CANADIAN **PARTNERSHIP** AGAINST CANCER

**PARTENARIAT** CANADIEN CONTRE LE CANCER

# Management of Cancer Screening Services During the COVID-19 Pandemic and Building Resilient, Safer & Equitable Screening Services

# *Guidance Document*

Released: November 2020

# Canadian Partnership Against Cancer

The Canadian Partnership Against Cancer (the Partnership) is an independent organization funded by the federal government to accelerate action on cancer control for all Canadians. The Partnership was founded in 2007 as the steward of the *Canadian Strategy for Cancer Control* (the Strategy). Ten years of shared effort has yielded results and key learnings related to effecting systemic change through unique modes of collaboration and improving the experience for Canadians with cancer and their families. Our goal is to translate what we have learned about the successes and barriers to change, into pervasive and impactful front-line policy and practice across Canada for the benefit of all cancer patients or those at risk of cancer.

Our efforts are collectively focused on the long-term objectives of reducing the incidence of cancer, reducing the likelihood of dying from cancer and improving the quality of life of those affected by cancer. The Strategy and work we support to achieve it, prioritizes the challenge of addressing a lack of equitable access to quality care for all Canadians. Our work spans the continuum of cancer control – from prevention and screening through diagnosis and clinical care to palliative care and survivorship – and cuts across that continuum with initiatives to monitor and improve cancer system performance and mobilize evidence to drive policy and practice improvements.

Central to this effort is influencing health system administrative structures and policies to meaningfully create systemic and clinician behaviour change that measurably supports patient and family needs. Our goal is to ensure the system actively takes a person-centred perspective in quality program delivery. Additionally, our work will continue to focus with partners to understand the barriers and then implement practice and policy to address the unique needs of underserved populations who have not yet benefited equitably from the Strategy. Our data tells us the health inequities are greatest for those living in poverty, especially rural, northern, and remote Canadian communities. We also remain committed to working across all jurisdictions to assist them in implementing a culturally responsive action plan for cancer control with and for First Nations, Inuit, and Métis communities – a key priority for the Partnership.

# Acknowledgements

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# Executive Summary

The first wave of the COVID-19 pandemic led to several measures to optimize the use of scarce healthcare resources. One measure was the pausing of cancer screening programs across Canada. Unfortunately, this disruption will have future impacts, including cancers being found at a later stage, which will result in poorer prognosis for many patients. It will also cause increased pressure on the cancer diagnosis and treatment system.[1] Integrating high value and innovative practices across the cancer screening pathway is necessary to safeguard screening as an essential service and to support the cancer screening system's resilience through successive waves of the pandemic, or future pandemics.[1]

As the steward of the *Canadian Strategy for Cancer Control* (the Strategy) the Canadian Partnership Against Cancer (the Partnership)

is committed to enabling equitable access to quality care for all Canadians across the continuum of cancer control – from prevention and screening, through diagnosis and clinical care, to palliative care and survivorship. Resilient cancer screening services require collaborative decision-making across provincial/territorial governments, cancer agencies/programs, primary care, diagnostic and treatment services, as well as partners and stakeholders outside of the health sector. To support the provision of essential cancer screening services throughout the pandemic, the Partnership, in collaboration with the cancer screening community and pan-Canadian partners, has identified the best available evidence and expert recommendations for continued service provision and prioritization during anticipated future outbreaks or service disruptions (Figure 1).

*Figure 1: Guidance on Building Resilient Screening Services and Programs*

The following figure outlines the primary recommendations provided by expert advisors and stakeholders.

| Managing screening programs when dealing with constrained resources |
| --- |
| • *Recommendation 1: Work with partners to develop pathways and prioritization frameworks and to support the sharing of information to ensure equitable screening during periods of constrained resources.*<br>• *Recommendation 2: Utilize screening program data to inform capacity planning during periods of constrained resources.*<br>• *Recommendation 3: Consider rationing proactive recruitment and correspondence to manage screening services.* |
| **Using evidence to focus screening activities on people who stand to benefit the most** |
| • *Recommendation 1: Leverage FIT triage to improve colonoscopy access*<br>• *Recommendation 2: Implement risk-based management for individuals referred to diagnostic mammograms, colposcopy, and colonoscopy.*<br>• *Recommendation 3: Develop a centralized referral uptake process (e.g., coordinated points of entry for receiving referrals)* |
| **Delivering cancer screening programs in a culture of safety** |
| • *Recommendation 1: Ensure that masks are worn by patients and staff and provide hand sanitizing stations.*<br>• *Recommendation 2: Ensure screening centres are set up to enable patient flow and adequate physical distancing and maintain a clean environment.*<br>• *Recommendation 3: Perform pre-screening for COVID-19 symptoms and possible exposures prior to in-person screening test.* |
| **Using digital health to optimize the screening journey** |
| • *Recommendation 1: Provide virtual care when safe and feasible, especially for those who are immunocompromised and at highest risk for COVID-19 infection* |
| **Increasing access to care closer to home** |
| • *Recommendation 1: Implement human papillomavirus (HPV) self-sampling for cervical cancer screening prioritizing populations that are more likely to be affected by COVID-19 related travel restrictions.*<br>• *Recommendation 2: Implement or continue mailed provision of fecal test kits for colorectal cancer screening.*<br>• *Recommendation 3: Continue to schedule mobile breast cancer screening clinics that visit communities so women can access breast cancer screening safely.* |
| **Supporting healthcare providers** |
| • *Recommendation 1: Engage and communicate with primary care providers about cancer screening on an on-going basis during COVID-19.* |
| **Supporting communities** |
| • *Recommendation 1: Partner with members of the multidisciplinary team, subject matter experts, community partners, and members of the public to plan screening services during pandemic.*<br>• *Recommendation 2: Build greater cancer awareness of the importance of cancer screening within communities.*<br>• *Recommendation 3: Partner with screening participants and families as core members of the healthcare team to enable a person-centred approach to care.*<br>• *Recommendation 4: Create a culture where feedback from patients, families, public is sought out every day.* |

