



The Division of
Continuing Professional Development
Faculty of Medicine



BC Cancer Agency

CARE + RESEARCH

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Primary Care Physician Education and Engagement in the Promotion of Recommended Cancer Screening in BC

EXECUTIVE SUMMARY ON PROVINCE-WIDE CANCER SCREENING NEEDS ASSESSMENT

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ADVISORY COMMITTEE MEMBERSHIP

Presented below (*in alphabetical order*) are the Advisory Committee members for the needs assessment study. Details on the involvement of the Advisory Committee are described in the 'Methods' section.

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GLOSSARY

BC	British Columbia
BCCA	British Columbia Cancer Agency
BCCFP	British Columbia College of Family Physicians
BCMA	British Columbia Medical Association
CCSP	Cervical Cancer Screening Program
CPSBC	College of Physicians and Surgeons of BC
CME/CPD	Continuing Medical Education/Continuing Professional Development
CPSBC	College of Physicians and Surgeons of BC
CT Colonography	Computed Tomography Colonography or Virtual Colonoscopy
DRE	Digital Rectal Examination
EMR	Electronic Medical Record
FHA	Fraser Health Authority
FOBT	Fecal Occult Blood Test
FPON	Family Practice Oncology Network
HCP	Hereditary Cancer Program
HPV	Human Papillomavirus
IHA	Interior Health Authority
LBC	Liquid Based Cytology
MRI	Magnetic Resonance Imaging
NHA	Northern Health Authority
PSA	Prostate Specific Antigen
SGP BC	Society of General Practitioners of British Columbia
SMP BC	Screening Mammography Program of British Columbia
UBC CPD	UBC Division of Continuing Professional Development
VCHA	Vancouver Coastal Health Authority
VIHA	Vancouver Island Health Authority

EXECUTIVE SUMMARY

INTRODUCTION

Studies show that screening for certain cancers leads to earlier detection and reduced morbidity and mortality, and that physician recommendations have the greatest influence on patient behaviour. However, most research on screening practices has been conducted on primary care physicians practicing in the United States where social, demographic, ethnic, and economic circumstances differ from Canadian health care models. Limited published data is available about the cancer screening practices, attitudes, and barriers of British Columbia (BC) primary care physicians.

In order to address the potential gap in recommended cancer screening practices in BC, the BC Cancer Agency engaged the University of British Columbia Division of Continuing Professional Development (UBC CPD) to conduct a comprehensive, province wide, needs assessment with the goals of:

- (i) Understanding BC general practitioners' and family physicians' attitudes and practices related to screening for the cancers that were the focus of the study (breast, cervical, colorectal, prostate cancers, as well as hereditary predisposition to cancer);
- (ii) Identifying physicians' suggestions for improving cancer screening in BC;
- (iii) Understanding the barriers to the engagement of physicians and well patients in discussions about cancer screening; and
- (iv) Developing a strategy to improve doctor/patient communication and best practices pertaining to cancer screening.

METHODS

The needs assessment study employed a mixed methods approach consisting of a comprehensive survey of primary care physicians registered with the College of Physicians and Surgeons of BC as of January 2009, followed by focus groups drawn from a sample of survey respondents. All data was collected in 2009. The online version of the survey was sent to 4,457 BC primary care physicians by email followed by a hardcopy of the survey mailed to 5,216. The quantitative data was analyzed using SPSS 17.0, with an α level set at 0.05, and descriptive analysis performed. Content analysis was performed on the qualitative data obtained from the open-ended survey questions. Salient thematic areas were identified and coded.

Focus groups and interviews were conducted involving a total of 25 participants. The focus groups and interviews were recorded and data were tabulated, triangulated, summarized, and analyzed for patterns or emergent themes. NVivo (version 8), a qualitative analysis software, was used for organizing and grouping data and applying codes and units of analysis.

DEMOGRAPHICS

In total, 887 primary care physicians completed the survey yielding a response rate of 17% with an even distribution of male and female physicians. A noticeable higher percent of physicians completed the hardcopy version (74%) compared to the online version (26%) of the survey. The average age of respondents was 49 years, suggesting substantial practice experience, as slightly more than half had been in practice for 20 years or more. A large percent were in full-time fee for service practice and reported seeing more than 100 patients per week in small family practice settings. There was physician representation across the five BC health authorities, with both urban and rural practitioners participating in the study. These demographics were similar between survey and focus group participants, confirming the study sample was representative of BC physicians.

