

FAMILY PRACTICE ONCOLOGY NETWORK PRIMARY CARE NEEDS ASSESSMENT



**British Columbia, Canada
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FINAL REPORT**

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ABOUT THE FAMILY PRACTICE ONCOLOGY NETWORK

Since 2003, the Family Practice Oncology Network (FPON) has provided oncology resources and connections to strengthen family physicians' abilities to care for people living with cancer in their communities. Going forward the role of FPON is expanding with a goal to assist BC Cancer in its mandate to improve cancer control in the province by overseeing the planning, implementation and promotion of activities as the Provincial Primary Care Program ("the Program"). The scope of activities will support primary care providers and their patients across the cancer care continuum. An Advisory Council will provide guidance to the Program on matters relating to improved patient care by family physicians and other primary care providers including the consideration of mechanisms by which general and family practitioners can be supported in their roles as community resources for cancer control as well as for other chronic and complex diseases.

Vision and Mission

The Program, through the Network will support family physicians and other primary care providers to:

- Prevent cancer for those at risk;
- Coordinate the investigation of those with symptoms;
- Care for those undergoing and recovering from cancer treatment;
- Provide psychosocial support throughout the cancer journey;
- Palliate those in need; and
- Provide long term follow up for survivors.

The Program aims to allow family physicians in British Columbia to focus on the coordination and continuity of patient care, prevention and early detection of cancer, provision of appropriate information for patients, and care and support for patients and families throughout their journey. Family physicians will have opportunities to access cancer related continuing medical education and clinical oncology research groups.

It is recognized that family physicians must treat a wide range of illnesses throughout the lifespan of their patients. The Program's communication tools and resources aim to help address the wide range of health issues for which a family physician is responsible.

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ABOUT UBC CPD

The Division of Continuing Professional Development (UBC CPD) is a unit within the Faculty of Medicine at the University of British Columbia. The Division via the Associate Dean CPD reports to the Executive Associate Dean Education along with the Undergraduate and Postgraduate Associate Deans. UBC CPD views itself, and is increasingly viewed by others, as an integral part of the continuum of health professions education in the Faculty of Medicine at UBC. We partner and collaborate with local, provincial, and national health care organizations to design and deliver high-quality, evidence-based education that promotes practice improvement and enhances patient care.

The strength of UBC CPD lies in its people and the relationships we have developed and nurtured across the Faculty of Medicine, the province, and the country. UBC CPD is a tremendously productive unit supporting many of the 11,000+ physicians across the province with their CPD needs. We accredit hundreds of programs each year through our Accreditation office and we continue to work toward developing and offering CPD for other health professions within the Faculty of Medicine and beyond.

UBC CPD is often seen as a “one stop shop” for partners and stakeholders in CPD because we can lead or get involved with all stages of an initiative, from conception, to curriculum design, to the development of a research, evaluation, and knowledge translation strategy, to the execution or implementation of educational programming. We pride ourselves in our ability to be nimble and responsive to learner needs and to address these needs with high-quality, evidence-based, multi-modal education strategies. Increasingly, we are approached by university departments, specialty societies, physician or other health care organizations, and provincial and national medical authorities, to lead educational or practice improvement strategies or manage CPD events.

Our Vision

To be leaders in health improvement through innovative continuing professional development.

Our Mission

To research, develop, implement, and evaluate continuing professional development (CPD) initiatives for physicians and other health professionals to optimize clinical practice and the delivery of patient care in order to improve health outcomes. As an academic unit, UBC CPD follows and contributes to best practices in CPD, including quality and practice improvement in BC and at national and international levels.

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EXECUTIVE SUMMARY

INTRODUCTION

British Columbia (BC) has a population of 4.62 million people; over 200,000 of whom have been diagnosed with cancer at some point in their lifetime¹. The prevalence of cancer in BC is growing by approximately 3% per year and the survival rate for all cancers continues to increase. Approximately 65% of adults and 80% of children diagnosed with cancer are now expected to live at least five years post-diagnosis¹. With this marked improvement in survival, there is a need to leverage the expertise of primary care providers in the province to ensure the increasing need for cancer care in BC is met. As we build a better understanding of the diverse and sometimes complex needs of patients after a cancer diagnosis, it is clear that to achieve sustainability and support primary care providers, a more robust primary care program at BC Cancer is needed.

To respond to the increasing demand on the cancer care system, BC Cancer is expanding the Family Practice Oncology Network (FPON) to become the Provincial Primary Care Program. Through this work, BC Cancer aims to strengthen relationships with primary care providers across BC, expand its successful educational offerings, and provide ongoing support and resources to primary care providers caring for patients with cancer, all to build capacity for cancer care within primary care. To support this expansion, FPON, in partnership with the University of British Columbia, Faculty of Medicine's Division of Continuing Professional Development (UBC CPD), conducted a province-wide primary care oncology needs assessment. The project was implemented in 2017, led by an inter-professional Working Group and completed in the summer of 2018.

Key Objectives

FPON engaged UBC CPD to conduct a province wide needs assessment to:

- Understand the current and ongoing unmet needs of family physicians (FPs) providing care for patients throughout the continuum of cancer care; and
- Establish a sustainable mechanism through which the BC Cancer Provincial Primary Care Program can engage FPs throughout the province in ongoing, two-way communication to improve their ability to meet their needs and advocate on their behalf.

METHODS

The FPON Primary Care Needs Assessment was implemented in three phases. The first phase consisted of nine key informant interviews with subject matter experts from across the continuum of cancer care. The second phase consisted of a comprehensive online survey disseminated to approximately 5000 FPs and other PCPs across BC. The final phase consisted of focus groups with new to practice FPs, rural FPs, urban FPs and oncologists. Detailed descriptions of each phase are included below.

Each phase of the needs assessment was designed to collect important information pertaining to the core issues surrounding the current and future landscape of cancer care and the role that the FPs and other PCPs can play in supporting their patients living with cancer. The key informant interviews, survey and focus group protocols were designed to capture different perspectives and to learn more about respondents' experiences with, and recommendations related to, clinical knowledge and comfort, current processes and procedures, roles and responsibilities, and education needs for FPs and other PCPs in BC.

RECRUITMENT

Key informants were identified through the professional networks of Working Group members and are subject matter experts in primary care or stakeholders from affiliated or partner organizations. Nine interviews were conducted with one rural FP, two urban FPs, one general practitioner in oncology (GPO), one oncologist, three physician administrators at BC Cancer and one faculty member of UBC Department of Family Medicine.

Following the key informant interviews, a 15-minute online survey was developed for FPs and nurse practitioners (NPs) in BC as well as general practitioners in oncology (GPOs) and oncologists. The survey was distributed online via various marketing channels.

Focus group participants were recruited through the online survey from respondents who expressed interest in participating further, provided their contact information and self-reported their practice demographic information (nine new-to-practice, four rural FP, nine urban FP, seven oncologists).

DATA COLLECTION

The key informant interview protocols were designed by iterative development to capture different perspectives on a number of oncology-related topics. Questions explored key areas including FP knowledge along the continuum of cancer care, BC Cancer's role in supporting FPs, and how the Provincial Primary Care Program should operate. The base protocol can be found in [Appendix B](#). All key informant interviews were conducted via teleconference to minimize barriers to participation. A total of nine, 30-minute key informant interviews were conducted.

The online survey was designed by the Working Group over a four-month period (October 2017 to January 2018) through iterative development and received external review by subject matter experts and external stakeholders (see [Appendix C for full survey](#)).

A total of 866 responses were collected (757 complete and 109 partial) after removing responses from ineligible respondents (i.e. non-PCP respondents or blank responses) resulting in a response rate of 18% (with 4852 considered to be the denominator).

Focus groups protocols were designed to address gaps in the preliminary results from the key informant interviews and online survey. Protocols used a semi-structured framework which allowed feedback on the sequence of questions. Questions further explored the FP role in cancer care, how the Provincial Primary

Care Program could support FPs, and key challenges to managing patients with cancer. Participants were sent the protocols ahead of time (see [Appendix D](#) for protocols). Focus groups were 90-minutes in duration conducted via WebEx and were moderated by the BC Cancer Provincial Primary Care Program Lead.

DATA ANALYSIS

Key informant interviews were audio recorded and transcribed. Data were tabulated, summarized, and analyzed for patterns and emergent themes. Qualitative survey data from open-ended questions was analyzed to identify key themes and further inform the quantitative data collected in each phase. Data summaries were reviewed by the Working Group for agreement and interpretation accuracy.

Further integrative analysis was performed for the purposes of report compilation and preparing recommendations. Similar thematic areas from the quantitative and qualitative analyses were grouped and reviewed by the project team to draw out consistent themes and outcomes.

NEEDS ASSESSMENT FINDINGS

Roles and Responsibilities

Family physicians throughout the needs assessment saw their role as the main point of contact for their patients throughout their cancer journey as well as the main source of psychosocial support. This reflects the lifelong relationships that FPs build with their patients and the broad scope of family medicine practice.

Cancer screening and timely referrals to BC Cancer were highlighted as key parts of the FP role in cancer care along with co-morbidity management and ongoing monitoring and surveillance after treatment.

Findings revealed that FPs value two-way communication with the cancer care team and think it is important to be involved in treatment decisions. They value being informed of potential side-effects and necessary follow-up care both during cancer treatment and after cancer treatment has been completed. Family physicians noted that the more information they are given, the better they can support their patients to navigate the cancer care system successfully.

Clinical Knowledge and Care Delivery

The current state of FP cancer care knowledge is highly variable and related to a number of factors including the individual provider, the complexity of the patient and the point along the cancer care continuum. Findings supported the perception that cancer screening and referral are key parts of the FP role, with most respondents agreeing that FP knowledge is strongest in the early stages of the cancer journey, particularly for common cancers.

Knowledge gaps exist when patients are transitioning into active treatment and instructions received from specialist physicians are unclear regarding post-diagnosis work-up and next steps. This was confirmed by FPs as a point of stress when caring for their patients with cancer. Further gaps were identified around

follow-up after treatment, particularly with less common cancers and those without clear primary care guidelines. Only 50% of survey respondents agreed that they were confident managing post-treatment cancer follow-up and late-effects.

Shared care was identified as important and key for the sustainability of high quality patient care. Conversations around shared care were often focused on the importance of communication between members of the care team both around roles and responsibilities and regarding access to and sharing of patient information electronically through an electronic health record (EHR).

Challenges related to care delivery included geographic isolation or remoteness, small or limited care teams, limited resources, lack of time, patient characteristics (such as income status, frailty, and mental health), and treatment delays or long wait times.

Communication

The primary method of communication from BC Cancer identified by needs assessment respondents was the discharge letter or summary. Opinions varied regarding the effectiveness of this channel, with some finding the letters very useful and others citing their lack of detail as a challenge. This likely reflects individual provider and community differences.

Respondents indicated that immediately post-diagnosis, communication and knowing what they should do next can be difficult. Respondents agreed that specialists were easily accessible by phone if the appropriate contact information was available, but that finding the correct contact information often posed challenges. Respondents offered a number of suggestions and ideas for improving communication including:

- Access to the patient care pathway;
- Knowing the patient's appointments schedule;
- Clear information on who to contact during the day and after hours;
- Direct lines to their patients' oncology team; and
- Specific contacts for specific questions/issues

Education Needs and Barriers

Respondents made multiple references to complexity of cancer care and treatment. They indicated that there are many gaps in knowledge and barriers to learning. The two main barriers are the rapidly changing, complex field of oncology and a lack of access to high quality resources. The two main gaps in knowledge identified are advising on treatment options and treating side-effects or co-morbidities. Patients come to their FPs for advice on treatment options as well as when dealing with side-effects or other illnesses. Family physicians often do not feel equipped to provide advice on treatment options.

Respondents felt that BC Cancer should take a leadership role in establishing primary care guidelines as well as pioneering the implementation of novel strategies to maximize the effective use of practice data for practice improvement/quality improvement (PI/QI) purposes.

Other identified education needs of FPs included:

- Awareness of the education and resources are currently available to them;
- New education opportunities and resources on cancer treatments, new and emerging cancer care technologies, distinguishing cancer-related symptoms from treatment side-effects, and treating other general illnesses for patients with cancer;
- Communication support including physician-patient communication and community physician-BC Cancer communication; and
- Quality assurance of clinical skills

Another identified gap was a lack of resources for holistic care and allied health services. Mental health care and social workers were commonly mentioned as needed resources, and respondents did not always know how to find or connect patients with available resources.

Respondents highlighted that education needs to be flexible and dynamic to accommodate busy schedules and learning styles. The top three most preferred identified learning formats were in-person conferences, self-paced online modules and small group learning.

Provincial Primary Care Program

A wide range of issues and suggestions came from respondents with regards to role of the Provincial Primary Care Program. Discussions of stakeholders ranged from differences between urban and rural physicians and their practices, to raising the awareness of the program within the Ministry of Health, to advocating for compensation changes to better support specialist physicians and FPs who provide cancer treatment. The Divisions of Family Practice, the BC College of Family Physicians, the Doctors of BC, Health Authorities and UBC CPD were identified as key organizations to partner and collaborate with for the expansion of the Provincial Primary Care Program. Respondents thought that communication with FPs should be prioritized by BC Cancer both at the individual FP level as well as the FP community as a whole.

In terms of education and resources that the Provincial Primary Care Program should develop, respondents identified quick access to information and advice, rather than developing deeper knowledge of cancer care subjects as important. This supports the shift away from tumour focused education and indicates a shift to care pathway focused education. Family physicians want to know the best online sources used and recommended by oncologists. They also want information on alternative treatments for when patients ask questions or are undergoing these treatments.

KEY RECOMMENDATIONS SUMMARY

The top priorities for the new Provincial Primary Care Program at BC Cancer, as identified by survey respondents, are:

- Advocate for improved access to appropriate clinical resources/services for patients (e.g. shorter wait times).
- Develop practice tools for supporting care for patients with cancer (e.g. treatment algorithms/pathways).
- Provide education and training for physicians.

Based on the needs analysis, there are four main areas in which to develop strategies for the Provincial Primary Care Program.

Given the scope of the recommendations, and the size of the team, it will be important to prioritize within and among the four categories of recommendations. For the strategies that are ultimately selected, setting up development and implementation patterns can assist in allocating workload and managing expectations. For instance, for a series of information resources or educational programs, establish topic/content-area priorities, then develop one resource or program at a time, establishing a consistent release schedule with the highest impact projects completed first.