*Adapted from Management of Cancer Screening Services During the COVID-19 Pandemic and Building Resilient, Safer & Equitable Screening Services [https://www.partnershipagainstcancer.ca/topics/cancer-screening-covid-19/][2]*

The COVID-19 pandemic has disproportionately affected some populations in Canada.  There is a risk that inequities in access to cancer screening will be exacerbated – compounding the disparities seen in cancer outcomes prior to 2019 (*Examining disparities in cancer control: A system performance special focus report*).  It is imperative that efforts to support screening resilience centre on addressing prevalent inequities in access to high-quality, timely, and safe screening across the country, and not further the disparities that already exist. To demonstrate progress towards equitable access to screening services, decision makers are encouraged to:

- Understand the different inequities that exist across communities, the extended marginalization of diverse populations, as well as the impact of systemic racism and other personal and intergenerational experiences with trauma, through improved data collection and monitoring, including having more robust and timely data to monitor cancer screening programs and identify success in closing new or emergent inequities.

- Work with First Nations, Inuit, and Métis and other diverse populations, to co-create services, leverage community-based supports and adjust services to meet the needs of communities against the changing face of the pandemic.
- Explore opportunities to provide care closer to home, especially for those living in remote and very remote locations in Canada who experience reduced access to care during the pandemic.

While these recommendations can support planning for continued provision of screening services during the COVID-19 pandemic, and also advance efforts to reduce barriers and improve access for underserved populations, there is more work to be done. Leveraging the recommendations within the Guidance Document, will build capacity to respond to both the healthcare system challenges and opportunities afforded by the pandemic, enable focused and co-created interventions to reach those most in need, and improve screening access and outcomes for all people living in Canada.

# Background

The first wave of the COVID-19 pandemic led to cancer screening programs pausing services across Canada. This sudden disruption to screening has significantly stressed current workflows and will impact future service delivery, as well as screening participant care and outcomes, particularly among underserved groups.

Modelling completed by the Partnership using OncoSim, the Partnership's microsimulation tool, shows that even short-term pausing of screening programs has notable impacts for people in Canada, including projected later stage diagnoses and increases in cancer deaths. For example, modelling predicts a delay in detection and later stage at diagnosis of breast cancer. Should breast screening pause across Canada for 6 to 12 months, it is projected that more breast cancers would be diagnosed at a later stage (e.g. Stage III, IV) from 2020 – 2029. Similarly, interruptions in colorectal screening may result in increased undiagnosed adenomas and subsequent colorectal cancers.

In general, data has shown disproportionately low rates of screening uptake and higher cancer mortality among underserved groups, such as people living in low-income and rural-remote populations.[3] First Nations, Inuit and Métis continue to experience poorer cancer outcomes than other people in Canada.[3] Often, cancer death among First Nations, Inuit and Métis are for those cancers that are detectable through cancer screening.[4] Barriers to screening participation are connected to challenges in access to screening and care including living in rural/remote/isolated communities, inequities in access to healthcare providers, transportation services, as well as a lack of education resources tailored to the population needs and access to culturally safe care.[3,4] Ongoing colonization amplifies these inequities.[5] Inequities that have already been identified in screening uptake and cancer mortality have the potential to be exacerbated during the COVID-19 pandemic.

# Issue Summary

Measures to manage the COVID-19 pandemic, such as maintaining physical distancing, rigorous surface disinfection, use of personal protective equipment (PPE) and redeploying healthcare personnel, require an urgent reallocation and adaptation of cancer screening resources to maintain screening services. The first wave of the pandemic has highlighted areas along the cancer screening pathway where high value screening practices can be adopted to support this goal. The pandemic has also highlighted the need to support underserved populations, who are often the most impacted by delays and disruptions to services. Looking ahead, there is an opportunity to learn from earlier experiences in the pandemic and implement screening innovations to support resiliency whereby screening can withstand possible successive waves of COVID-19, in compliance with health and safety measures, and demonstrating progress towards equitable access to screening services.