HIGHLIGHTS OF SURVEY FINDINGS

CURRENT PRACTICE

The majority of physicians start recommending cancer screening within an age range that is consistent with current recommendations. However, results showed variation in physician practice with respect to the age range they stop recommending cancer screening, which was often much older than recommended by cancer screening guidelines. These differences in physician practice may be explained either by their perception that the potential benefits of screening older patients outweighs the potential harms of not screening or by their misunderstanding of recommended screening guidelines.

The majority of physicians informed well patients about the need for cancer screening during check-ups or routine visits. One-third of physicians were less comfortable with their knowledge to help patients decide the pros and cons of cancer screening. In particular, physicians reported higher comfort with explaining the pros and cons and interpreting results for breast, cervical, and colorectal cancer screening, but lesser comfort in doing this for hereditary predisposition to cancer and prostate cancer screening.

For well patients, a large percentage of physicians recommended colonoscopy, a Digital Rectal Exam (DRE) with a home Fecal Occult Blood Test (FOBT), or simply a FOBT completed at home for colorectal cancer screening. Almost all physicians recommended DRE and a Prostate Specific Antigen (PSA) test for prostate cancer screening. This is particularly interesting when considering the fact that PSA testing and colonoscopy are not part of the routine BC cancer screening program.

The majority of physician respondents believed that the BC Cancer Agency, primary care physicians, and public health agencies have a role in sending screening notifications to patients, whereas few perceived the Ministry of Health and regional health authorities as having a role in this.

Participants commented on their satisfaction with the existing reminder system in place for the screening mammography program and suggested that similar models could be expanded to other screening practices. Approximately half of physicians indicated they needed access to better reminder systems to notify their patients of recommended cancer screening for cervical, colorectal, and prostate cancers. The physicians believed EMR systems should be integrated for patient reminders in practice settings. Data revealed that paper based reminders were perceived to be a more effective mechanism for reminding patients about cancer screening procedures compared to phone calls. These paper-based reminders could be sent to the public by the BCCA.

ATTITUDES/KNOWLEDGE

The physician respondents reported an overall strong belief in the advantages of cancer screening for well patients. Although still considered favourable, agreement was lower for prostate cancer screening and hereditary predisposition to cancer. Findings showed a high percent of physician respondents were comfortable with their skills in performing clinical breast exams, Pap tests, and DREs for cancer screening.

Physicians recognized their central role in the cancer screening process. The majority believed they effectively communicated cancer screening strategies to their well patients and that patients tend to follow their recommendations for cancer screening. Most physicians believed that patients should be able to continue to self-refer for breast cancer screening and self-referral should be made available for colorectal cancer screening.

FACILITATORS/BARRIERS TO CANCER SCREENING

Physicians indicated barriers to discussing and encouraging cancer screening for well patients included several competing issues such as: patients with multiple health issues; language and cultural barriers; level of comfort with knowledge about cancer screening and the time it takes to explain the pros and cons of cancer screening; inadequate physician financial compensation; patient discomfort with screening procedures; patient inability to afford the cost of screening procedure; and patient anxiety about the results; accessibility of screening services (*especially rural areas*). Some of these barriers related to the limited time a physician could spend with a patient to deal with cancer screening, and several strategies were suggested by physicians to maximize the time a physician could spend with their patients for this. These included changes to the current physician financial compensation structure; processes to facilitate physicians spending dedicated time with patients for cancer screening; cancer screening discussions during scheduled group visits; the use of brochures as decision aids to inform patients about cancer screening; and the availability of point of care tools for use in a medical practice context.

The data showed a need for physicians to have better available cancer screening educational materials for patients especially related to colorectal and prostate cancer, as well as the hereditary predisposition to cancer.

The physicians believed the current pace and scope of their practices made it difficult for them to be the “primary driver” for population based screening. It was also suggested that better public education to increase patient awareness of cancer screening would be an important strategy to encourage more meaningful physician-patient discussions about cancer screening.

Both electronic and paper-based resources were preferred by physicians for keeping up to date on cancer screening information and accessing screening guidelines.

The physicians predominately reported the need for more education to improve their current cancer screening practices. In particular, information about new screening programs, referral criteria, and clearer follow-up processes and screening guidelines were requested. A significant percentage of physicians reported needing clearer cancer screening guidelines and follow-up recommendations for patients with positive screening results for colorectal and prostate cancers as well as the hereditary predisposition to cancer.