1. INFORMATION RESOURCES

The needs assessment indicates that respondents have a strong preference for “just in time” resources. Guidelines for the most common cancers were well received and there were many suggestions for additional guidelines, tips, checklists, etc.

- 1.1 Continue to develop tumour-group guidelines and update existing guidelines as needed. Both the Cancer Care Outreach Program on Education (CCOPE) final report and the FPON needs assessment identified the tumour-group guidelines as a key resource and priority for ongoing development.
 - 1.1.1 Use the needs assessment results to prioritize the order for development of the remaining guidelines: blood/lymphoid, lung, and skin.
 - 1.1.2 Set a pattern for the development timeline (i.e. one new tumour-group per year) to both use Provincial Primary Care Program human resources effectively and to manage expectations.
- 1.2 Create infographics, checklists or guidelines for commonly requested areas of knowledge, such as:
 - 1.2.1 Resources for emergency room physicians regarding how treatments protocols are adjusted or differ for patients with cancer.
 - 1.2.2 Brief explanations of treatment options for physicians to use with patients.
 - 1.2.3 Tips for differentiating side-effects from cancer-related symptoms.
 - 1.2.4 Overview of how to treat cancer patients with common illnesses or comorbidities.

- 1.2.5 Prioritize resource development by level of impact on patient care (either due to the critical nature of the information or the number of patients it will impact).
- 1.3 Expand the most effective existing information tools to include cancer care:
 - 1.3.1 Add oncologists to Pathways.
 - 1.3.2 Add oncologists to the specialists that are available via RACE line.
 - 1.3.3 Improve interoperability of BC Cancer EHR system.
- 1.4 Improve the BC Cancer website to ensure it is the go to resource for FPs and patients with cancer.
 - 1.4.1 Improve the user interface design.
 - 1.4.2 Add portals for both patients and professionals.
 - 1.4.3 Improve content quality and implement a schedule for website review and update.
 - 1.4.4 Create a searchable database of support contacts (from social workers, to mental health clinicians, to transportation support, etc.).
 - 1.4.5 Consider developing a mobile application for the BC Cancer website.
- 1.5 Explore ways to push updates to existing guidelines and other information resources to FPs. Use existing technologies and communication channels.

2. EDUCATIONAL PROGRAMMING

Emphasize the practical application of knowledge and skills for care delivery over theoretical knowledge in all education programming. Prioritize topics that will impact the most patients and/or FPs. Vary delivery methods. Track all evaluation results to inform program planning annually.

- 2.1 Create new programming to meet the highest identified needs along the cancer care continuum, particularly at transition points. The needs assessment found that FPs have variable levels of knowledge along the cancer care continuum, find the transition points particularly problematic and stressful, and find it difficult to keep up with changing technologies, treatments and guidelines. The top four priorities for new educational programming should be:
 - 2.1.1 Post-acute treatment and long-term follow-up.
 - 2.1.2 Managing initial work-up and making a diagnosis.
 - 2.1.3 Cancer prevention.
 - 2.1.4 Managing pain during active treatment.
- 2.2 Coordinate release of new guidelines and other information resources with more in-depth education opportunities. For instance:
 - 2.2.1 Release an information resource and offer a webinar for review and discussion.
 - 2.2.2 Pair an information resource with a 5-10 minute presentation for Division of Family Practice members.
 - 2.2.3 Consider other dissemination approaches such as Youtube videos, podcasts, or social media.
- 2.3 Transition in-person workshops to self-paced online modules after two years.

- 2.3.1 Though more respondents identified a preference for in-person learning over online self-paced modules or webinars, attendance at workshops over the four-year CCOPE program was around 800 participants from a potential 5000-6000 FPs. A participation rate of under 20% leaves room for the learning resources to reach a much larger audience. In a two-year period, especially if that time limit is known/advertised, those who prefer in-person learning will have sufficient time to participate. The time limit may actually increase participation rates among those with this learning preference.
 - 2.3.2 The existing four tumour-group workshops could be transitioned in order of either age or popularity. As new workshops are developed (tumour-groups or other topics), plan to offer them throughout the province for about two years prior to transitioning them to self-paced online modules. To retain some of the facilitator-led and peer-to-peer aspects of workshop learning, the follow-up component could be done as a webinar, with the option to attend live for questions and discussion or view later as a recording.
 - 2.3.3 This strategy will address the learning preferences of a larger audience and may allow for the initial round of development and engagement to benefit from the more immediate feedback and iteration possible with in-person teaching and learning.
- 2.4 Review the CCOPE workshop participation data and analyse for month and location participation rates.
- 2.4.1 Determine highest participation months and cluster workshops in those months. This strategy will enable marketing to focus on normalizing certain months or dates, so they become part of the expected rhythm of the year, enabling participants to plan ahead, partially addressing the primary barriers identified and potentially increasing attendance.
 - 2.4.2 Set a location pattern for the workshops that encourages regional participation and does not split enrolment between locations. For instance, rather than offer a workshop in Port Alberni one day and Parksville the next, offer at one location in spring and one in fall. This still gives the choice of attending in your home location or the option of attending earlier in the same region. Track participation rates and refine locations over time.
- 2.5 Target education and resources at the transition points (such as diagnosis to treatment and graduation to follow-up) and to specific roles (FPs, locum FPs, emergency room physicians, nurse navigators).
- 2.5.1 Create learning resources and education opportunities that equip FPs to better support patients at these transition points, thus reducing their stress in providing patient care.
 - 2.5.2 Create quick reference information resources for emergency room physicians on identified issues such as protocol variations for cancer patients being treated for other illnesses or conditions.
 - 2.5.3 Develop training to prepare nurses for the navigator role.
 - 2.5.4 Develop communication skills education for locums giving diagnoses to patients they have just met, along with tips for connecting these patients to supports.

- 2.6 Track program metrics by delivery method (workshop, conference, webinar, self-paced online module) and use the data to inform annual programming decisions. For instance:
- 2.6.1 Total number of each program offered, number run, number cancelled, cancellation rate (i.e. 20 workshops offered, 15 run, 5 cancelled, 25% cancellation rate).
 - 2.6.2 Average participation rates per program (i.e. 20 webinars offered, 400 participants in total, average participation per webinar = 20).
- 2.7 Track program metrics by topic, such as:
- 2.7.1 Within the webinar program, track participation by live attendance and recording viewed for every topic. Determine which webinar topics are no longer needed (low attendance and viewings), which topics do not need to be done live (much higher viewing, with correspondingly high satisfaction rates), and which topics need to be live (higher attendance, lower satisfaction when recording viewed).
 - 2.7.2 Watch for workshop attendance to drop off by tracking cancellation rates and average participants per course. Discontinue or transition those topics to a webinar or online module format.
- 2.8 As part of the development process and when updating any course or program, address non-technical aspects of cancer care:
- 2.8.1 Review the language and cultural indicators to ensure that cancer is identified as a chronic disease.
 - 2.8.2 Identify and provide guidance for dealing with social barriers.
- 2.9 Given that conferences are a) more popular than workshops; b) awareness of CME Day is higher than workshops; c) respondents would like more education near them; and d) it is difficult for physicians to set aside time for frequent educational programming: consider making CME Day a regional event on a standard annual schedule to strengthen regional relationships. Although in-person conferences experience the highest attendance, small group learning and self-paced learning are more effective learning formats.
- 2.9.1 To maximize learning impact, prioritize the following education formats: small group learning, self-paced online modules, followed by in-person conferences.

3. COMMUNICATION PRACTICES

The needs assessment identified areas where communication practices and channels can be improved to facilitate better care delivery and reduce stress for FPs and oncologists. Communication can also provide a channel for physicians to give input to BC Cancer and the Provincial Primary Care Program, as well as for raising awareness of programs and resources.

- 3.1 Reduce the number of communication channels/tools and the number of steps to get to advice or information.

- 3.1.1 Identify the most accessible and effective communication types and develop strategies to use them, limiting duplications.
 - 3.1.2 Ensure that clear and accurate contact information is included with every communication or documentation.
 - 3.1.3 Discontinue and replace or reroute dated communication techniques such as letters and faxes.
 - 3.1.4 Modify the discharge letter to address feedback regarding its limitations; create a template and conducting training as needed.
- 3.2 Focus on two types of communication:
- 3.2.1 Urgent: real-time consults such as secure text messaging, direct phone.
 - 3.2.2 Non-urgent: asynchronous such as email, websites or electronic medical record.
- 3.3 BC Cancer should prioritize communication with FPs:
- 3.3.1 Foster relationships with individual FPs.
 - 3.3.2 Communicate to the broader FP community as a whole to improve communications.
- 3.4 Host a monthly poll on the BC Cancer website, particularly if/when a professional portal is added, to do straw votes on topics for information resources and education programs. Ask questions such as:
- 3.4.1 What are the most common questions you get from your patients with cancer that you are not certain how to answer?
 - 3.4.2 What are your top three cancer-related CME needs this year?
 - 3.4.3 What is the best cancer resource you have found in the past month?
- 3.5 Use existing and preferred communication channels to increase awareness of FPON/Provincial Primary Care Program programs (email, websites, and Divisions of Family Practice meetings).

4. RELATIONSHIP BUILDING

It is important that relationship building be undertaken not as an additional drain on time or increase in complexity of communication, but to make real improvements in care delivery with reduction of stress for health care providers.

- 4.1 Use Quality Improvement projects as a key method for relationship building among FPs, specialist physicians, nurses, and allied health professionals.
- 4.1.1 Identify areas where improvements in care delivery are needed and bring together care teams to create and test guidelines and strategies.
 - 4.1.2 Ensure teams are representative of all groups that would be involved in implementation, which may vary project by project.
 - 4.1.3 Provide teams with the best available practice data.
 - 4.1.4 Give a practical and immediate focus to building relationships, setting goals, and measuring outcomes.

- 4.2 Further develop shared care and inter-professional team approaches.
 - 4.2.1 Include FPs in inter-professional teams, even if virtually or asynchronously.
 - 4.2.2 Develop one team member, likely a nurse, to take on the Navigator role, with additional duties, training and time allocated to providing navigation services to patients and FPs.
 - 4.2.3 Have one point of contact (e.g. nurse, medical office assistant, program assistant) for patients and for primary care providers, with that contact reaching out to other resources as needed.
- 4.3 Use existing methodologies, procedures, and technologies from other specialties.
 - 4.3.1 Learn from how other specialists interact with FPs and adapt what works well.
 - 4.3.2 Adapt specific processes such as the gastrointestinal first access referral sheets.
 - 4.3.3 Use the electronic medical record system to expand shared care for cancer patients, by connecting BC Cancer to other systems and by normalizing use for team communications.
- 4.4 Partner with key stakeholders and organizations to ensure alignment of priorities and to maximize communication channels.
 - 4.4.1 Involve the Divisions of Family Practice, the BC College of Family Physicians, Doctors of BC, the Collaborative Committees, the Practice Support Program and UBC CPD in the expansion of the Provincial Primary Care Program.

INTRODUCTION

BACKGROUND

British Columbia (BC) has a population of 4.62 million people; over 200,000 of whom have been diagnosed with cancer at some point in their lifetime¹. The prevalence of cancer in BC is increasing by approximately 3% per year and the survival rate for all cancers continues to increase. Approximately 65% of adults and 80% of children diagnosed with cancer are expected to live at least five years post-diagnosis¹. This equates to over 200,000 cancer survivors living in BC right now and nearly 250,000 expected by the year 2020.

With this marked increase in prevalence and improvement in survival, there is a need to leverage the expertise of primary care providers in the province to ensure the increasing need for cancer care in BC is met. As we begin to build a better understanding of the diverse and sometimes complex needs of patients after a cancer diagnosis, it is clear that in order to effectively involve family physicians (FPs) in the full scope of cancer care delivery from screening and diagnosis to treatment and follow-up, they require more support and resources from BC Cancer.

In 2009, BC Cancer's Family Practice Oncology Network (FPON) and the Division of Continuing Professional Development at the University of British Columbia's Faculty of Medicine (UBC CPD) conducted a province-wide needs assessment in partnership with BC Cancer's Screening Group. The outcomes of this work led to the establishment of the Cancer Care Outreach Program on Education (CCOPE), a comprehensive accredited physician cancer care education program based on identified learning needs and best practices. CCOPE was structured to support practice improvement by leading the physician-learner through case-based learning and specific evidence-based approaches to practice change. CCOPE reached over 1200 FPs and NPs through a total of 90 community-based workshops across BC. In addition to the in-person workshops, learners also had access to conference-based education, webinars, and online self-paced modules on a variety of primary care-focused oncology topics. As a result of this work, physicians gained an increased awareness of specific cancer screening programs, including the full scope of the cancer care continuum for multiple cancers.

In 2015, following completion of the three year CCOPE pilot, a new Advisory Committee was formed to provide direction on the future of the program. The committee provided four key recommendations to FPON including: refine and update the existing educational modules; customize the educational approach to the individual needs of FPs; focus future CCOPE programming on providing data and feedback to support clinical practice and quality improvement; and conduct a new province wide primary care oncology needs assessment given the changing landscape of cancer care in BC.

In 2016, with support from Shared Care, BC Cancer held engagement sessions supported by the Survivorship and Primary Care Program (which has since been reorganized) to better understand challenges related to the transition of care from oncology to primary care. Four sessions were held with a total of 131 FPs discussing *"How do we ensure the post treatment needs of cancer patients are met in the community while optimizing cancer care system capacity to address the care needs of those in active treatment?"* Results

from the sessions were used to help guide the development of the Primary Care Needs Assessment framework.

In 2017, organizational changes within BC Cancer resulted in the formation of a new Provincial Primary Care Program that builds upon the work of FPON. In order to inform the expansion of FPON and determine the current needs of primary care providers when caring with their patients with cancer, FPON provided funding to UBC CPD to conduct a comprehensive, province-wide primary care oncology needs assessment.

PURPOSE

To respond to the increasing demand on the cancer care system, BC Cancer is expanding FPON to become the Provincial Primary Care Program. Through this work, BC Cancer aims to strengthen relationships with FPs and NPs across BC, expand its successful educational offerings, and provide ongoing support and resources to FPs and NPs caring for patients with cancer, all to build capacity for cancer care within primary care. To advance its mission, FPON, in collaboration with UBC CPD conducted a province-wide primary care oncology needs assessment.