# Purpose & Approach

- The aim of this guidance document is to provide the best available evidence and expert recommendations for screening service provision and prioritization to increase the resiliency of screening services during anticipated outbreaks or service disruptions related to the pandemic.
- As the Chief Public Health Officer of Canada (CPHO) has identified the risk of widening disparities due to COVID-19, this document gives particular attention to the importance of embedding equity and cultural safety considerations into the recommendations.[6]

- This document does not describe clinical advice for patients.
- This document and its recommendations were informed by a Working Group convened by the Canadian Partnership Against Cancer and comprised of experts, clinicians, provincial and territorial screening program representatives, and pan-Canadian health organizations representatives. The recommendations were also informed through engagements with a broader e-Panel including Patient and Family Advisors who provided insights and feedback on the recommendations for the Working Group.

## Target Audience

- This guidance document was created to support decision-makers within federal/provincial/territorial governments and jurisdictional cancer programs (i.e., health system administrators of screening programs with a leadership role in screening operations).

## Guiding Principles

### Implementation Considerations

- When and how screening is resumed should be based on local factors, such as:
  - Availability and impact on resources (e.g. PPE, staffing, and physical space); and
  - Local trends of COVID-19 infection, including public health recommendations and specific local vulnerability to infection (e.g., new infections in remote or isolated populations).
  - Provincial and territorial government decisions and health system service resumption and infection control guidelines.

- Building resilient screening services requires collaborative decision-making across a complex set of health and social settings, but can be challenged by changing or limited data.[6]
  - Screening programmatic data can be leveraged to provide a history of test volumes, abnormal detection rates and cancer detection rates, which can be used to develop jurisdiction-specific strategies.
  - Community-level data can be leveraged to understand local variations in screening services (e.g. ability to assess wait times for screening or access to primary care by socio-demographic variables, geographic variables, and/or deprivation indices).

## Embedding Equity to Develop Resilient Screening Services & Programs

Prevalent inequities in access to high-quality, timely, and safe screening across the country can be exacerbated during times of particular pressure on the health system. Recognizing that the COVID-19 pandemic has meant that some populations, such as older adults, racialized populations, LGTBQ2S+ persons, people living with disabilities and women, are at greater risk of experiencing poor health outcomes, efforts to support screening resilience should be centred on addressing these inequities.[6,7] In an effort to address disparities, and not further the divide, the following equity principles are offered as a guide to embed a health equity approach to screening pandemic preparedness, response, and recovery.

## Equity Guiding Principles

- Understanding the needs of underserved populations requires engagement with those individuals, communities, and representative organizations.
  - It is important to reflect on how one's own power and privilege may be both perceived and enacted when communicating with individuals who are eligible for screening. [7]
  - Working closely with communities provides a better understanding of their needs, jointly moves towards workable solutions, and improves trust in the healthcare system, as a result, culturally safe and appropriate approaches to care can be developed and can help improve screening uptake.
  - Enabling screening participants to make informed contribution to care and treatment decisions can ensure health services are provided in a holistic, dignified, and respectful manner. [8,9,10]
  - It is important to recognize the different inequities that may exist across communities - urban, rural, and remote.
  - Travel restrictions that have been put into place in response to the COVID-19 pandemic, should be considered when assessing the provision of screening services to people who reside in rural and remote areas.
- It is important to recognize that providing access to self-sampling methods and mobile cancer screening can enable care in or closer to the community, but it may not address all systemic barriers such as infrastructure (including information and supply/distribution systems), as well as systemic racism and other personal and intergenerational experiences with trauma. [6]

## First Nations, Inuit and Métis Needs and Priorities

Many First Nations, Inuit, and Métis experience inequities in accessing cancer services and diagnostics, and these gaps in access are widened in times of system and resource pressures. As observed during the 2009 H1N1 pandemic, additional disparities can occur during emerging and reemerging infectious diseases, like COVID-19. [11]

- Commit to learning about the historical and ongoing experiences of First Nations, Inuit and Métis in the land now known as Canada. [7]
  - First Nations, Inuit and Métis are culturally rich, strong, and resilient. It it important to understand that past traumatic experiences may be overwhelming and may challenge one's ability to cope, particularly during a pandemic. [7]
- Engagement with First Nations, Inuit and Métis governments, organizations and communities is critical to reducing health inequities, preventing further exacerbation of existing inequities and designing safe spaces for screening.
  - It is essential to work with First Nations, Inuit, and Métis to understand screening pathways and systemic/community barriers and supports to screening uptake, so that screening services/programs can be designed and delivered to leverage community-based supports that address barriers and inequities.
  - Navigating the system is quite complex, multi-faceted, and multijurisdictional for many First Nations, Inuit, and Métis. Engagement with First Nations, Inuit and Métis can facilitate improved communication and coordination of services, ultimately improving navigation.

It is important to recognize and respect the Indigenous right to self-determined culturally safe care. *Cultural safety guidance for clinicians during the COVID-19 pandemic* has been developed by the Royal College of Physicians and Surgeons of Canada, to raise awareness about the critical need to follow culturally safe practices.