Physician respondents demonstrated a higher preference for a traditional educational format for learning about cancer screening – conferences – in comparison to other, less preferred educational formats such as self directed study, small group workshops, hospital rounds, and online CME/CPD.

Physicians also indicated individual report cards on Screening Mammography and Pap Test Sampling Quality to be a useful feedback mechanism, particularly in reference to the quality of screening that they performed and the summary of the number of patients screened. It was suggested that the report cards might also be a valuable source of ongoing education for physicians.

Data showed that periodic concise emails from the BC Cancer Agency was an appropriate method for informing physicians about updates to cancer screening guidelines and changes to screening programs. These notifications might be sent in partnership with other BC physician organizations.

DEMOGRAPHIC VARIATIONS IN SURVEY RESPONSES

Rural physicians agreed less with the advantages of screening and found geography more of a barrier and language less of a barrier in recommending cancer screening for their well patients compared to urban based physicians.

Interestingly, gender played a role in discussing and performing certain cancer screening recommendations. In comparison to female physicians, male physicians had more patients requesting PSA testing and greater comfort performing DREs, but less often asked new patients about their Pap history or explained to them the pros and cons of cervical cancer screening, had fewer patients requesting Pap tests, and were less comfortable performing Pap tests.

Compared to the physicians who had been in practice for a longer period of time (*at least 30 years*), knowledge base was more often a barrier for the physicians newer to practice (*10 years or less*) in specifically discussing the pros and cons of cancer screening with well patients. The findings also showed the cohort of newer physicians were less confident in performing certain cancer screening procedures. Physicians newer to practice had a higher preference for online CME and accessing cancer screening information electronically.

SYNTHESIZED FINDINGS AND RECOMMENDATIONS

The synthesized findings and recommendations are directed towards the BC Cancer Agency (BCCA) and other stakeholder organizations involved in cancer screening in BC. They are grouped into the following eight categories, addressing key findings from the survey and focus groups of the province-wide BC cancer screening needs assessment study:

1. Addressing Practice Based Challenges*
2. Public/Patient Engagement*
3. BCCA Website*
4. Breast Cancer Screening
5. Cervical Cancer Screening
6. Colorectal Cancer Screening
7. Hereditary Predisposition to Cancer
8. Prostate Cancer Screening

* Categories 1 – 3 are general recommendations related to the screening topic areas that were the focus of this needs assessment study.

In interpreting these recommendations, considerations should be made to the associations between demographic variables - geographic region physicians practice in (i.e. urban vs. rural), gender, and years physicians have been in practice - on survey responses that are presented in section 3.5 of the report.

1. ADDRESSING PRACTICE BASED CHALLENGES

- 1.1. British Columbia Medical Association (BCMA) and Society of General Practitioners (SGP) should **advocate** for the creation of specific billing codes to compensate *fee-for-service* primary care physicians for dedicated time to discuss cancer screening with well patients.

For example:

- 1.1.1. A billing code for a cancer screening visit to discuss cancer screening procedures that are appropriate for the patient.
- 1.1.2. A billing code for a group visit, where physicians educate patients in groups on appropriate cancer screening in a practice support model.
- 1.2. **Need** an expanded reminder and follow up system for all established cancer screening programs, potentially using the model of the Screening Mammography Program of BC.
 - 1.2.1. Prior to implementing changes, ensure physicians are: (i) supportive of expanded reminder or follow up systems; and (ii) kept involved with all aspects of engaging their patients.
- 1.3. **Support** the integration of cancer screening practices into Electronic Medical Record (EMR) systems used by physicians:
 - 1.3.1. Send individualized patient screening results and recommendations directly through electronic methods to physicians' EMR.
 - 1.3.2. Advocate for the Physician Information Technology Office (PITO) to support integration of clinical practice alerts and audits for cancer screening in EMR systems.
- 1.4. BCMA and SGP should **support** the BCCA in the development of a cancer screening system that helps to link all patients to specific primary care physicians or alternate health care providers for screening and follow up.
- 1.5. **Improve** educational materials provided to physicians:
 - 1.5.1. Integrate physician educational materials into the BCCA website and allow physicians to request (via online and paper form) specific brochures for their practice.
 - 1.5.2. Expand the current BCCA branding scheme (*e.g. use of purple & white*) used on colorectal and hereditary cancer educational materials/brochures to other screening programs. Ensure BCCA logo and type of cancer are prominently displayed (*e.g. at the top of the materials*) on each piece of educational material/brochure.
 - 1.5.3. Need clear flow charts for each cancer program, similar to the "Participant Flow Chart" used in the pilot Colon Check program, which illustrates the process of screening by outlining the pathways from screening criteria, to appropriate screening procedures, to frequency for repeating screening, to follow-up recommendations for abnormal screening results.
- 1.6. **Coordinate** development of resources and education for primary care physicians on:
 - 1.6.1. How to address situations whereby at-risk patients refuse screening due to cultural sensitivities or a prior traumatic experience (*e.g. patient has history of abuse*).
 - 1.6.2. Appropriate screening procedures to use for well patients (*including accuracy, benefits, and limitations of screening procedures*).
 - 1.6.3. Appropriate age groups to begin screening, frequency of screening, and time frame for repeating/stopping screening.
 - 1.6.4. Follow-up procedures for patients with abnormal screening results.