To ensure a nimble approach to the project, a core Working Group was established made up of a family physician, the Provincial Primary Care Program Lead and Program Manager, and members from UBC CPD including the Associate Dean, Project Manager, and Research Assistants (see [Appendix A](#) for details). The Working Group led the establishment of the needs assessment framework which was implemented between July 2017 and May 2018. Key objectives and framing questions are outlined below.

Key Objectives

FPON engaged UBC CPD to conduct a province wide needs assessment to:

- Understand the current and ongoing unmet needs of FPs providing care for patients throughout the continuum of cancer care; and
- Support development of a sustainable mechanism through which the BC Cancer Provincial Primary Care Program can engage FPs and other PCPs throughout the province in ongoing two-way communication to improve their ability to meet their needs and advocate on their behalf.

Key Questions

The needs assessment was focused around the following framing questions:

- What are current attitudes of BC FPs towards the full spectrum of cancer care?
- What is the current level of knowledge amongst BC FPs surrounding cancer care delivery?
- What are the key barriers and enablers to support optimal doctor/patient communication in cancer care delivery?
- What do BC FPs perceive as their role in ensuring that patients receive supportive cancer care?
- How do BC FPs want to be engaged in the full spectrum of cancer care delivery in BC?

- What beliefs and level of knowledge do BC FPs currently possess with respect to the application of guidelines or best practices for the management of cancer care?
- What awareness/understanding do FPs currently have of new technologies and advancements in primary care related to cancer control?
- What, if any, impact do patient demographics (i.e. race, gender, socioeconomic status) have on doctor/patient communication?
- What strategies aimed at increasing doctor/patient communication and improved cancer care do BC FPs see as being viable/desirable? How do BC FPs want to be engaged?
- How can communication between community FPs and networks of identified family practice oncology champions (including General Practitioners in Oncology [GPOs]) be improved?
- How do FPs see their role in the integration of primary care as part of patient-centred and interdisciplinary teams?
- What tools/resources do FPs want to support them when working in teams?
- How would FPs rate their level of knowledge in these areas? Clinical skills and educational gaps?
- What types of educational strategies/practice improvement interventions are likely to have an impact?

Findings from this project will help to shape the future of the Provincial Primary Care Program and support the development of a robust, sustainable engagement framework between community FPs and other PCPs and BC Cancer and the ongoing sustainability of cancer care in BC.

Note: Although the FPON Primary Care Needs Assessment included engagement with some NPs and RNs, the majority of respondents were FPs. To improve brevity, we will refer to all respondents as FPs throughout the report. Responses from administrators, specialist physicians and general practitioners in oncology (GPO) will be identified as such.

METHODS

The FPON Primary Care Needs Assessment consisted of three phases of engagement to gather input and feedback on the current and future needs of FPs when caring for their patients with cancer. The first phase consisted of nine key informant interviews with subject matter experts from across the continuum of cancer care. The second phase consisted of a comprehensive online survey disseminated to approximately 5000 FPs across BC. The final phase consisted of four focus groups with new to practice FPs, rural FPs, urban FPs and oncologists. Detailed descriptions of each phase are included below.

Each phase was designed to surface important information pertaining to the core issues surrounding the current and future landscape of cancer care and the role that the FPs can play in supporting their patients living with cancer. The key informant interviews, survey and focus group protocols were designed to capture different perspectives and to learn more about respondents' experiences with, and

recommendations related to, clinical knowledge and comfort, current processes and procedures, roles and responsibilities, and education needs for FPs in BC.

RECRUITMENT

Key informants were identified through the professional networks of Working Group members and are subject matter experts in primary care or stakeholders from affiliated or partner organizations. Nine interviews were conducted with one rural physician, two urban family physicians, one general practitioner in oncology (GPO), one oncologist, three physician administrators at BC Cancer and one faculty member of UBC Department of Family Medicine.

Following the key informant interviews, a 15-minute online survey was developed for FPs in BC as well as GPOs and oncologists. The online survey was distributed to FPs, RNs and NPs in British Columbia from February 5 to March 19, 2018. Physicians were primarily engaged via an email blast from UBC CPD and supplemented by notifications through the Doctors of BC (DoBC) eNews and website advertisement; the Divisions Dispatch (an electronic newsletter distributed by the Divisions of Family Practice); the BC College of Family Physicians (BCCFP) eNews and website; the UBC Department of Family Practice eNews; various FPON channels including the Journal of FP Oncology, CME Day, GPO Case Study Day, webcasts and GPO preceptor training; as well as supplemental advertisements through the UBC CPD webpage, social media, and QuickLinks newsletter. NPs were engaged by an email blast facilitated by the BC Nurse Practitioner Association as well as social media advertising through the Association of Registered Nurses of BC.

Focus group participants were recruited through the online survey from respondents who expressed interest in participating further and provided their contact information and self-reported their practice demographic information (new-to-practice, rural FP, urban FP, oncologist). Focus group participants were separated into four demographic-based groups as outlined in the table below and conducted between April 2018 and May 2018.

Table 1. Focus Group Participants

Focus Group	Inclusion Criteria	N	Rationale
FG1: New-to-practice FPs	Primary care physicians designated as family physicians/general practitioners who have entered into full-time practice within 10 years.	9; all women	This group provided insight into the issues faced by family physicians early in their career following completion of their training. This allowed us to see which current systems are working well and which could be improved to facilitate primary cancer care.
FG2: Rural FPs	Primary care physicians designated as family physicians/general practitioners who practice in rural BC communities.	4; two women and two men	This group provided perspective on rural primary cancer care including issues faced when coordinating care for patients without ready access to BC Cancer.

FG3: Urban FPs	Primary care physicians designated as family physicians/general practitioners who practice in Urban communities.	9; four men and five women	This group provided insight into their experience caring for patients who have cancer in urban settings in BC.
FG4: Urban Oncologists	Practicing oncologists from BC Cancer Clinic sites.	7; five women and two	This group provided perspectives from oncologists caring for patients referred by a primary care provider.
Total Participants		29	

DATA COLLECTION

The key informant interview protocols were designed by iterative development to capture different perspectives on a number of oncology-related topics. The protocols consisted of a total of three questions with two to three follow-up probes per question. Questions were open-ended, and the protocol was designed to be used in a responsive manner with respondents (questions may have modified, and additional follow-up questions added as needed to fit the flow of the discussion). Questions explored key areas including FP knowledge along the continuum of cancer care, BC Cancer’s role in supporting FPs, and how the Provincial Primary Care Program should operate. The base protocol can be found in [Appendix B](#).

All key informant interviews were conducted via teleconference to minimize barriers to participation. A total of nine key informant interviews were conducted between August and December 2017. Interviews were led by a member of the project team and were 30-minutes in duration. Informants provided written informed consent to the project team and were given the question protocol prior to participating in the interview.

The survey was designed by the Working Group over a four-month period (October 2017 to January 2018) through iterative development and received external review by subject matter experts and external stakeholders (full survey available in [Appendix C](#)).

Due to the disparate nature of the distribution and marketing strategy, it is difficult to quantify the exact number of physician who received invitations to complete the survey. The mailing list for the UBC CPD email blast contained 4852 unique contacts, however supplemental marketing resources may have increased this number. A total of 866 responses were collected (757 complete and 109 partial) after removing responses from ineligible respondents (i.e. non-PCP respondents or blank responses) resulting in a response rate of 18% (with 4852 considered to be the denominator).

Focus groups protocols were designed to address gaps in the preliminary results from the key informant interviews and online survey. Protocols utilized a semi-structured framework which allowed feedback on the sequence of questions, while allowing the discussions to flow freely among the respondents. Each focus group followed a unique protocol depending on the group type and the objectives of the session. Questions

further explored the FP role in cancer care, how the Provincial Primary Care Program could support FPs, and key challenges when managing patients with cancer. Respondents were sent the protocols ahead of time (see [Appendix D](#) for protocols).

Focus groups were 90-minutes in duration and were moderated by the BC Cancer Provincial Primary Care Program Lead who is a FP. All FP focus groups (see Table 1) were conducted via WebEx; a web-conferencing software platform which allows participants to interact “face-to-face” from their homes, offices, etc. without the need for travel. A teleconference dial-in option was also available. The oncologist focus group was conducted in-person at the UBC CPD offices in Vancouver BC due to its proximity to the Vancouver BC Cancer Centre and a dial-in option was provided for those not located in Vancouver. Project staff were present at each focus group and during the post session debrief to take notes and troubleshoot any technical difficulties. All respondents provided written informed consent prior to participating and were compensated for their time at DoBC sessional rate.

DATA ANALYSIS

Key informant interviews were audio recorded and transcribed. Data were tabulated, summarized, and analyzed for patterns or emergent themes. The Working Group members collaboratively created a coding structure and manual that was used to organize the information within each transcript. The codes were designed to be mutually exclusive and to differentiate between the various aspects of FPs’ feelings and thoughts around cancer care. Fifty-four codes were identified and transcripts were coded independently by two research assistants and rater agreement was analyzed to ensure data interpretation was aligned and accurate (see [Appendix E](#) for code book). Coded transcripts were uploaded in NVivo (Version 11) a software program used to group the data under various codes and to apply units of analysis. Key words and themes were counted and tabulated for each code and summarized. Data summaries were reviewed by the Working Group for agreement and interpretation accuracy.

Quantitative survey data was analyzed using SPSS 17.0 with significance set at $\alpha=0.05$. Descriptive analysis was also performed. Likert scale responses were reported as weighted means instead of arithmetic means given the ordinal nature of the data. Further, while Likert-style questions were collected on a 5-point scale, findings were analyzed and reported using a 3-point Likert scale by binning polar responses (e.g. a 5-point Likert scale ranging from 1=Definitely disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Definitely agree, was collapsed into a 3-point scale ranging from 1=Disagree; 2=Neutral; 3=Agree by aggregating responses 1 & 2 and 4 & 5, respectively). This was done to: a) clarify and simplify what stories the data told; and b) ensure minimum expected frequency assumptions during Chi-squared analysis were not violated. Cross tabulations and Chi-squared analyses were used to determine if there were significant differences among the responses in terms of different region (*rural vs. urban*), compensation model (*fee-for service [FFS] vs. alternative payment plan [APP]*), gender, and duration in practice (<5, 5-10, 11-20, 21-30, >30 years). Qualitative survey data was analyzed on data collected from open-ended survey questions to identify key themes and further inform the quantitative data collected in each phase.

The focus groups were audio recorded and transcribed. Data were tabulated, summarized, and analyzed for patterns or emergent themes using the same coding structure and manual developed for the key informant interviews. Transcripts were coded by two qualitative researchers and rater agreement was analyzed to ensure data interpretation was aligned and accurate. Coded transcripts were uploaded in NVivo (Version 11) a software program used to group the data under various codes and to apply units of analysis. Key words and themes were counted and tabulated for each code and summarized. Data summaries were reviewed by the Working Group for agreement and interpretation accuracy.

Further integrative analysis was performed for the purposes of report compilation and preparing recommendations. Similar thematic areas from the quantitative and qualitative analyses were grouped and reviewed holistically by the project team to draw out consistent themes and outcomes. This was done collaboratively and iteratively between members of the Working Group and are outlined below.

NEEDS ASSESSMENT FINDINGS

PARTICIPANTS

A total of 785 participants took part in this needs assessment. Participants included 644 FPs; 30 specialist physicians; 14 resident physicians; 37 GPOs; 22 NPs; three physician administrators (one FP and two oncologists) and 36 participants who identified as “other”. A breakdown of the participants follows:

Key informant Interviews

- 4 FPs
- 1 GPO
- 1 Oncologist
- 3 Physician administrators (1 FP and 2 oncologists)

Online Survey

- 619 FPs
- 22 Specialists
- 14 Residents
- 36 GPOs
- 22 NPs
- 36 Other

Focus Groups

- 22 FPs
- 7 Oncologists

Further demographic information is included below with the online survey findings.

KEY INFORMANT INTERVIEWS

Roles and Clinical Knowledge

In order to inform the expansion of the Provincial Primary Care Program, we sought to better understand what FPs believe to be their role along the continuum of cancer care and how this compared to other stakeholders. Responses to this question were diverse, but centered on a few key points including initial malignancy identification (screening and diagnosis), timely referral to subsequent care providers, health care system navigation, and psychosocial support. Family physicians and other stakeholders saw the FP as the main point of contact for support and advocacy for patients throughout their cancer journey.

“We’re tasked to sort of step in around the softer silent dealing with cancer and providing that support and feedback around decisions that the patient is having to make.”

“I think our role is really what kind of care that we provide when it comes to managing co-morbidity and broader life management.”

“We view ourselves as kind of the grand organizers and guides as the patient goes through the process.”

“I would suspect that they would see the role as key in helping the navigation of the system for patients and advocacy for timely access to diagnosis, treatment, surgery, or whichever plans that are needed.”

Key informants were also asked to provide their thoughts on the current state of FP knowledge along the continuum of cancer care. Follow-up questions were asked about the different stages of cancer care from screening and diagnosis to treatment and follow-up. Informants were also asked to comment on how well current clinical practice guidelines are implemented and where FPs are at with their knowledge and adoption of new and emerging technologies in cancer care.

Informants identified that the current state of FP cancer care knowledge is highly variable depending on the provider, the point along the continuum of cancer care and the complexity of the patient. Informants agreed that FP knowledge regarding cancer screening is good and that FPs are comfortable and confident with the screening program processes in place. Informants further agreed that competence is especially high for more common cancers and where clinical practice guidelines exist.

“Well I think it’s a bell curve. I think there’s some really good GP’s who are quite cognizant in dealing with patients.”

“I think that people’s knowledge is adequate for their understanding of what’s going on but probably not adequate enough to be able to fully support the patient.”

"I think screening they're doing quite well. Where screening guidelines exist, I think they're being followed."

A knowledge gap identified was around roles and responsibilities for post-diagnosis work-up when patients are transitioning into active treatment at BC Cancer. Many informants pointed to communication challenges and noted that FPs are often unsure who is responsible for which elements of care moving forward. They found that challenges emerge when there are multiple competing sources of information or when clinical practice guidelines change.

"There's a little bit of handing off of that occurs and I assume in many systems the weak link is kind of that transition between care providers."

"I find when patients are acutely diagnosed with [cancer], they do enter a bit of a black box from my perspective."

"I also find [...] sometimes [oncologists] are not clear about whether they'll be arranging follow-up or if they want me to do it."

Another identified knowledge gap highlighted FP knowledge of specific treatment protocols and what this means for their patients. It was acknowledged that while the bulk of care comes from specialists at BC Cancer, Health Authority cancer clinics or surgeons, FPs are often unsure of potential side-effects and how to address them, along with co-morbidities and drug interactions. Particular emphasis was placed on the management of comorbidities as the population ages and patients present with multiple complex chronic conditions.