# Guidance on Building Resilient Screening Services and Programs

## 1. Managing screening programs when dealing with constrained resources

<u>Note</u>: The extent to which any of these strategies are required will be driven by the extent to which resource capacity is constrained within the jurisdiction, which in turn will be heavily influenced by the extent of COVID-19 in the population and local response (e.g., redeployment of staff, travel restrictions etc.), and may vary throughout the pandemic by region and by community.

<u>Recommendation 1: Work with partners to develop pathways and prioritization frameworks and to support the sharing of information to ensure equitable screening during periods of constrained resources.</u>

*Key Evidence* & *Implementation Considerations*

- Alterations to pre-existing screening practice should not be arbitrary and should be based upon stated criteria which relate to the objectives of screening and operational constraints. Such practice should make every effort to align with pre-existing screening guidelines (e.g., screening with the right test at the right interval).
- Service resumption must fully consider the full screening pathway and not be based upon primary screening alone (i.e. must take into consideration the impact of screening on laboratory services, diagnostic services, pathology, surgery / treatment etc.). Moreover, service resumption must fully consider the impact of screening volumes on resources shared with other aspects of the healthcare system (e.g. diagnostic services).
- Development of evidence-based prioritization frameworks that take into consideration all indications for service use (e.g. imaging as a whole, all of gastrointestinal endoscopy) may help address competing needs in an equitable fashion.[10]
  - o Provide guidance to healthcare providers and facilities to support prioritization of services by urgency of the indication.[13]
- Screening programs should direct providers and facilities to align practices with local COVID-19 guidelines rather than establishing separate screening program guidelines.[13]
- Screening programs can support local/regional-level decision making in a number of ways:
  - o Identifying opportunities to help ensure the most appropriate and effective use of constrained resources (for examples see Ontario tip sheets).[12,13,14]
  - o Identify opportunities for facilities / regions to consider implementing (or expanding access to existing) processes for evidence-based strategies that support effective and equitable use of constrained resources (e.g., processes for centralized intake of referrals, use of frameworks to make evidence-based decisions for triage and prioritization of screening participants, and use of centralized waitlists (i.e., system where screening participants are booked to open slots that are not assigned to a specific provider but rather a pool of providers).

- o Identify opportunities to help ensure the most appropriate and effective use of constrained resources to ensure safety (including staff, PPE, etc.).[15]
- Given local and regional variation in the spread of COVID-19, screening programs should develop guidance about how to deal with these variations such that response to future waves of the pandemic can be deployed at the local level.

Recommendation 2: Utilize screening program data to inform capacity planning during periods of constrained resources.

*Key Evidence & Implementation Considerations*
- Establish a set of monitoring criteria to determine prevalence of COVID-19 in the community and related service capacity.
- Screening programs can support local/regional-level decision making by using data available to the program and developing tools to support planning.
  - o Tools may include updates on service volumes at the provincial/regional/facility level, modelling regarding backlogs based on historical volumes, tools that allow for manipulation of the data to assess the impact of various strategies on backlog recovery. For examples, refer to Ontario models.[16]

Recommendation 3: Consider rationing proactive recruitment and correspondence to manage screening services.

*Key Evidence & Implementation Considerations*
- In June 2020, the WHO recommended modifying and considering the temporary delay of cancer screening programs and services that require contact with the healthcare providers (e.g. mammography and colonoscopy).[17]

- Guidance from Ontario suggests that resumption of screening services and mailing of test kits should be gradual and prioritized based on risk.[13]
- Make decisions regarding the appropriateness of mailed correspondence and when to stop / re-start letters that encourage screening taking into consideration operational factors (e.g. Canada Post delays, impacts of physical distancing / infection control policies on fulfillment house practices etc.) as well as the impact of recommending screening on the healthcare system capacity (e.g. primary care, diagnostic services etc.).

## 2. Using evidence to focus screening activities on people who stand to benefit the most

**Risk-based screening should be explored to optimize the impact of screening with the capacity available.**

*It is important that risk-based approaches to prioritizing screening services consider the following:*
- Risk based screening should be based on the likely net benefit of screening, and not the risk of COVID-19 infection or COVID-19 related complications.
- Risk based screening should be equitable and not exclude groups on the basis of varying risk factors.[6]
- Screening benefit should be defined and relate to important clinical and/or health outcomes.
- The estimation of benefit should have an evidentiary base supported by appropriate scientific literature and health information.
- The benefit estimation process should be documented and available for professional and public inspection.

Recommendation 1: Leverage FIT triage to improve colonoscopy access

*Key Evidence & Implementation Considerations*
- A recent UK study showed that FIT triage (at 10 and 150mg HB/G) of urgent symptomatic patients in primary care could streamline access to diagnostic colonoscopy and reduce delays for true-positive CRC cases.[18] Utilizing such strategies can be beneficial during short-term rationing of endoscopy services.[16]
- Temporarily changing screening result criteria for referral for diagnostic assessment will result in subjects who will no longer be referred: their future screening should be clearly described for both the staff and screening participant.
- Detailed data on the outcomes of subjects should be collected, maintained, analyzed, and reported (e.g., period of time that elapses before individuals with a positive FIT at a low value receive colonoscopy).
- Unavoidable variations in delivery should be considered as opportunities for improving knowledge and not as obstacles to change.