- 1.7. **Disseminate** cancer screening guidelines, follow-up recommendations, changes/updates to existing screening programs, and **educate** primary care physicians about current recommendations and resources available to assist them in their cancer screening practices through:
 - 1.7.1. Accredited CME/CPD approaches such as: conferences, local small group workshops, hospital rounds, online webinar sessions and/or self-directed learning projects.
 - 1.7.2. Use of multiple mediums such as: the physician section of the BCCA website, BCCA feedback report cards, email, courier services, and postage mail.
 - 1.7.3. Development of a case-based cancer screening related educational road show, which incorporates best practices in cancer screening.
 - 1.7.3.1. Utilize existing professional development networks such as the Family Practice Oncology Network (FPON) and the University of British Columbia's Division of Continuing Professional Development (UBC CPD) to deliver road shows provincially.
 - 1.7.4. Development of a mechanism to outline BC-based cancer screening guidelines and processes to physicians new to practice or moving to BC from elsewhere.
 - 1.7.5. BCCA partnering with other professional health organizations such as the BCMA, BC College of Family Physicians (BCCFP), UBC CPD, as well as the College of Physicians and Surgeons of BC to address the above areas.
- 1.8. **Encourage** physicians, particularly those in urban areas serving a patient population with diverse languages, to utilize the BCCA website, 811 nurse line, Healthlink BC (www.healthlinkbc.ca), as well as the Public Health Agency of Canada (www.phac-aspc.gc.ca) as resources for multilingual cancer related information.

2. PUBLIC/PATIENT ENGAGEMENT

- 2.1. **Develop** multi-media public education campaigns (*e.g. web-based video clips, TV, radio, brochures within physician offices*) for cancer screening with support from BC Ministry of Health Services, Health Authorities, other professional health organizations, and non governmental organizations, in order to:
 - 2.1.1. Dispel myths and uncertainties about cancer screening (*e.g. breast, prostate*).
 - 2.1.2. Illustrate benefits and potential harms of screening.
 - 2.1.3. Reduce anxiety and uncertainty about screening procedures.
 - 2.1.4. Encourage appropriate participation in screening procedures.
 - 2.1.5. Engage high-risk groups and those with low screening participation.
 - 2.1.6. Provide clarity on follow up procedures when there is an abnormal screening result.
- 2.2. **Improve** the readability of text in patient brochures by using shorter sentences, additional figures and diagrams, and expand provision of multilingual materials reflective of the diverse BC population.
- 2.3. **Develop** a patient group or public forum educational toolkit on cancer screening that might be delivered by a physician or another trained health care provider.

3. BCCA WEBSITE

- 3.1. **Create** an entry portal for users of the website to select information "For Physicians" or "For Patients". Subsequent web pages should be tailored accordingly.

For physicians

- 3.2. **Promote** the BCCA website as a resource for primary care physicians to:
 - 3.2.1. Clarify guidelines for cancer screening.
 - 3.2.2. Clarify follow-up recommendations for patients with positive screening results.
 - 3.2.3. Download and/or order relevant educational materials such as brochures or newsletters on cancer screening both for patients and for themselves.
- 3.3. **Enhance** the user interface of the website by reducing the 'branches' physicians have to navigate through to obtain desired information.
- 3.4. **Highlight** the latest updates on cancer such as clinical trials, or changes in clinical guidelines on the main entry page.