"I think where some of the challenges come is the interactions between being on chemo and other medications; now that the population is aging, I think those co-morbidities are going to be playing a lot more of a role."

"When it comes to identifying once the patient gets into the cancer therapy part, managing that process in terms of side-effects, expectations, prognosis, counselling, I think that it's pretty much unknown for a lot of them."

Informants were also asked to comment on FP knowledge regarding follow-up after treatment. Informants suggested that for the more common cancers with clear clinical practice guidelines, FP knowledge regarding follow-up is adequate. However, for uncommon cancers and where the guidelines are not clear, there is a clear knowledge gap.

"In the post-treatment follow-up, the more common cancers have a pretty good straightforward recommendation of what you should be doing afterwards, although it's always good to get sort of a much clearer recipe for follow-up."

"Where the follow-up guidelines aren't so clear, I know they feel nervous about okay what do you want me to do and when."

Given the rapidly changing landscape of cancer care, including new treatment protocols, genetic screening, and precision medicine, informants were asked to comment on the level of awareness among FPs around new and emerging technologies. Generally speaking, respondents felt that FPs are not aware or up to date with emerging technologies relating to cancer care. Many informants identified the breadth of knowledge FPs are responsible for keeping on top of as a barrier to attaining this knowledge.

“There may be some uncertainty around newer modalities for screening, especially as it relates to predictive value of things like genomics or genetics...probably for colon and breast fairly comfortable with the hereditary component and influence on advising people about screening but on other cancers not as familiar...”

“I would suspect like anything for GPs, you know, there are many things to keep on top of and I’m not sure if cancer care is at the top of their list for keeping up with.”

Shared Care

Shared care and team-based approaches were identified as key to the sustainability of high quality cancer care for patients. Informants often linked discussions around shared care to the importance of developing centralized EHR-type data tracking systems that are up-to-date and accessible to all care providers at any point along the care continuum.

“We have to get some sort of data sharing process so that when we do have a report from a surgeon and we have a report from an oncologist we can pull data from those two sources and create an overarching report.”

Barriers

Informants identified time constraints as a barrier to collaborative and quality care as well as the wealth of information FPs are expected to keep on top of for all of their patients.

“I know that the oncologists are terribly busy and really stretched...”

“I think being a family doctor would be so challenging trying to keep up with the latest and greatest of all of the different things that they have to manage.”

Social barriers, particularly regarding access to health services for people who are not able to travel or take time off work were identified by informants. Access to primary care was also another barrier to high quality care. Discussion here was often paired with geographical isolation or remoteness.

“A lot of people are reluctant to travel from the rural areas for treatment [...] rural patients are less likely to receive the full scope of treatment than somebody in an urban area might because of that.”

“It’s the social as much as the medical at this stage in family practice. It’s ensuring that the partner has got access to employment insurance or whatever it is so they can attend the visits at the hospital. It’s transport, it’s all the stuff that goes on around the patient having quite intensive therapy and a lot of disruption to their lives.”

“I find accessing primary care here is as still at a semi-crisis level. People have to line up for walk-ins and if you don’t get there early enough you’re turned away.”

Communication

Current Practices

Informants were asked to comment on the current state of communication between community FPs and BC Cancer. Probe questions asked more specific questions about communication pathways and modalities and how these could be improved. Most informants identified the BC Cancer discharge letter as the primary communication method between FPs and BC Cancer regarding patient care. Opinions vary regarding the effectiveness of this letter as a communication mechanism, with some finding the letters very useful and others citing their lack of detail as a challenge. Suggestions for improvement include more timely delivery and more comprehensive/ holistic patient assessment.

“Currently you get a letter, you don’t usually have anyone phone us or talk to us [...] it’s really quite high level and feels quite impersonal, it doesn’t seem to address the whole person.”

“I have trouble sometimes because I don’t have all the information on what treatments were being discussed and so that’s a time when it would be really helpful for me to have that consult letter sent to me quickly.”

Informants agreed that communication between FPs and oncologists and other specialists was very community specific, more specifically that smaller communities were at an advantage given the smaller community of health care providers and existing relationships. Informants agreed that specialists were easily accessible by phone if the appropriate contact information was available, but finding the appropriate contact information posed challenges.

“I think it’d be very community dependent because in smaller communities where you still know everybody, you’re just picking up a phone and calling”

Improving Communication

Informants were asked to comment on what could improve the current state of communication between community FPs and oncologists and other specialists. Informants desired communication channels included a mix of leveraging/modifying existing channels and implementing new ones. Modifications of the BC Cancer letter or adding a phone number to the letter were practical additions. Novel channels included updated

EMR capabilities, mobile application development, and streamlined newsletter communication. Informants also suggested reducing the volume of communications they receive on a regular basis.

Education Barriers and Knowledge Gaps

Informants were asked about their awareness of existing primary cancer care education provided by FPON. Probe questions asked about the greatest learning needs for FPs and any barriers and limitations to current education opportunities. Barriers to educational opportunities included a lack of flexible education formats (including formats suitable for busy time schedules and the realities of remote communities), lack of FP time and motivation, inability to reach those practitioners who need it most and a lack of prioritization from medical educators.

“There hardly ever a time I can actually tune in for a live seminar 8 to 9 because I am already working at 8:00. I’ve always wanted to go to [CME days] but again it’s time away from my practice. If all these things could be available on the web I would certainly do them.”

“The limited educational energy that family practitioners have and time is in a very competitive environment for various specialties or disciplines trying to get their message out.”

“The people that need to show most, hardly show, and I don’t know how we gauge that, we’ve never been overly successful.”

“How do you provide opportunities for people in an efficient way closer to their home?”

A wide range of education gaps and learning needs were identified. Data revealed that there could be improvements made to education opportunities addressing all stages of the cancer care continuum (screening, diagnosis, staging, treatment and follow-up). Other education needs included physician-patient communication, community FP-BC Cancer communication, quality assurance of clinical skills, and education on cancer care technologies.

“I think my gut would say in follow-up [...] the transition piece, the side-effects, what do I do after they’re off active care?”

“There’s a gap in us knowing how to communicate with and manage patients that have issues around side-effects, long-term effects or being able to have conversation about prognosis.”

“We get residency or medical school to be taught our pelvic exams, our breast exams, so we often kind of yearn for retraining some of those physical skills.”

“I mean if I want to know patient’s just been diagnosed with small cell carcinoma, what is the latest treatment? Where do I go for that? How do I navigate that for the patient?”

BC Cancer Role

The role of BC Cancer was understood to be diverse and spanning many aspects of care. There was agreement that BC Cancer should retain their centralized role in overseeing clinical cancer care for patients as they have an established and trusted expertise. Informants thought that communication with FPs should be prioritized by BC Cancer both at the individual FP level as well as with the FP community as a whole. Finally, respondents felt BC Cancer should take a leadership role in establishing care guidelines as well as pioneering the implementation of novel strategies to maximize the effective use of practice data for quality improvement purposes.

“I think that right now they look to the Agency for its expertise in treating patients.”

“I think number one is communication. Number two is guidelines, improving our guidelines. And then number three I think would be inviting GP’s in for shadowing experiences.”

“I think in several. So obviously a leadership role in cancer care so being at the forefront of developing standards, providing information, getting feedback with the data that they have [...] leadership in information translation and information creation.”

Redefining the cancer care paradigm was a minor theme that emerged. Respondents felt that this lens was a better characterization of cancer and highlights the relevant treatment challenges that come with chronic disease management.

“I agree looking at cancer management from a much broader whole patient viewpoint as you do sort of the chronic care model from a care point of view, absolutely. People are not simply sums of their individual medical conditions. I was always a bit surprised that cancer, some definition of cancer was never included in that chronic care model. “

Provincial Primary Care Program

Stakeholders

The final questions for informants explored their thoughts and ideas around what a Provincial Primary Care Program at BC Cancer should look like. Follow-up questions asked about key stakeholders, education, and important future directions. Informants identified a very broad range of potential stakeholders that should be included in the development of primary cancer care program. Informants suggested partnerships with organizations like BC Cancer, Doctors of BC, the Divisions of Family Practice, and the Health Authorities. Further, informants discussed mobilizing input from local practitioners and developing relationships with stakeholders that could support the development and implementation of data systems.

“I think for it to work in any geographic area you need the people who are involved locally.”

“We’ve got to have policy and planning so the Ministry of Health, you can’t do this in a vacuum. Got to have research in academia. We’ve got to have patients and the public and we’ve got to have this e-platform data.”

Education and Resources

Informants provided wide-ranging suggestions for education delivery. They emphasized the need for education to be flexible to accommodate busy schedules and learning styles and should focus on practical information that FPs actually need to provide quality, wrap-around care rather than focusing on the theoretical.

“A program to pursue some type of technology through smart phones that patients and their family physicians can use.”

“I think [...] education around how the GP could be more meaningfully involved in care.”

“The key is flexibility.”

“In the CFP journal they have a single page on tools for practice where they’ll give us one single page on evidence-based answer to a single simple question.”

Quality Improvement

Discussions around the provincial primary care program and education opportunities often touched on the need to include data integration and data tracking into the development of the primary care program. These comments went hand-in-hand with discussion on EHR integration, data stakeholders, coordinated communication, and team-based care. Discussions around the Provincial Primary Care Program did not cover specific QI methodologies.

Following completion of the key informant interviews, results were used to inform the development of a needs assessment survey. Results from the survey are summarized below.

NEEDS ASSESSMENT SURVEY

Demographics

Figure 1-1: Category of practice (n=749)

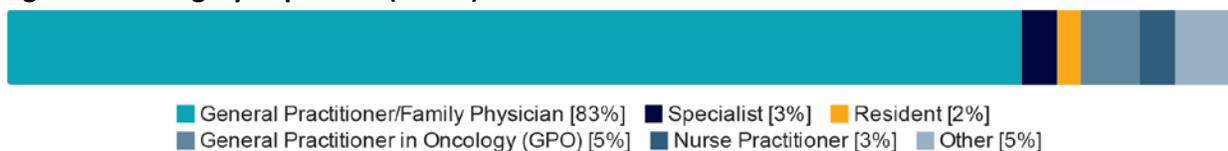


Figure 1-2: Time in practice (n=746)

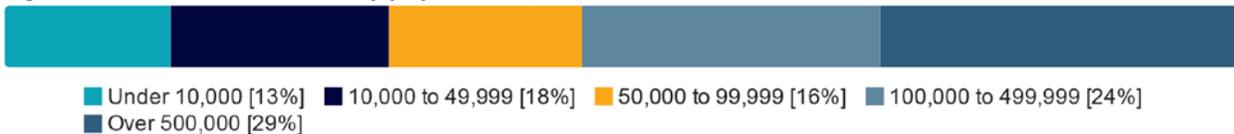


The majority of survey respondents were FPs (83%), with the remaining respondents made up of GPOs (5%), specialists (3%), nurse practitioners (3%), and residents (2%). Survey respondents spanned the full breadth of practice experience evenly with approximately 20% falling into each category (See Figure 1-2).

Figure 1-3: Practice community type (n=748)



Figure 1-4: Practice Community population (n=747)



The majority of survey respondents (67%) practiced in what they identified as an urban community, with further breakdown by population revealing that 29% practices in a community of 500,000 or more, 24% in a community of 100,000 to 499,999, 16% in a community of 50,000 to 99,999, 18% in a community of 10,000 to 49,999 and 13% in a community of 10,000 or less.

Figure 1-5: Type of practice (n=749)



Figure 1-6: Practice location/description (n=749)

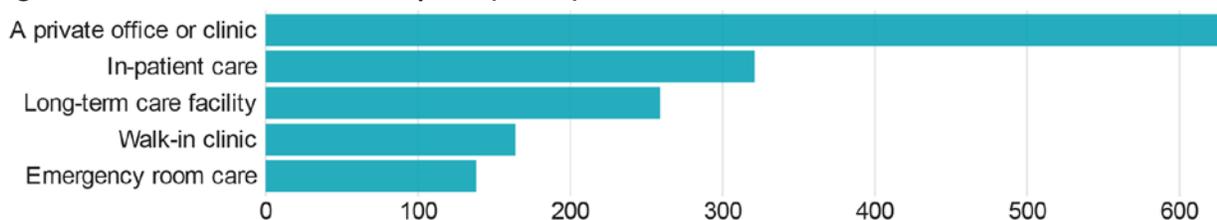
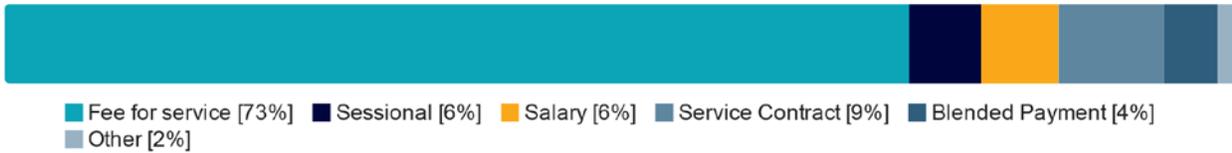


Figure 1-7: Compensation Model (n=747)



Approximately 63% of respondents identified as full-time, 24% as part time, 8% as locums and the remaining as retired. Of those, the majority practiced in a private office or clinic, followed by in-patient care, long-term care facility, walk-in clinic and finally emergency room care. When asked about their compensation model, the majority of respondents (73%) were in a fee-for-service model, followed by service contract (9%), followed by sessional (6%), salary (6%) and blended payment (4%).

Figure 1-8: Health Authority of practice (n=748)



The regional health authorities were well represented in the survey respondents, with 20% from Fraser Health Authority, 18% from Interior Health Authority, 29% from Vancouver Coastal Health, 20% from Vancouver Island Health Authority, and 3% from Provincial Health Services Authority.