<u>Recommendation 2: Implement risk-based management for individuals referred to diagnostic mammograms, colposcopy, and colonoscopy.</u>

*Key Evidence & Implementation Considerations*
- International evidence suggests that colonoscopy demand should be prioritized by classifying participants according to individual colorectal cancer risk and medical urgency.[19,20]
- The Canadian Association of Gastroenterology recommends that endoscopic procedures should be prioritized according to tiers: must always be performed; should be performed; could be performed; should be deferred.[21] For example those with high likelihood of colon cancer based on imaging, physical examination or symptoms should be performed[21]

- Ontario Health recommended that gastrointestinal (GI) endoscopy is prioritized according to potential for serious consequences for morbidity or mortality, but could occur for specific cases to screen people at increased risk for GI cancer.[10] However, GI endoscopy for participants who can be screened for colorectal cancer with the FIT instead of colonoscopy, during or after the pandemic is not recommended.[12]
  - o Recent modelling which estimated the backlog and recovery of screening service in Ontario showed that minimizing colonoscopy for CRC surveillance and screening in favour of FIT testing can reduce recovery time for screening backlogs.[22]
- BC Cancer recommends that patients with significant symptoms should be referred for colonoscopy and all patients who have been recommended for colposcopy should be referred.[23]
- Ontario guidance recommends the use of risk-based management for individuals referred to colposcopy to maximize capacity and minimize risk to patients and staff.[24] A priority classification framework provides direction to the Ontario colposcopy community for the prioritization of colposcopy services during COVID-19.[25]
- Ontario encourages prioritizing those with an abnormal screening result and those participating in the high-risk breast screening program for mammography versus average-risk screening.[14] Similarly, breast MRI is prioritized for those with an abnormal screening result.[14]
  - o Recent modelling which estimated the backlog and recovery of screening service in Ontario showed that prioritization of screening mammography could facilitate clearing of screening backlogs, specifically for

higher risk groups (high risk screens, initial screens, annual/one-year screens).[22]

- In the Ontario Health (Cancer Care Ontario)'s lung cancer screening pilot, screening was interrupted in March of 2020, at its four major screening sites and as the COVID-19 pandemic receded, screening restarted in July of 2020. Recommendations were made to sites to prioritize screening starting with those with preceding abnormal Lung-RADS classifications and to those with highest PLCOm2012 scores. There is evidence to support this recommendation. Individuals who screened negative prior to 2009 in the Toronto Princess Margaret site of the International Early Lung Cancer Action Program (IELCAP) were recalled for screening between 2015 to 2018 starting with those with highest PLCOm2012 risk scores and working down the rank order. [26,27,28]

Recommendation 3: Develop a centralized referral uptake process (e.g. coordinated points of entry for receiving referrals)

*Key Evidence & Implementation Considerations*
- Implementing a centralized referral uptake process can:
  - Support the ethical prioritization of patients at a hospital and regional level, where available consult with a Bioethicist;[12,6]
  - Facilitate the use of agreed upon, evidence-based referral triage criteria; [12] and
  - Reduce wait times for people who need GI endoscopy procedures.[21]
- Programmatic referrals for diagnostic services such as colonoscopy, can minimize duplicate referrals (i.e., referrals that may have been sent to more than one facility and/or endoscopist for the same indication).[12]

## 3. Delivering cancer screening programs in a culture of safety

**3.1 Infection prevention and control practices should be driven by provincial and territorial policies and procedures, to continue cancer screening safely and effectively.**

Recommendation 1: Ensure masks are worn by screening participant and staff, and provide hand sanitizing stations.[29]

*Key Evidence & Implementation Considerations*
- Training for PPE and PPE inventory management is recommended by the European Society of Gastrointestinal Endoscopy (ESGE) and The European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA).[30]
- For endoscopy procedures, the British Society of Gastroenterology recommends that enhanced PPE is used for upper GI endoscopic procedures. Use of PPE for lower GI procedures should consider the screening participant's risk, symptoms, and their COVID-19 screening result.[31]

Recommendation 2: Ensure screening centres are set up to enable patient flow and adequate physical distancing, and maintain a clean environment.

*Key Evidence & Implementation Considerations*
- Intensified deep cleaning should be performed to protect staff and screening participants.[32]
- Improve the set up and flow of screening centres, by having:
  - Plexiglass barriers.[32]
  - Physical distancing.[32]
  - Marked places to stand in elevators.[32]
  - Limit the number of people in common areas and waiting rooms.[32]

- Utilize outdoor safe spaces (e.g., personal vehicle, designated outdoor waiting area) to reduce time spent waiting inside.[33]
- Schedule additional time in between appointments to ensure adequate time for cleaning and reduce wait times.[33]

### 3.2 Assessing individuals for COVID-19 exposure and symptoms prior to attendance for cancer screening or evaluation can reduce risk of exposure for staff and other-individuals.