For public/patients

- 3.5. **Promote** the website as a resource for the public/patients to:
 - 3.5.1. Read and/or download cancer related information and materials such as on prevention strategies and screening procedures.
 - 3.5.2. Be more actively involved in self-education and self management, by developing an interactive tool through which a user can input their demographic information (*e.g. age, gender, lifestyle, family history, etc*), to generate results that highlight potential cancer risks and suggest screening procedures/prevention strategies to discuss with their physician.
- 3.6. **Offer** the public/patient content of the website in languages reflective of the diverse BC population and improve the readability level of text content on the website.
- 3.7. **Imbed** educational videos that explain screening procedures in a more dynamic manner than solely providing information through written content.

4. BREAST CANCER SCREENING

- 4.1. **Develop** educational activities for primary care physicians on enhanced screening practices/recommendations/procedures for high risk patients.
- 4.2. **Improve** accessibility and reduce wait time to the screening mammography program (SMP).
 - 4.2.1. Increase the frequency that the Screening Mammography mobile van visits rural/remote communities.
 - 4.2.2. Expand the number of SMP clinics accepting patients.
- 4.3. **Investigate** the feasibility of alternative evidence-based breast cancer screening procedures that yield less false positives and less discomfort for patients.

5. CERVICAL CANCER SCREENING

- 5.1. **Facilitate** linkages between male primary care physicians and female physicians or allied health care providers, particularly in rural areas, for carrying out a Pap test by a female health care provider when requested by a patient.
- 5.2. **Improve** access to colposcopic examination for follow up of abnormal results.

- 5.3. **Investigate** feasibility and reliability of alternative screening procedures such as:
 - 5.3.1. Procedures that can be performed by patients.
 - 5.3.2. Wider adoption or change over to HPV testing for cervical screening.
 - 5.3.3. Usage of Liquid Based Cytology (LBC).
6. **COLORECTAL CANCER SCREENING**
 - 6.1. **Increase** accessibility and reduce wait time for appropriate colorectal cancer screening (*e.g. colonoscopy*).
7. **HEREDITARY PREDISPOSITION TO CANCER**
 - 7.1. **Support** accredited CME/CPD sessions (*e.g. through regional conferences, local workshops, hospital rounds, webinar sessions, etc*) for primary care physicians that:
 - 7.1.1. Raise physician awareness and familiarity with the Hereditary Cancer Program (HCP), particularly in rural areas (*e.g. criteria for referrals, appointment locations, etc*).
 - 7.1.2. Clarify the genetic counselling and testing process for patients and physicians.
 - 7.1.3. Highlight the evidence and benefits and/or limitations of genetic testing for hereditary predisposition to cancer.
 - 7.2. **Provide** primary care physicians with hardcopy samples of patient related educational materials about hereditary predisposition as well as genetic counselling and testing.
 - 7.3. **Improve** the communication between the HCP and referring physicians to better clarify the results of genetic testing for both patients and primary care physicians.
 - 7.3.1. Promote physician awareness of the dedicated phone line at the BCCA where primary care physicians can call in to present questions about the referral criteria to HCP or the results of genetic testing.
 - 7.3.2. Identify strategies to more effectively communicate to the primary care physician the implications of genetic testing results for individual patients.
 - 7.4. **Solicit** provincial and federal funding to support the expansion of the number of HCP sites.
8. **PROSTATE CANCER SCREENING**
 - 8.1. **Develop** accredited CME/CPD educational programming for primary care physicians to clarify uncertainties surrounding prostate screening.
 - 8.1.1. Provide clear information about the controversies, benefits, and potential harms of prostate cancer screening, in particular on Prostate Specific Antigen (PSA) testing.
 - 8.1.2. Provide primary care physicians with prostate cancer screening guidelines.
 - 8.1.3. Engage the CMPA (Canadian Medical Protective Association) in leading educational programming specifically around any potential medical/legal aspects of not ordering PSA tests.
 - 8.2. **Establish** a committee to engage appropriate stakeholders in discussions around Medical Services Plan (MSP) coverage of PSA testing.
 - 8.3. **Provide** primary care physicians with decision support aids to give to their patients that:
 - 8.3.1. Create awareness and understanding of prostate cancer.
 - 8.3.2. Educate on available prostate cancer screening procedures such as Digital Rectal Exams and PSA testing, as well as the benefits (*e.g. early detection*) and limitations (*e.g. false positive*) of each.