTFPHC: Canadian Task Force on Preventing Health Care; CUA: Canadian Urological Association; IDSA: Infectious Diseases Society of America; TOP: Toward Optimized Practice Clinical Practice Guidelines; USPSTF: U.S. Preventive Services Task Force.

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2021 ANNUAL EVALUATION HIGHLIGHTS