Recommendation 3: Perform pre-screening for COVID-19 symptoms and possible exposures prior to in-person screening test.

*Key Evidence & Implementation Considerations*
- Where available, refer to technical guidance available for healthcare works provided by provincial and territorial health ministries
- Screening and monitoring for signs and risk of COVID-19 infection such as pre-procedure participant screening, post-procedure participant follow-up and daily staff assessment for signs or symptoms of infection.[33]
- Follow local public health guidelines to develop an approach to isolate and test for high risk or infected patients.[28]
- Screening participants should be reminded of COVID-19 protocols prior to their appointment. [33]

Recommendation 4: All healthcare providers should play a role in communicating current information on infection control practices within their clinical setting and responding to concerns of screening participants.[34]

*Key Evidence & Implementation Considerations*

- It is crucial that hospital-based and community-based GI endoscopy units and clinics develop and adhere to a carefully designed IPAC strategy.[30]
  - All GI endoscopy units and clinics should have an infection prevention and control (IPAC) policy that is aligned with hospital, regional or provincial/territorial guidance.[30]
  - All GI endoscopy units and clinics should monitor for changes in hospital, regional, or provincial guidance and adjust their IPAC policy accordingly.
- Members of the care team which includes screening participants, are encouraged to report and act on screening participants infection control concerns and incidents.[29]
- Incidents are disclosed to the screening participant and/or family as soon as known and documented.[34]
- Incidents are analyzed and acted upon by interdisciplinary teams which include patients.[34]

## 4. Using digital health to optimize the screening journey

**Leverage virtual care visits and virtual triaging, to minimize in-person contact with health care providers and to ensure the continued promotion of patient participation in cancer screening.**

Recommendation 1: Provide virtual care when safe and feasible, especially for those who are immunocompromised and at highest risk for COVID-19 infection.[35]

*Key Evidence & Implementation Considerations*
- Virtual triage can be implemented for new referrals to diagnostic services following an abnormal screening test.[36]

- Canadian and international evidence supports the use of virtual care visits, particularly for those at high risk, rural/remote populations, and those unable to travel.[37,38,6]
- Virtual visits (videoconference, telephone, e-mail, or text) can be used for education and follow-up (e.g., to communicate results and provide counseling after a negative test and for management of a positive test).[17,39]
- Virtual visits can enable health care workers to do remote examinations of the screening participant's condition and share relevant information concurrently without making direct interaction, subsequently preventing the spread of COVID-19.[40] When planning for virtual and digital supports, it is important to consider online formats that make resources accessible to all.[36]
- Consider how to make supports available for screening participants whose first language is not English or French.[36]
- Radiologists can review mammograms from offsite.[36]
- The same legal, professional, and standard of care obligations that apply to in-person care applies to virtual visits[41].
- A screening participant's health, specific needs, existing resources, and circumstances must be considered to determine if virtual mechanisms are appropriate and a safe way to deliver care[41].
  - o It is important to identify and address disparities in access to and uptake of virtual services, including barriers in access to internet-enabled devices or high-speed internet, experience of lower digital literacy and concerns related to confidentiality, privacy and data security.[6]
- An in-person physical exam may still be required, and virtual care is not a substitute for attending the Emergency Department for urgent situations.[41]

- Ensure the suitability of the participant and virtual care tool used in the encounter.
  - o The Canadian Medical Association, along with the Royal College Physicians and Surgeons of Canada, created a Virtual Care Task Force who established that, to be effective, virtual care must uphold (and not detract from) the principles of quality care as compared to in-person care.
  - o The following six-dimension concept of quality as defined by the US Institute of Medicine should be applied: safe, effective, patient centred, timely, efficient, and equitable.[42]
  - o Healthcare providers should remain abreast of emerging evidence and tools to support the uptake of virtual care in a safe, effective, and efficient way.
    - For example, guidance was made available by The College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, and the Canadian Medical Association through a *Virtual Care Playbook* in March 2020.
- In utilizing virtual care technologies, screening participant consent must be obtained, including consent for the use of any photos or email prescriptions to pharmacy. Medical records of the visit should be maintained, transmitted, stored in secure encrypted systems, and available to other healthcare professionals for the provision of ongoing patient care.[41, 43]
- Preparation allows the virtual visit to be more professional, productive, and efficient.[42,44]

## 5. Increasing Access to Care Closer to Home

Note: when pursing strategies for increasing access to care closer to home it is important to also acknowledge and respond to persistent

systematic barriers to screening. Working closely with communities throughout planning can provide a better understanding of their needs and improve trust in the healthcare system. Ensuring that strategies to increase access to care are aligned with community needs, priorities and infrastructure will lead to improved access to and uptake of screening. Refer to Embedding Equity to Develop Resilient Screening Services & Programs section for further detail.