Figure 1-9: Involvement in team-based practice (n=749)



Figure 1-10: Description of team-based practice (n=749)

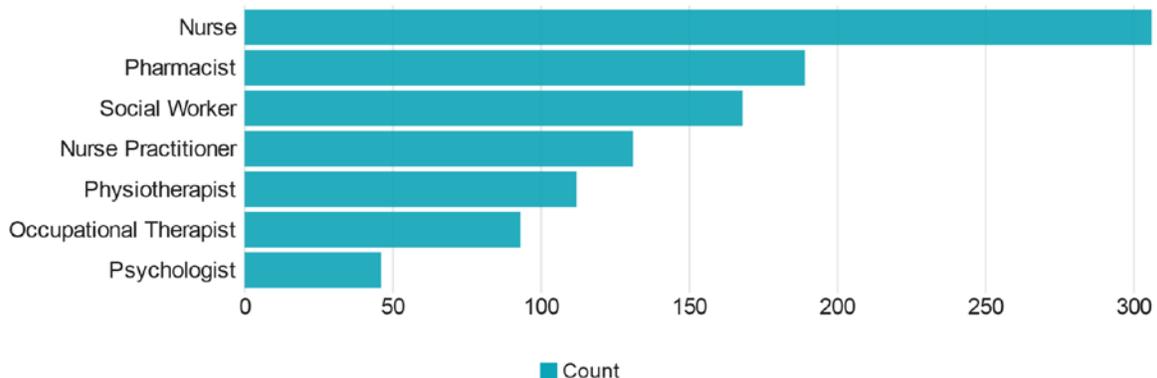


Figure 1-11: Utilization of EMR in practice (n=739)



Figure 1-12: Gender (n=744)



Over half of respondents (57%) identified that they work in a team-based care practice setting with nurses, pharmacists, social workers, nurse practitioners, physiotherapists, occupational therapists and psychologists. Only 9% of respondents indicated that they do not use an EMR in their practice.

According to available comparative provincial data, the demographic information collected through the survey depicts a representative sample of BC FPs except for the balance between male and female respondents. We looked into respondents’ gender as a function of their time in practice to see if there were any intersectional demographic effects, but our proportions were relatively consistent across age groups indicating that females were simply more likely to respond to our survey. The relative proportion of specialists vs. generalists that responded does not reflect the total physician population, as this survey was primarily targeted towards PCPs and only those specialists providing direct cancer care. This demographic information was kept in mind when interpreting the survey results.

Current Attitudes and Practices

Respondents were asked about their current attitudes and practices when communicating with BC Cancer and the quality of the information (clinical and non-clinical) that is available to them when supporting their patients with cancer. Family physicians were also asked to indicate their level of confidence managing their patients along the cancer care continuum from screening and diagnosis to treatment, follow-up and palliative care. Responses are outlined in the table below. Data was collected on a 5-point Likert scale, but binned into a 3-point scale for analysis purposes.

Table 2-1: Current attitudes and practices

Question	n	Disagree	Neutral	Agree	Weighted Mean (/5)
It is easy for me to communicate with my local/regional General Practitioners in Oncology (GPOs)	744	21%	27.6%	51%	3.5

It is easy for me to communicate with my local/regional BC Cancer centre/ specialists	837	17%	21.9%	61%	3.6
It is easy for me to communicate with my local/regional surgeons	837	13%	20.8%	67%	3.8
It is easy for me to refer my patient to BC Cancer (or a Community Oncology Clinic where appropriate)	826	11%	14.4%	75%	3.9
It is easy for me to get information about the treatment my patient is receiving at BC Cancer or a Community Oncology Clinic	833	17%	21.1%	62%	3.6
I know who to contact and how to reach them if my patient with cancer develops problems	836	31%	24.4%	45%	3.2
I receive useful clinical information (e.g. patient care, treatment plans)	825	9%	14.7%	76%	3.9
I receive timely clinical information (e.g. patient care, treatment plans)	823	15%	19.6%	66%	3.7
I feel confident screening, managing initial diagnostic work-up, and referring my patients for cancer treatment	825	9%	19.2%	72%	3.8
I feel confident managing post-treatment cancer follow-up and late-effect symptoms , including advance care planning when appropriate	830	27%	22.8%	50%	3.3
I feel confident managing my patient through end-of-life or palliative care if required	834	19%	13.9%	68%	3.7
I receive useful non-clinical information from BC Cancer/FPON (e.g. guidelines updates, education resources)	825	26%	34.1%	40%	3.2

The majority of survey respondents agreed or strongly agreed with each of the statements listed above related to communication and information quality from BC Cancer and confidence along the cancer care continuum (Table 2-1). The one exception was regarding the usefulness of non-clinical information from BC Cancer, where the majority of respondents were neutral, disagreed or strongly disagreed.

More specifically, communication with the various physicians involved in the cancer care journey was rated between 3.5 and 3.8 on a 5-point Likert scale. Surgeons were the easiest to communicate with (3.8), followed by BC Cancer specialists (3.6), then GPOs (3.5). Results suggest that referring patients to BC Cancer is considered easy (3.9), whereas getting information about the treatment their patient is receiving and knowing who to contact if there are problems were not as straightforward, being rated at 3.6 and 3.2 respectively. These results suggest an opportunity for improvement for Provincial Primary Care Program to advocate for BC Cancer to enable connecting PCPs with accurate contact information for specialists.

The quality of clinical information (such as patient care plans and treatment details) from BC Cancer was rated 3.9 for usefulness and 3.7 for timeliness. The usefulness of non-clinical information (such as guideline updates and education resources) was rated at 3.2. This again highlights areas for improvement supported through the activities of the Provincial Primary Care Program.

Confidence ratings for cancer care management were 3.8 for screening, managing initial diagnostic work-up and referring; 3.3 for managing post-treatment cancer follow-up and late-effect symptoms; and 3.7 for managing patients through end-of-life or palliative care. These results suggest FPs are confident with the initial phases of the cancer care continuum, but could use more support managing their patients post-treatment.

Respondents were also prompted to provide open-ended feedback. Responses were highly varied, but the following quotes capture some of the common themes and highlight the disparate opinions volunteered by respondents:

“It’s often hard to tell if I should contact the oncologist, or the nurses when it comes to patient’s various oncology needs. Patients usually ends up directing this.”

“It’s not easy to connect to anybody in the area until the patient has been assessed by oncology.”

“I think the local oncologists are very approachable and easy to access. The next layer (i.e. referring to [BC Cancer]) is a bit harder to navigate mainly because of a lack of personal knowledge of the consultants and how they are organized.”

“Referring to BCCA is a complex process, hard to get patient to right area, or make any choice in who they see, hard to find contact numbers for specialists once they are there.”

Chi-Square Analysis

Chi-square analysis was performed to explore relationships between survey responses and demographic information (rural vs. urban; fee-for service [FFS] vs. alternative payment plan [APP]; gender, and duration in practice). Relative to their urban colleagues, respondents from rural communities were more likely to agree that it was *easy for them to communicate* with their local/regional GPOs, local/regional cancer centres, and their local/regional surgeons ($[X^2(2)=47.33; p<0.01]$; $[X^2(2)=10.35; p<0.01]$; and $[X^2(2)=55.13;$

$p < 0.01$] respectively). This result suggests that there may be better engagement between community FPs and specialists providing cancer treatment in smaller rural areas, facilitating better communication. Rural respondents were also more likely to indicate that clinical information received from BC Cancer was *useful* and arrived in a *timely* manner ($[X^2(2)=10.21; p < 0.01]$ and $[X^2(2)=9.15; p < 0.05]$, respectively). Rural respondents also indicated higher levels of confidence managing *post-treatment cancer stages* as well as *palliation* $[X^2(2)=26.62; p < 0.01]$, potentially highlighting the skills and confidences associated with the rural generalist role.

Many significant chi-square values were found corresponding to increased levels of comfort and confidence in managing the scope of primary cancer care. This is to be expected as professionals would gain confidence and increased competence as they spend more time in their profession and therefore these values are not reported here.

Male respondents were more likely to indicate it was easier for them to *communicate with BC Cancer* regarding the care of the patients $[X^2(2)=7.86; p < 0.05]$ and they were also more likely to indicate *confidence* in their abilities in all areas (*screening and diagnosis* $[X^2(2)=8.96; p < 0.01]$; *follow-up* $[X^2(2)=42.14; p < 0.01]$; *palliation* $[X^2(2)=23.98; p < 0.01]$). This result could suggest gender differences in how FPs perceive their abilities and competence with regards to managing cancer care.

Primary Care Role

Respondents were asked to rate the importance of various primary care provider roles and responsibilities in providing quality care to their patients with cancer. The following table summarizes responses binned into a 3-point scale.

Table 3-1: Role of the primary care provider in cancer care

Factor	n	Not Important	Neutral	Important	Weighted Mean (/5)
Actively participate as a member of the care team	827	3%	10%	87%	4.4
Understand my role as the primary care provider in the care of my patient	826	1%	4%	95%	4.7
Understand the role of BC Cancer/specialists in the care of my patient	826	1%	3%	96%	4.7
Screen, manage initial diagnostic work-up, and refer patients for further treatment	824	1%	5%	95%	4.6

Manage post-treatment cancer follow-up and late-effect symptoms, including advance care planning when appropriate.	822	2%	7%	91%	4.4
Manage my patient through end-of-life or palliative care (e.g. advance care directives) if required.	826	3%	7%	90%	4.5
Be included in my patients' care conferences	824	7%	29%	65%	3.8
Access information about the treatment my patient is receiving	826	1%	3%	96%	4.6
Engage in two-way communication with BC Cancer/specialists	825	2%	7%	91%	4.4
Receive detailed care plans to improve follow-up of my patients	826	1%	3%	96%	4.7

The majority of factors listed above were considered important with all of the factors receiving a score of 4.4 or higher on a 5-point scale, except for “*Being included in my patient’s care conferences*”, which was ranked at 3.8. This suggests that FPs see their role as important along the cancer care continuum and value two-way communication with cancer care providers. The lower rating of inclusion in care conferences may be indicative of scheduling challenges with numerous busy care providers.

Open-ended responses highlight the vital role PCPs play in the care of patients with cancer.

“Very important to be involved and have a role especially if there is a long term relationship [with the patient]. Also important to have help/consultation (i.e. palliative care) as it is difficult to maintain high level of expertise in all possible areas of general practice. Some GPs may have a particular interest in oncology and be able to do more independently, while others may need more consultation to provide best care for patients.”

“I don’t have to be involved in every conversation but I do need a detailed understanding of the proposed care plan and rationale; patients often need time to reflect on things and need help from their primary care providers to make decisions.”

Chi-Square Analysis

With a few exceptions, respondents did not vary along demographic divisions. Female respondents were more likely than males to rate *being an integrated member of the care team* as an important part of providing high-quality cancer care [$\chi^2(2)=6.59; p<0.05$].

Expanding FPON into the BC Provincial Primary Care Program

To explore how the expanded provincial primary care program could best support them in providing high quality care for their patients, physicians were asked to rate their level of agreement with some of FPON’s strategic goals and key areas to prioritized to maximize the programs’ impact on primary cancer care in BC. An overview of responses is provided below.

Table 4-1: Strategic directions for provincial primary care program

Question	n	Disagree	Neutral	Agree	Weighted Mean (/5)
Improve communication between BC Cancer/specialists and primary care providers at the local/regional referral centre level	775	2%	9%	89%	4.4
Develop a process for primary care providers to give input directly to BC Cancer at the provincial level	772	5%	29%	66%	3.8
Develop a two-way communication process between BC Cancer and the Divisions of Family Practice to inform and support cancer care strategies	776	4%	17%	79%	4.1
Provide education and training for physicians	768	1%	6%	93%	4.5
Develop and implement primary care guidelines	772	3%	7%	90%	4.4
Develop practice tools for supporting care for patients with cancer (e.g. treatment algorithms/pathways)	762	2%	7%	91%	4.5
Advocate for improved access/inter-operability to health information systems between BC Cancer and primary care electronic health records	766	2%	14%	84%	4.3

Advocate for access to population level data from BC Cancer for use by the Divisions of Family Practice and Primary Care Networks	775	7%	36%	57%	3.7
Advocate for access to practice level data to allow clinicians to better understand their patients with cancer as part of panel management	778	6%	30%	64%	3.8
Provide resources and education for patients (e.g. cancer prevention materials, self-management tools, risk-benefit decision support)	760	1%	9%	90%	4.4
Advocate for improved access to appropriate clinical resources/services for patients (e.g. shorter wait times)	748	1%	6%	93%	4.6

Respondent agreed with the pre-identified strategic areas for expansion, with each receiving a weighted mean score above 3.8 on a 5-point scale. The top three responses were:

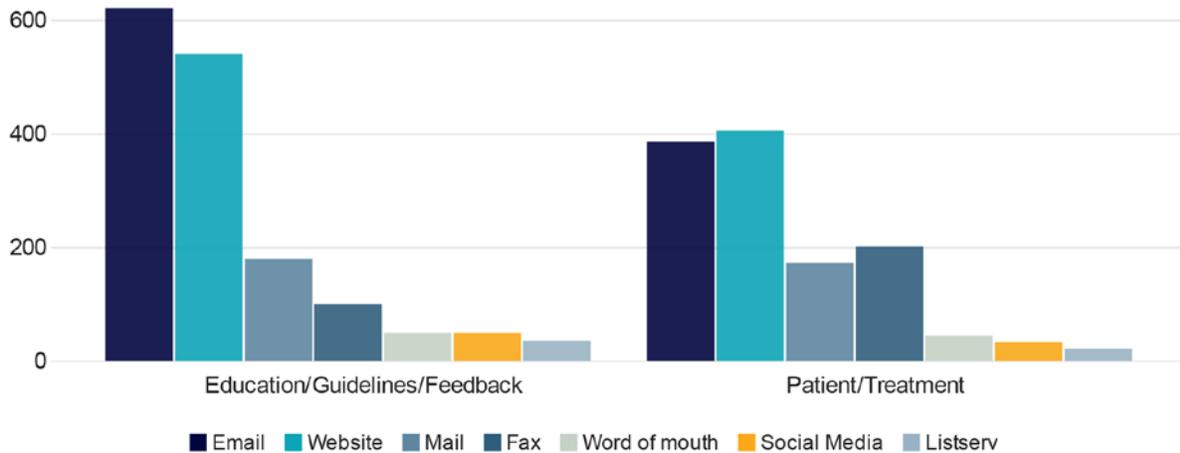
- Advocate for improved access to appropriate clinical resources/services for patients (e.g. shorter wait times) – 4.6/5
- Develop practice tools for supporting care for patients with cancer (e.g. treatment algorithms/pathways) – 4.5/5
- Provide education and training for physicians – 4.5/5

Chi-Square Analysis

These results align with results from the focus group where physicians identified timely access to treatment for their patients as a source of stress when caring for patients with cancer. Results also indicate that the Provincial Primary Care Program can continue to grow and expand their resources and educational offerings. Urban physicians placed more importance on *patient resources and education* [$\chi^2(2)=6.39$; $p<0.05$] as well as *advocacy for improved access to clinical resources* [$\chi^2(2)=6.52$; $p<0.05$] than their rural counterparts. This result may indicate greater wait times faced by urban physicians.

Respondent were asked to identify their preferred method of communication for non-clinical offerings such as educational opportunities, the development/dissemination of primary care guidelines, and calls for feedback regarding any facet of FPON’s programming. They were also asked their preferred method of communication for clinical information regarding their patients.

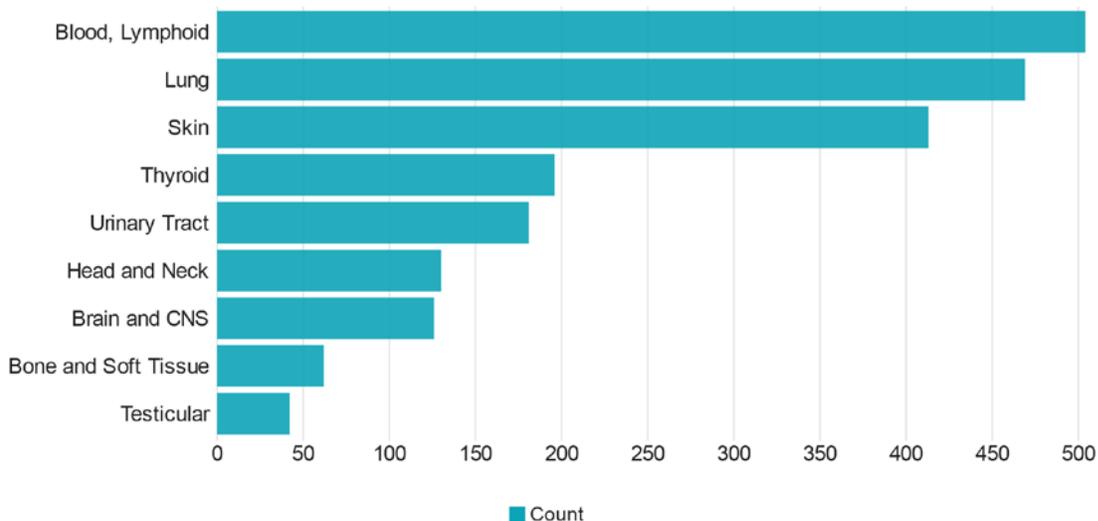
Figure 4-2: Preferred methods of communication



Email communications and website updates were the preferred method of communication in both categories. Physical mail communications received intermediate support, and approximately 200 respondents indicated their preference for fax communications for patient/treatment information. Word of mouth, social media, and organizationally-hosted listservs had low levels of support. This was consistent across demographic categories.

Participants were asked to identify the top three tumour groups with the greatest need for primary care guideline development.

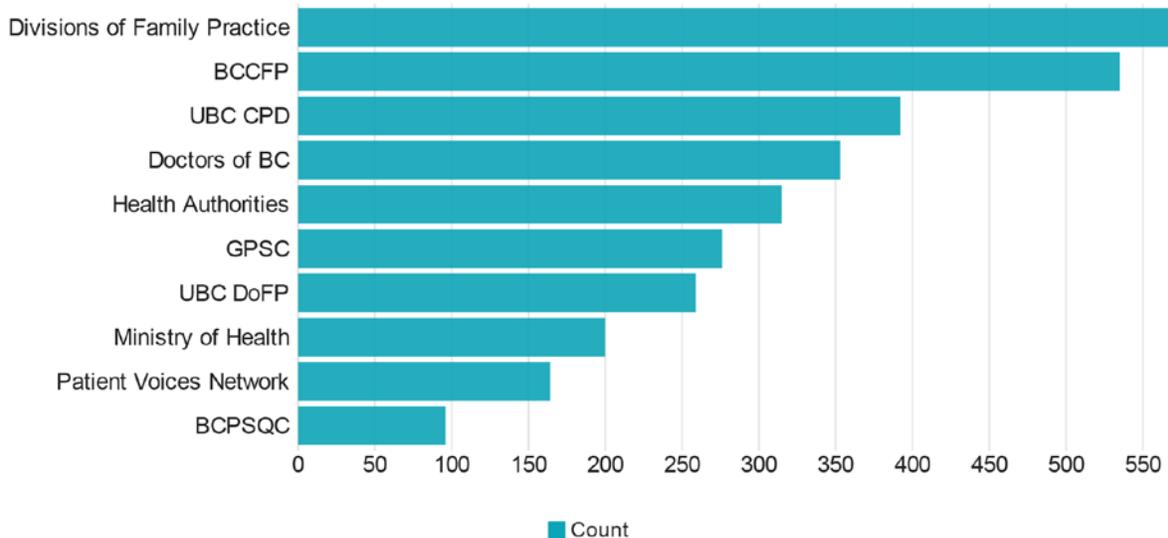
Figure 4-3: Future directions for primary care guidelines in cancer care



The top three tumour groups which participants identified included:

- Blood, Lymphoid, and Multiple Myeloma - 504/866 respondents identifying
- Lung - 469/866 respondents identifying
- Skin (Melanoma and non-Melanoma) - 413/866 respondents identifying

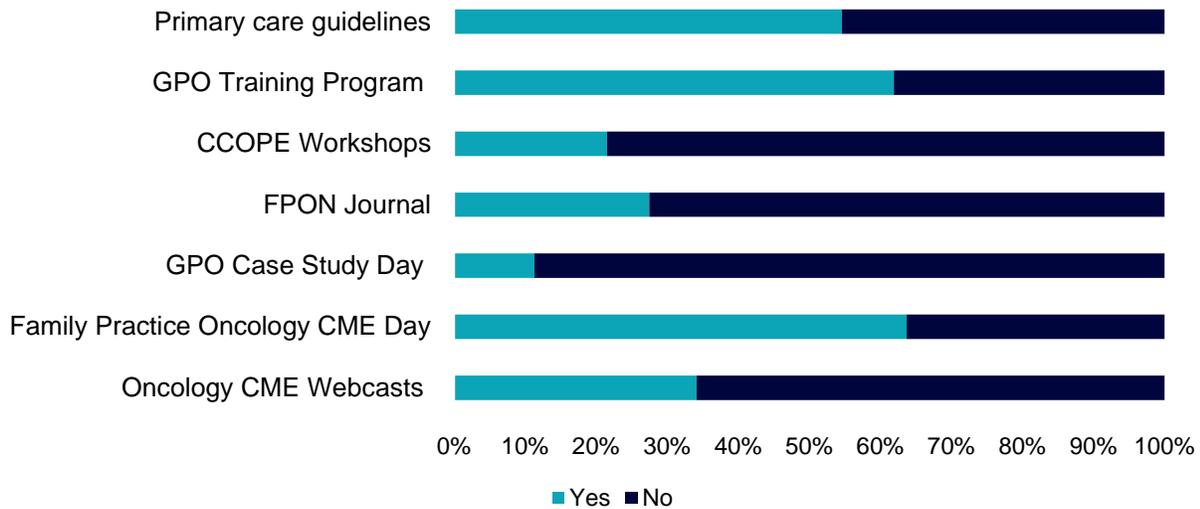
Figure 4-4: Organizational partnerships for provincial primary care program



Participants were asked to identify which organizations the expanded Provincial Primary Care Program should partner with to create a sustainable and coordinated education and standards delivery system for primary cancer care. Figure 4-4 illustrates the number of votes each organization received. The Divisions of Family Practice, the provincial college and physician association and UBC CPD were the most commonly rated partners.

We asked participants whether they were aware of the following FPON programs to determine awareness and reach of existing educational programs. As can be seen in figure 4-5, the awareness of FPON programming was variable with the CME Day, GPO training program and primary care guidelines the most common. The remaining programs were not as well known. These results suggest that the Provincial Primary Care Program may need to focus efforts on marketing their offerings more widely across the province.

Figure 4-5: Knowledge of current FPON programs and educational offerings



Chi-Square Analysis

Rural respondents were more likely to indicate they were familiar with several FPON offerings relative to their urban counterparts. These included the *GPO training program* [$X^2(2)=7.52$; $p<0.01$] and the *primary care guidelines* [$X^2(2)=7.34$; $p<0.01$]. These findings may be explained because there are fewer educational opportunities in rural compared to urban centres, meaning FPON education may have better visibility in smaller communities.

Primary Cancer Care Knowledge and Education

To guide the provincial primary care program’s future development of educational programming, respondents were asked to rate their level of interest in a range of potential CPD topic offerings.

Table 5-1: Interest in CPD by subject area

Question	n	Not Interested	Neutral	Interested	Weighted Mean (/5)
Screening	707	4%	5%	82%	4.2
Managing initial work-up and making a diagnosis	737	2%	4%	90%	4.4
Managing side-effects and co-morbidities during active treatment	749	3%	5%	85%	4.2
Managing pain during active treatment	748	4%	5%	85%	4.3
Post-acute treatment or long-term follow-up	746	2%	3%	89%	4.4
Advance care planning , including palliative care and end-of-life support when appropriate	751	5%	6%	79%	4.1

Providing psychosocial support for patients throughout their cancer journey	751	4%	6%	74%	4.0
Staying up to date with advances in oncology treatment and care	747	6%	7%	74%	4.0
Cancer prevention	746	3%	4%	83%	4.3

There was a high level of interest for participating in CPD in all topic areas identified (all topics had 4.0 or higher on a 5 point Likert scale). The top four subject areas are reported here due to tied scores:

- Post-acute treatment and long-term follow-up – 4.4/5
- Managing initial work-up and making a diagnosis – 4.4/5
- Cancer prevention – 4.3/5
- Managing pain during active treatment – 4.3/5

Chi-Square Analysis

Women were more likely than men to be interested in the following topics: *Managing initial diagnosis* [$\chi^2(2)=6.64$; $p<0.05$], *Post-treatment/follow-up care* [$\chi^2(2)=21.03$; $p<0.01$], *Advance care planning/palliation* [$\chi^2(2)=7.24$; $p<0.05$]. Those respondents who were longer in practice were more interested in *staying up to date with advances in cancer care* [$\chi^2(8)=42.70$; $p<0.05$].

To determine which education delivery format is most preferred by primary care providers, we asked them to rate their preference on a range of standard education delivery models. Responses are summarized below.

Table 5-2: Preferred learning formats

Question	n	Not Preferred	Neutral	Preferred	Weighted Mean (/5)
Small group learning (e.g. peer study group, journal club, workshop)	732	17%	21%	61%	3.6
In-person conference	738	8%	15%	77%	4.0
Webinar	722	24%	23%	53%	3.4
Mentoring/Coaching	710	32%	40%	29%	3.0
Self-directed learning (e.g. literature review, personal learning project)	723	26%	24%	50%	3.3
Self-paced online module	730	12%	18%	69%	3.8

The top three most preferred identified learning formats were:

- In-person conference – 4.0/5
- Self-paced online module – 3.8/5
- Small group learning – 3.6/5

Chi-Square Analysis

The longer respondents had been in practice, the more likely they were to prefer *small group learning* [$\chi^2(8)=23.67$; $p<0.01$] and *self-directed learning* [$\chi^2(8)=16.24$; $p<0.05$], while those respondents on alternative payment plans (i.e. salary, sessional, blended, etc.) were more likely to prefer *webinars* [$\chi^2(2)=7.81$; $p<0.05$] and *online modules* [$\chi^2(2)=10.51$; $p<0.01$].

Respondents were asked to identify potential facilitators and barriers to engagement with CPD offerings. Responses are outlined in the following two tables.

Table 5-3: CPD Facilitators

Question	n	Never	Sometimes	Often	Weighted Mean (/5)
Ability to improve the care of my patients living with cancer	740	1%	7%	92%	4.5
Ability to learn about new and emerging technologies in cancer care	741	10%	25%	66%	4.3
Quality of the presenter/facilitator	741	5%	21%	73%	4.0
Specific topic area/learning objectives that will be addressed	740	2%	11%	88%	4.0
Ability to collaborate with colleagues/other healthcare professionals to ensure best practices and patient outcomes	739	6%	26%	68%	3.8
Continuing Medical Education (CME) credits	738	12%	23%	65%	3.8
Local or regional educational offerings	738	5%	19%	76%	3.8
Provision of food/meals	736	38%	33%	30%	2.9

The only factor that did not receive high support was the provision of food/meals. Male respondents were more likely to be motivated by the *ability to learn about new and emerging technologies in cancer care* [$\chi^2(2)=13.61$; $p<0.01$], while FFS respondents were more likely to be motivated by the provision of *CME credits* [$\chi^2(2)=9.34$; $p<0.05$].

Table 5-4: CPD Barriers

Question	n	Never	Sometimes	Always	Weighted Mean (/5)
Professional obligations	741	8%	26%	66%	3.7
Social/family obligations	743	8%	31%	62%	3.7
Content/relevance of CPD activity	736	12%	41%	47%	3.5
Geographic location	741	11%	29%	60%	3.6
Duration (hrs) of CPD activity	737	19%	43%	38%	3.2
Timing (time of day/month)	742	8%	35%	57%	3.6
Direct program cost (e.g. registration, travel)	737	23%	31%	47%	3.3
Loss of income from practice	740	29%	25%	46%	3.2

Ability to find clinical practice coverage	736	33%	21%	46%	3.2
CME fatigue	736	45%	39%	16%	2.6

The factor receiving the lowest level of agreement was *CME fatigue*, suggesting that primary care providers are highly motivated to participate in CPD activities that accommodate their schedule and provide appropriate incentives.

Rural physicians were more likely to rate several factors as barriers to engagement with CPD offerings compared to their urban counterparts:

- Professional obligations [$X^2(2)=10.48$; $p<0.01$]
- Ability to find practice coverage [$X^2(2)=6.91$; $p<0.05$]
- Geographic location [$X^2(2)=6.54$; $p<0.05$]

“Make activities more accessible in my community; not excessively long, affordable, and not interfering with my regular practice hrs; preferably on weekends.”

Along the same lines, fee-for-service respondents were more likely to rate several factors relating to cost and time spent engaged as barriers than were their APP counterparts:

- Duration (hours) [$X^2(2)=11.57$; $p<0.01$]
- Loss of income [$X^2(2)=49.41$; $p<0.01$]
- Ability to find clinical coverage [$X^2(2)=22.12$; $p<0.01$]

These results are important when considering how the Provincial Primary Care Program can create flexible, responsive educational opportunities to meet the need of busy primary care providers. Respondents who were longer in practice were less concerned about *professional* [$X^2(8)=20.51$; $p<0.01$] as well as *social/family obligations* [$X^2(8)=50.28$; $p<0.01$]. This may be indicative of a culture shift with fewer new graduates taking on full time practice, compared to their more experienced peers.