## 5.1 Implement self-sampling for cervical and colorectal cancer screening to provide continued access to cancer screening and reduce in-person interactions with healthcare providers throughout successive COVID-19 waves.

Recommendation 1: Implement human papillomavirus (HPV) self-sampling for cervical cancer screening prioritizing populations that are more likely to be affected by COVID-19 related travel restrictions.

Key Evidence & Implementation Considerations
- Canadian and international guidance supports self-collection of cervical screening samples at home. Jurisdictions are asked to consider switching to primary HPV testing to enable self-sampling.[17, 39, 45, 46]
- WHO guidance emphasizes that appropriate infrastructure and capacity is required for self-sampling for cervical cancer (HPV test).[17]
- Implementation of self-sampling will contribute to the adoption of HPV testing as the primary cervical cancer screening tool.

Recommendation 2: Implement or continue mailed provision of fecal test kits for colorectal cancer screening.

*Key Evidence & Implementation Considerations*

- At-home testing with the FIT test is the preferred screening method for colorectal cancer screening and mailed provision of the FIT test is efficient and has good uptake among participants.[47,48]
- It is important to build on existing momentum to advance mailed provision of fecal test kits, while recognizing mailed provision of tests is subject to:
    - o Availability of a registry that includes addresses and screening history.[48,49,50]
    - o Timely access to colonoscopy.[48,49,50]
    - o Effective means to coordinate follow-up for individuals who test positive
    - o Review of wait-times from abnormal results to colonoscopy.[48,49,50]
    - o Needs for case prioritization because of reduced endoscopy unit capacity due to physical distancing, turnover times, scarce personal protective equipment (PPE). [48,49,50]

## 5.2 Resume mobile cancer screening services where they are commonly used as sites to offer care in the community.

Recommendation 3: Continue to schedule mobile breast cancer screening clinics that visit communities so women can access breast cancer screening safely.

*Key Evidence & Implementation Considerations*
- Healthy individuals may be afraid or reluctant to travel in from their community for imaging appointments. Data indicates that with proper measures, community screening remains a safe and reliable way to maintain regular cancer screening breast during the pandemic.[51, 52]
- Mobile screening units (MSU) need to be modified to ensure COVID-19 safety measures (e.g., proper ventilation systems on the bus). [53,54,35]

- Consider the state of the pandemic in both the region where the MSU is coming from and going to; when booking MSU, include questions to understand community Covid-19 status prior to travel.
- Consider measures to keep MSU staff healthy (e.g. suitable accommodations with kitchen to prepare meals, travel method if required to meet up with the travelling MSU).

## 6. Supporting Healthcare Providers

**Provide primary care providers with resources and tools, to support patient engagement and continued screening efforts with subsequent waves of the pandemic.**

Recommendation 1: Engage and communicate with primary care providers about cancer screening on an on-going basis during COVID-19.

*Key Evidence & Implementation Considerations*
- Support primary care providers in appropriate use of resources and infrastructures through education on recommended screening practices.[55]
  - E.g. Healthcare professional training on community realities and cultural safety are embedded in the system. [8,9,10]
- Support primary care providers to adopt high value screening practices, discard low value practices, reduce inequities and increase awareness of COVID-19 impact on population and culture.[56]
- Include primary care providers on communications with the screening participants to ensure they remain abreast of the individuals progress through screening and follow up procedures.[55,56]
- Ontario guidance emphasizes requirements for coordination between care providers (e.g. primary care,

colposcopists, endoscopists and screening sites) to facilitate participant referrals.[57]
- Provide specific training to communicate the importance of cancer screening during the pandemic and respond to factors which contribute to barriers to screening (e.g., concerns regarding exposure to COVID-19, travel limitations, line-ups)
- Utilizing virtual mechanisms to delivery care can strengthen occupational health of healthcare providers.[40]

## 7. Supporting Communities

**Provide practical supports and on-going communications to people receiving care, to address individual needs with respect to cancer screening during and after the pandemic.**

Recommendation 1: Partner with members of the multidisciplinary team, subject matter experts, community partners, and members of the public to plan screening services during pandemic.

*Key Evidence & Implementation Considerations*
- Identify barriers and facilitators to implementing the plan.[58,59]
  - Where barriers exist, efforts are made in collaboration with partners and stakeholders to ask why and collectively work towards solutions.[54,35] For example, learnings from screening participants and their families past experiences and where they see future risks to their safety can help address public fear and identify ways to reassure the public of precautions taken to ensure their safety when visiting healthcare settings, including primary care and labs.[60]
- Document and communicate the plan.[58,59]
  - Proactively review and continuously update the plan.[58,59]

- Ensure the plan is easily accessible to staff, partners and stakeholders.[58,59]
- Patient and Family Advisors suggest that plans should consider psychosocial (e.g. family/caregiver support at appointments) and practical (e.g., transportation to screening sites) needs to enable participation in screening.

Recommendation 2: Build greater cancer awareness of the importance of cancer screening within communities.