“It’s an individual professional’s obligation to balance family, work, CME. This is a difficult thing to teach, and often we just need regular reminding. Destination CME’s where families could accompany are one of the best barrier solutions.”

FOCUS GROUPS

The focus group protocols were designed to capture different perspectives and to learn more about respondents’ experiences with and recommendations related to, oncology care and education needs for FPs in the province of BC. Questions were open-ended, and the protocol was designed to be used in a responsive manner with respondents (questions may have modified, and additional follow-up questions added as needed to fit the flow of the discussion).

The protocol was identical for the urban, rural, and new-to-practice focus groups, with the exception of references to the identifying demographic characteristic. The protocol for the oncologist focus group was

significantly adapted to secure perspectives from those specialists on the role of FPs in cancer care and of the proposed Provincial Primary Care Program.

Roles and Care Delivery

The three FP focus groups were asked about what their role could and should be in caring for their patients throughout their cancer journey. Follow-up questions asked about continuity of care, inefficiencies and solutions, knowing who to contact and how to contact them, how FPs could be better supported, and how they understood the roles of oncologists and other specialists. Oncologists were also asked what they believed the role of FPs could and should be in cancer care for their patients. Probes included questions on continuity of care, collaborating with and supporting FPs.

Family physicians in the focus groups saw their role as providing ongoing health care, not losing sight of the basics. They also indicated their role was preventative health, co-morbidity management, and ongoing monitoring/surveillance after treatment. Some saw their role as helping patients navigate the system and coordinating appointments.

Oncologists viewed the FP role as key to managing comorbidities and in providing follow-up care. All groups generally saw their roles as complementary and with at least the potential for collaboration and mutual support.

Continuity of Care

Both FPs and oncologists spoke of the importance of continuity of care, from the physician and patient viewpoint. Many comments related to continuity of care focused on the transitions during the patient journey.

"I personally like to have the continuance care of my patients so with regards to cancer patients I love the idea of the specialist fulfilling the specialist role but still as a GP fulfilling my role in terms of understanding the whole the picture because I've developed a relationship over many years much before the cancer diagnosis usually." Urban FPs, R1

"...sort of feels like they have to divorce from the Cancer Center and I think that if we could begin that palliative care journey right at the beginning, that would be so much more of a better transition for the patient." Oncologists, R5

A number of respondents spoke of the gap in their role between diagnosis and follow-up, especially not knowing what was happening with the patient in between; not being in the loop. Family physicians were frustrated by the lack of timely information about their patient's journey as well as by their inability to provide answers to questions ranging from types of treatment to what to expect at each step.

"I have to say often I feel like it's a kind of a gap. My patient goes into some kind of care and I don't really know what's happening and then they come back to me and have questions and I don't have the information for them..." Urban FPs, R2

The extent and type of gap felt varied depending on their geographical location and role. For Rural FPs, there was an added challenge that patients receive treatment at distant locations, so it is more difficult to stay involved. A particular challenge for locums was raised that not knowing the patients to whom they are conveying a diagnosis. When seeing cancer patients, the locum does not know where they are in their treatment or what their supports may be.

There were also challenges around who does what at key transition points. One respondent was unsure about who is responsible for conveying a diagnosis to patients. Another was uncertain about their role in referring patients for support, wondering if that was done at BC Cancer. Additionally, FPs wanted to be sure that they were not repeating work already being done elsewhere for the patient, or missing support that they were expected to provide. A single point of contact for patients and for FPs was suggested multiple times in the discussions.

"...who tells the patient yes this is cancer is the question. Is it me, is it the surgeon? You know I get the result at the same time as the surgeon or the oncologist may get a result and who's role is that is one thing that comes up for me." Rural FPs, R2

"...if there was one, even if it was a nurse or a nurse practitioner who was their main sort of contact person to help coordinate all those things would be fantastic." New to Practice, R9

Shared Care

Shared care and team approaches were seen as increasingly important as people live longer with cancer and with co-morbidities. The Oncologists focus group discussed this at some length, indicating the need for good communication in a shared care approach to supporting patients. One spoke of the importance of the FP's expertise in managing co-morbidities.

"...when patients are becoming more complex (with) co-morbidities...I feel out of my scope because I don't know all the latest...for me as a specialist and for the patient, we're both really relying on the GP's expertise..." Oncologists, R3

Oncologists also discussed building support teams comprised of allied health professions to enable FPs to take on cancer patients. This would assist patients as they complete their cancer treatment and potentially support recruitment and retention of FPs.

"You don't want people who have expertise to leave because of burnout because they don't have the supports." Oncologists, R5

There was a suggestion to have the nurses assigned to inter-professional teams, or those with related knowledge from working in cancer treatment, act as navigators for the patient and as a contact for the physicians to keep up-to-date on the patient.

Discussions of the patient's role in care delivery focused on access to good information. Respondents saw a need for high quality, accessible resources for patients, so that patients won't feel the need to use Google. They indicated that BC Cancer website is difficult to use and this should be where patients go for information.

One creative suggestion was to let patients decide whether their primary contact is their FP or BC Cancer.

*"...a lot of patients are connected with walk-in clinics and they're connected with...services that are not as holistic so I think that giving the patient the option to choose would be an interesting one...patients could say check a box and say I want the BC Cancer Agency to really be the...primary...manager of my cancer journey versus the GP receiving the specialist data and then working with the patient through things."
Urban FPs, R1*

Barriers

Different locations may have different capacities for cancer care. Areas with more resources, such as GPOs, local cancer centres, oncology teams, and holistic teams, were experienced as stronger and easier to access.

"...we've got a pretty good system in Vernon as we've got a local cancer center, we've got two full-time oncologists and we have three more part-time GP oncologists. So for the most part it's fairly simple to you know just be able to pick up the phone and talk to whoever is the primary physician responsible for the patient." Urban FPs, R9

On the other hand, areas without those resources can have lower capacities, even with basic care. Small or isolated communities may not have the specialist staff, so available staff may be asked to do work for which they are not trained.

"I find our care team can be a little bit overwhelmed or stressed...the Centre will send (patients) back not realizing how little wound care nurses actually do so they get overwhelmed pretty quickly and pretty scared with patients who are sick." New to Practice FPs, R1

From the patient perspective, barriers to care delivery can include barriers to travel, such as income, transportation, distance, frailty, or preference. Respondents' spoke of patients coming to the Emergency Room and seeming lost in the system. Patients can also be moved around due to scarce resources, causing delays and frustration. In particular, a number of respondents spoke of the impact of delays on patients.

"The problem is that we have got this message out to people that they need to find things quickly and present quickly with and it needs to be diagnosed quickly and you

know time is of the essence when you have a cancer diagnosis but it all comes apart when you're waiting for the tissue diagnosis. And sometimes even after you've had the biopsy it'll take a month or more to get the results before you can even start doing anything." Rural FPs, R4

"...wait times are probably what frustrates the patients the most..." Rural RPs, R1

Improving Care Delivery

Family physicians need easy access to information for use immediately following diagnosis: both information to answer patient's questions and information on workups that can get started while waiting for an oncologist appointment. Respondents had other suggestions for improving care delivery, especially learning from other specialties about coordinating care with FPs. They also spoke of using existing tools more effectively and adopting proven practices from other services. It was suggested that FPs be referred to Pain and Symptom Management Clinics, rather than to oncologists, for questions about treatment or side-effects.

"I think the role of the oncologist really needs to be putting contingency plans in place which I find the internists do really well...So they really give you like if X happens, here's what you do with Y and I would like to see more of that from the Cancer Agency...So I'd like to see more of those pathways for who we should be calling with what complications and how urgently because we don't have those right now." New to Practice FPs, R1

"...one situation I'm thinking of was when a patient was having complications, I didn't know if the GPO was working on it or if I should start working on it from where I was working and just a bit of communication through EMR or through the health records would be helpful..." New to Practice FPs, R1

"...the GI service has done this as well with essential GI intake, so everything's very streamlined and they explain really clearly on the referral page what happens...tell us where patients are in the pathway and what we need to do if things change...my patients who go through those clinics, I just feel like they're looked after, they're in the pathway, they're on their way and I know exactly what happens when we go through that." New to Practice FPs, R1

Addressing FPs' concerns about continuity of care and shared care was also seen as having the potential to reduce stress. When asked about support that the Provincial Primary Care Program can provide in reducing stress, respondents indicated that advocating for working more closely as a team and being more aware of where the patient is in their journey are both ways to reduce stress.

"...feeling like we're connected and part of the team...feeling like...our patients are being well taken care of that will reduce stress." New to Practice FPs, R9

Communications

Communication between FPs, oncologists, allied health, and BC Cancer was the most discussed issue throughout the focus groups. Specific questions about communication were asked as part of the protocol, but were addressed at multiple points during the discussions as they touched on everything from care delivery, to information resources, to stress relief. Though respondents did have some differing experiences, this was a key pain point and an area with room for improvement that the Provincial Primary Care Program can address.

Current Practices

Focus group respondents had a range of perspectives on current communications practices. They indicated that immediately post-diagnosis, communication and knowing what to do next can be difficult. They acknowledge the support that BC Cancer provides in this area, but overall saw room for improvement.

"...once they're kind of well-connected and the information's going back and forth, that part's not really a problem but...just kind of the initial part." New to Practice FPs, R6

For both FPs and oncologists, going through the communication channels to connect is time-consuming and can be a barrier to efficient communication, especially by phone. Family physicians spoke of the importance of knowing who to contact and being able to reach them directly and quickly, indicating that:

- They can't always find a contact number on a chart;
- Consult notes don't have contact information on them;
- There can be layers of communication to get through;
- Delays can result in making decisions and giving treatment before a consult is received; and
- BCCA is a resource for communications

"It is a few more steps for us to phone the Cancer Agency and then wait for their phone call back but it has worked for me." Urban FPs, R6

"...while I don't have a phone number per se I do know that if I call BC Cancer in general they eventually I get redirected to someone who can help me. It just takes a bit of time." New to Practice FPs, R3

"I'm spending time sitting in my office making phone calls trying to figure out how to reach this person." Rural FPs, R2

"...the patient connectors...have been awesome in my experience. So they've been super, super helpful with my patients who are first getting connected in trying to coordinate appointments and travel times from towns that are six hours away and that kind of thing and they've been really understanding and really patient...and they're quick to call me

back during the day when I'm in the office so that's quick turnaround time." New to Practice FPs, R1

For non-urgent communications, email was seen as easier to fit in than phone calls. One respondent also mentioned the value of being able to send non-urgent questions to the oncologist through the EMR. Another indicated that using letters is dated and slow. Opinions varied on the speed and value of updates and documents as they are currently provided.

"...I just get either a great note or a mediocre note..." New to Practice FPs, R6

"...there's usually pretty frequent contact in the way of progress notes and treatment updates so I think that part is usually okay." New to Practice FPs, R5

"...sometimes we'll get nice letters back that kind of guide us in way of what physical exams or that kind of thing we should be watching for or lab work we should be doing and that's always really helpful..." New to Practice FPs, R1

"...I feel like sometimes I'm doing work that I don't need to do because it's already been done and I'm just not hearing everything..." Urban FPs, R5

For oncologists, the volume and types of communications are challenging. Time for communications with FPs is not built into their schedules so it is something that needs to be fit in between other commitments. Added to this is the possibility that communications may come by phone, text, email, electronic medical record, etc.

"...all this communication is happening in between actually seeing patients and that time doesn't really exist..." Oncologists, R6

"...communication is quite variable and I think as a specialist you receive communications from multiple media which gets a bit overwhelming and confusing sometimes..." Oncologists, R6

Oncologists also wonder how well current communication practices work for FPs. One indicated they would rather have immediate contact than a message to respond to later, particularly if the FP is both with the patient and getting paid. The concern was both for providing advice in time and also for respecting the FP's ability to charge for the time.

"So for instance, if a patient's in their office so they can bill, I don't mind them calling me right there and then and if I can I will answer if, you know, usually it can be really quick even if I'm in clinic, because if that's how the model works and this is how they're funded, then I'd almost rather have that then find something, a message from my secretary after 5:00 when I finally come up from my clinic and I can't reach that doctor because I'm still working on dictations and so forth but if their day happened in a different time frame." Oncologists, R3

Improving Communications

Respondents shared many ideas for improving communications between FPs and others in a patient's cancer care team. They spoke of improved communications as a way to reduce their stress in caring for cancer patients.

Family physicians want more engagement with the oncology team. They want to know specifically who to contact. They would like to get information from the oncology team at certain stages, for instance about prognosis or treatment support or on surveillance after a patient graduates. In more complex cases, they want a debrief meeting. The most difficult points are the transitions; when first diagnosed and when exiting cancer treatment.

"I would feel more comfortable if the oncologist gave me information about expected prognosis then I would know how to help my patient prepare for that." Rural FPs, R2

"... Making sure that we're included in all the consultation...we receive all of the consults and the notes even from a social worker...it's hard to feel like you're the support for the patient in the community if you are not a part of their cancer care." Urban FPs, R5

"...they need to communicate...what other programs the patient is accessing through the Cancer Agency and if we know what they're accessing to also know who to contact if we have questions or concerns along the way." Urban FPs, R6

On the other hand, one urban FP indicated that sometimes the next steps are very clear.

"...with a lot of the cases I think it's fairly straightforward. Like if you send a colonoscopy and then they found a colon cancer then there's not much that you have to do." Urban FPs, R8

Oncologists also want to ensure that FPs have this transition information.

"...how can we facilitate transfer of care back to the GP when you know our care has kind of sort of ended and we want to, you know, turn care back over to the GP, you know, do we need to provide like survivorship care plans or just, you know, sort of guidelines in terms of you know how to, you know, what kind of issues the patient's going to have moving forward and how to best manage them." Oncologists, R2

Respondents made a range of specific suggestions for improving communication practices, including:

- Access to the patient care pathway;
- Knowing the patient's appointments schedule;
- Clear information on who to contact, during the day and after hours;
- Direct lines rather than going through switchboard, receptionists, nurses etc.; and
- Specific contacts for specific questions/issues

Another suggestion included physicians-only email on the Pathways tool for specialists. Pathways is an online resource that allows GPs and their office staff to quickly access current and accurate referral information, including wait times and areas of expertise, for specialists and specialty clinics. In addition, Pathways makes available hundreds of patient and physician resources that are categorized and searchable (<https://pathwaysbc.ca/info>).