*Key Evidence & Implementation Considerations*
- Design and deliver education sessions and materials with First Nations, Inuit, and Métis populations with specific priorities to ensure results are meaningful and relevant.
- Patient and Family Advisors suggest developing a strategy for communicating screening services to the public.
  - It is important to ensure screening results are communicated to patients as they now have fewer interactions with the healthcare system and may fall between the cracks.
- Patient and Family Advisors note the importance of providing assurance that individuals will receive care should they have an abnormal result, while being realistic about expected backlogs.
  - Create key messaging around safety and importance of screening using plain language.[58,59]
  - Communicate information about backlogs and share that recommendations can change over time in response to the current situation. [58,59]
  - Explain risks in context of competing risks (e.g. the risks associated with missing cancer screening, as opposed to the risk of contracting COVID-19).[58,59]
- Messaging about what can be expected in screening should be stated using real terms that honestly and transparently communicate the plan for the individual and what role the participant plays in their care.[6]
- Use visual aids such as posters and reminders to aid in communicating with the public.[59]
- Awareness activities are planned and implemented.[59]

Recommendation 3: Partner with screening participants and families as core members of the healthcare team to enable a person-centred approach to care.

*Key Evidence & Implementation Considerations*
- Support and engage screening participants and families in making informed decisions about their health.[58,59]
  - Enabling screening participants to make informed contribution to care and treatment decisions can ensure health services are provided in a holistic, dignified, and respectful manner.[8,9,10]
- Ensure screening participants have the information they need to contribute to decision making.[6,58,59]
  - Establish practices to support communications to participants that are clear and help manage expectations regarding key potential concerns such as delays accessing services and the impact of delays or reduced access to screening on outcomes.
  - Make it clear that screening test results and gathered information are owned by the screening participant.[7]
- Provide materials (e.g., patient education handouts, online resources, etc.) written in simple language and in the screening participant's language of choice, with specific consideration for variation in health literacy.[6,58,59]
- Engage screening participants in their own care - involve participants and families in planning and improving their health care.[58,59]

- Patient and Family Advisors suggest mechanisms are needed to allow families/caregivers to accompany screening participants to their appointments.
  - Where it is not possible for family/caregivers to accompany screening participants, mechanisms should be explored to create virtual mechanisms for family/caregiver support.

Recommendation 4: Create a culture where feedback from screening participants, families, public is sought out every day.

*Key Evidence & Implementation Considerations*
- Ensure structures are in place to support daily dialogue and conversation with participants and families about care (e.g. safety huddles).[58,59]
  - Normalize and encourage participants and families to speak up and raise concerns (e.g. encourage screening participants to articulate anxiety and mental health concerns and offer supportive care and counselling to address their concerns).[4,47,48]
  - Take a collaborative approach to explore and act on concerns raised.[58,59]
- Co-design point of care policies and procedures with participants and families (e.g. family presence policy, patient handovers, etc.).[58,59]
- Involve screening participants and families at an organizational level (co-design services with patient, community and public partners, establish patient, community and public advisory councils etc.).[58,59]
- By making imaging, laboratory results and clinical notes available online, screening participants can be empowered to better understand their treatment plan, clarify with their care team when needed, and identify errors in their medical records should they exist.[58,59]

# Conclusion

Efforts to support screening resilience will support the provision of screening services to eligible populations across Canada. Particular attention should be placed to ensure equitable access to screening for underserved communities, which will involve working with governments and organizations that represent underserved communities to achieve goals towards advancing equity and cultural competency within screening services:
- Strategies for supporting screening resilience can support the provision of screening services during the COVID-19 pandemic but should work to also advance activities which address needs, reduce barriers, and improve access for underserved populations.
  - Engaging communities to understand the factors that drive barriers and facilitators to accessing health, education and social support and ensure these services remain available for those who rely on them both throughout and beyond the pandemic.[6]
- Development of evidence-based prioritization frameworks should consider ways to address competing needs in an equitable fashion.
- Modifications to the screening pathways should ensure needs of underserved populations—including people with lower incomes and people who live in rural and remote communities—are being addressed both during and beyond the pandemic**.**

More and better data are needed:
- Efforts to improve the availability, analysis and dissemination of Peoples-specific, self-determined data are needed to better understand the First Nations, Inuit, and Métis screening journeys during the pandemic.

- Efforts to collect, link and disaggregate data (e.g. related to socio-demographic factors, including geography, income, education, racial and/or ethnic background, sex and gender, sexual orientation, etc.) can enable an improved understanding of inequities and enable targeted intervention to reach those most in need.[6]
- Further investigation of the impact of the first wave of COVID-19 on the provision and uptake of screening services is needed to provide additional insights to inform future planning activities to enable screening resilience through future waves of this pandemic, or future pandemics.[6]

This document reflects the best available evidence and expert recommendations for screening service provision and prioritization to increase the resiliency of screening services during anticipated outbreaks or service disruptions related to the pandemic. This document will be reviewed and updated to reflect new and emerging evidence as it becomes available.

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