The critiques and suggestions around communications came down to a central desire for streamlining communications and reducing the impact of communication needs on everyone's schedules.

"...a way to streamline things, if there was a way to communicate the answers to high yield frequent questions..." Oncologists, R6

"...if the communication was more enhanced, more seamless, it would have been much more quicker to diagnose that person and prevent unnecessary delays...having those network of multiple specialists on the same platform of encrypted communication service, it would become much more easier." Oncologists, R7

"... we might find better ways to avoid what we call doing things in series which is where it takes, you know, three days to talk to so and so and then it takes another three days to talk to get, find the radiologist and then, you know, being able to be nimble for that smooth patient care." Oncologists, R3

Generally, a main contact is preferred, with multiple contacts only when specialized information is required.

"...I think having some easier contact information or like having one person that was the main contact for us would be really useful, especially when they are being treated by multiple providers at the Cancer Center..." New to Practice FPs, R9

"I really like this idea about if the patient has complications from surgery versus complications from chemo versus complications from radiation then we actually, you know, had different lines to call." New to Practice FPs, R4

Communication Methodologies

Critique of communication methodologies was primarily along two lines: dated methods and time-consuming methods. Letters and faxes were considered to be dated and often not useful, particularly if they did not include contact information for follow-up questions. Communication by phone, though timely when it works, was often cumbersome and many-layered. Established communication methodologies such as email were supplemented by emerging methods and the expansion of methods from other disciplines.

The emerging use of secure text messaging was seen as useful for making contact quickly and for being able to respond in their own time.

"...I think text messaging is a pretty good way to kind of stay in touch because it's not something you're forced to say I got to answer this right now. You got a text, you can take it on as an email, and you can answer it in a few hours or the next day." Rural FPs, R3

"I'd love the opportunity to have more asynchronous communication between BC Cancer, in other words the oncologists, and our office. So the ability to ask a question in a more of a model like email as opposed to one where I constantly need to struggle to find the right person to communicate with..." Urban FPs, R1

Text messaging can also be a way to provide direct access to specialists, with a layer of privacy.

"...there's no real number showing up but the name of the doctor is showing up, you can text them and they can text you back. And in case you need to call them they can call you back." Urban FPs, R7

Along with secure text messaging, a main theme for improving communications was the use of existing tools. Both Pathways and the Rapid Access to Consultative Expertise (RACE) line were referred to repeatedly. Respondents want cancer care incorporated into existing, effective communication and information tools. They would like to have an oncologist available via RACE line. They see Pathways as having value both for information on specialists and for connecting patients with resources.

"...being new in practice Pathways is awesome, the RACE Line is really helpful and it just helps to get things for patients that they need really quickly." New to Practice FPs, R1

"I think it would be helpful if Pathways also included some information on how to connect patients with these resources, whether it's like the referral because of a cancer diagnosis or other services that the Agency also supplies." Urban FPs, R8

Respondents also discussed navigation; both in terms of tools and in terms of a Navigator for patients and FPs. Whether through the BC Cancer website or RACE line, FPs need assistance navigating the resources when they have questions. Some also feel it is their role to be a navigator for their patients but they need navigation support themselves in order to do that. A cancer care navigator role was raised as something that would be of value for both patients and FPs.

"It can be a confusing system so it's almost like the GP needs a navigator in addition to the patient needing a navigator from the GP. So if we could find a way to have a navigator through the BC Cancer Agency that the GP could quickly call, that would be a good thing." Urban FPs, R4

"Someone who can act as a navigator and can pick up on patients that are referred and guide them through the process or ensure that they have the means to do it." Rural FPs, R4

The findings reveal that the primary unmet communication needs of FPs are:

- Clear, accessible contacts for urgent consultations and for non-urgent questions and information
- Inclusion in regular communications about their patients along the cancer care pathway
- Efficient and effective communication methodologies between specialists and FPs such as EMR-embedded communications, asynchronous communication channels, and access to relevant patient information.

Education Barriers and Gaps in Knowledge

The focus groups were not asked direct questions about barriers to education or gaps in knowledge. These surfaced in responses to other questions and are summarized here to show what needs to be addressed by the Provincial Primary Care Program.

Throughout the focus group sessions, FPs made multiple references to complexity of cancer care and treatment. They indicated that there are, therefore, many gaps in knowledge and barriers to learning enough to be helpful to patients. The two main barriers are the rapidly changing, complex field and access to quality resources.

There was positive feedback on both UBC CPD and BC Cancer education programs. Those that had attended GP Oncology Day or webinars all indicated that the learning was beneficial.

"I attended the breast cancer workshop and I really learned a lot about how to manage and diagnose and work up patients with breast cancer." Urban FPs, R4

A number of respondents either did not know about the webinars or did not know that they could view the recordings at their convenience. Respondents referred to seeing emails about education/webinars but not following up.

"I do get a lot of emails and I saw there was a webinar recently that I probably should have listened in to but due to time constraints it didn't happen but I learned something new now, I know I can just search the CPD, like the CPD website and it's there so it's good, I'm glad it's getting more robust." New to Practice FPs, R4

One respondent expressed the view that continuing education opportunities can only take a FP so far.

"...no level of like set webinars I attend or those kinds of things will prepare me to have those discussions with patients and I don't think it's appropriate for me to do that." New to Practice FPs, R1

In terms of gaps in knowledge, most discussion was about the complexity of treatments. The two main gaps in knowledge were advising on treatment options and treating side-effects or co-morbidities. Patients come to their FPs for advice on treatment options as well as when dealing with side-effects or other illnesses. FPs and not just those new to practice, often do not feel equipped to provide advice on treatment options.

"I also will get patients coming to me during their course of treatment asking either for my advice on, you know, which treatments they should go with, if they were given any options, what my thoughts and opinions are, which is often hard cause it's obviously very complicated things." New to Practice FPs, R9

"...there are different treatment options for patients - surgical, radiation, chemo. And sometimes I'm at a loss to have the knowledge to know the best road to go down for a specific cancer." Urban FPs, R1

Some FPs feel they lack the knowledge to handle side-effects or to know when a cold or other minor illness may need special attention. This gap was raised by both community-based practicing physicians, as well as one emergency room physician seeing cancer patients for other conditions and not knowing if treatment protocols differed for them.

"...sometimes get patients who come with side-effects, side-effects of treatments and sometimes don't know exactly who I'm supposed to turn to for, um, you know assistance with sorting out those side-effects." New to Practice FPs, R9

Another identified gap was in the area of resources for holistic care and allied health services. Mental health care and social workers were commonly mentioned as needed resources, and the respondents did not always know how to find out what was available or how to make contact.

The primary unmet education needs of FPs are:

- Knowing what education and resources are currently available to them; and
- New education opportunities and resources on cancer treatments, distinguishing symptoms from side-effects, and treating general illnesses for cancer patients

BC Cancer Role

The role of BC Cancer was understood to be important by respondents, with variations on how FPs experienced the contacts and resources provided. During the discussions, respondents were asked whether they knew who to contact at BC Cancer when they had questions about patient care. Analysis of the current BC Cancer role, as well as directions for the new Provincial Primary Care Program, appeared throughout the focus group discussions, touching on care delivery and communications as well as information and education resources.

Respondents discussed a wide range of support activities and resources that BC Cancer can provide to FPs. Generally, it was seen as a priority for BC Cancer to ensure that cancer care information (from guidelines to FP and patient resources) is incorporated into tools that FPs are already using, such as Pathways and the RACE line. They also referenced resources available for some cancers that could be built out or replicated for others. Specifically, one respondent mentioned the `I Am Tom` website as useful for both FPs and patients, suggesting something similar could be created for other cancers.

Specific types of resources mentioned included:

- Resources for locums, for giving diagnoses when they do not have an existing care relationship with the patient
- Broad, quick reference resource for patient questions after diagnosis, before seeing oncologist
"...resource that we can refer to quickly and that just sort of at least pre-empt them before they see their oncologist cause they often come in with a lot of questions even before they've seen the oncologist and I don't know how to handle that." New to Practice FPs, R1
- Topical resources for specific issues, such as symptom management and side-effects
"For example, if the patient has had some skin issues as a result of the chemotherapy or maybe they have a mental health related issue as a result of their recent cancer diagnosis, so how to best connect people with those resources." Urban FPs, R2
- A list of FPs accepting cancer patients, so patients do not get turned away
- A list of specialists and surgeons, who does what, so FPs can find the right person (requested by FPs and suggested by an oncologist)
"...we need to have provide some data information to the community as who are the true experts for certain type of management to help the GP's to know who to refer to..." Oncologists, R4
- Contact lists for social workers, drivers, etc.
- Patient contact for the gap between diagnosis and seeing an oncologist
"... if they can't see someone there would be someone they could talk to on the phone for 10 or 15 minutes to just give them some preliminary information." Urban FPs, R2

The FPs also pointed to the needs of particular patient populations. For instance in rural/isolated areas where housing is cheaper, patients can have lower incomes, which can make getting to treatment especially challenging. It is important to connect patients with lower income and resources to social workers. Patient populations such as mariners, new immigrants, and non-English speaking folks were highlighted as having specific needs around social supports. The First Nations Health Authority was mentioned as being particularly strong in holistic care and support for indigenous patients.

Respondents appreciated the treatment protocols and guidelines for follow-up care that are available on the BC Cancer website. Some indicated that an up to date website with links is the best resource. One emergency room physician also suggested guidelines for treating other conditions when a patient has cancer/is in cancer treatment. Another asked for a resource on medications and side-effects.

"I would love something very simple like, you know, these are the meds your patient's on and these are the common side-effects to, you know, expect so I'm a little bit more knowledgeable and when, you know, somebody else had eluded to somebody shows up

in the office, well how do you know, is it meds, is it disease progression, what the heck is it?" Urban FPs, R8

Family physicians also suggested other resources, including maps of the patient journey, starting with their initial contact with BC Cancer and through their treatment.

"...just some information for us about what the patient journey is like when they do go to BC Cancer Agency and, um, what kind of supports they have and then information on how we could connect them to those supports in case they fall through the gap or something like that." New to Practice FPs, R6

"...if there was some kind of a flow sheet of, you know, like a journey map that at certain points you could see where the patient is in that journey map and realize oh I forgot to catch up with the biopsy part or I forgot to catch up with the first visit with the oncologist or now they're going to radiation or you can sort of find out where your patient is and maybe, you know, get back in touch..." Rural FPs, R3

It would be important to include expected timelines for different parts of the journey, especially for new to practice as they don't have the experience with the system yet:

"...that's one of the best ways we could reassure patients." New to Practice FPs, R6

Along with the range of resources suggested, respondents shared strategies for BC Cancer to improve uptake of their services. They indicated that FPs need education about the services and supports that BC Cancer provides to patients as well as resources available to physicians. In particular, education about supports around mental health and social supports are needed.

"I don't want to do redundant things and it takes longer if we have to refer them than if it's already in the Cancer Agency so, I'm not sure where I could find out where, you know, what kinds of resources there are for patients within the Cancer Agency and also whether it's easy for patients to actually sign up for those and who manages them." Urban FPs, R5

"...it's great that the BC Cancer has all these resources but if nobody knows about them then they're really not so great because we need to know about them in order to properly utilize them." Urban FPs, R4

Critically, education needs to be accessible as and when needed, both so it can be found quickly and so that it is not forgotten by the time it is needed.

"I just find that point of care or close to point of care being able to get the information helps. If I go to an educational event and then I don't see that particular cancer for a few years, I, it's not fresh in my mind." Urban FPs, R2

Provincial Primary Care Program

Family physicians in the focus groups were asked how the Provincial Primary Care Program could improve education and resources aimed at supporting them to provide high quality cancer care to their patients. They were specifically asked about tools and resources for both patient information and their own information. They were also asked about resources and tools from other programs that they would like BC Cancer to have. Finally, they were asked how an expanded Provincial Primary Care Program could support reduction of undue stress for FPs.

Oncologists were asked what they thought the role of the Provincial Primary Care Program should be going forward. They were also asked about tools and resources for both patients and FPs. Critically, they were asked to identify the biggest practice or care gaps with FPs they have worked with. Referring to the expected increase in people with cancer, oncologists were asked to discuss how to prepare FPs for this increase and for supporting oncologists in their specialist role.

A wide range of issues and suggestions came from these questions and probes. Many of them have been included earlier in this report and the focus now turns specifically to the role of the Provincial Primary Care Program going forward, addressing stakeholder engagement, strategic communications, QI, and education and resources.

Stakeholders

Discussions of stakeholders for the Provincial Primary Care Program ranged from differences between urban and rural physicians to the role of government.

"...the family physicians as you know in urban areas versus family physicians in rural areas. I think they have very different needs and I guess, the program needs to help develop their expertise and help us understand what their needs are so that we can provide the information and the education etc. that these two distinct groups as family physicians require." Oncologists, R5

"...some of this is the way we've always done things, this is the way the government has always done things, and this is the way MSP has always done things. And it actually gets in our way." Oncologists, R3

"...if you get into the right channels and you have the right data and everybody, so the specialists and the GP's are both saying the same thing, you can get somewhere. So I think that, um, relationship with the Ministry of Health, making the Ministry of Health so

aware that this new program now exists, [I: yeah] that you're going to start feeding them data, you're going to start giving them sort of ways to move." Oncologists, R3

Respondents also spoke of the need to use existing resources and find key community stakeholders.

"We have analytic help at BC Cancer and we have all kinds of people in the regional centers who would probably be interested in making that liaison." Oncologists, R3

"...identify those key leaders in community who have their fingers on the pulse of the other practitioners so that they can communicate and give us a feedback..." Oncologists, R7

Respondents articulated a role for the Provincial Primary Care Program and strategies for prioritizing needs in order to make the most impact.

"...to be a liaison between the family practice community and the cancer oncologist community and so you know we would come to you to tell you what our needs are and they would go to you to tell them what their needs, to tell you what their needs are and somehow it, you know, you'll help us meet in the middle." Oncologists, R5

"...see the role of Primary Care Program and BC Cancer probably have to take on a bit of heavier role of liaising with various groups to come up with standard care pathways, treatment guidelines or whatever. So you need to create a whole bundle of that in order to put in if you have the software to put into physicians' computers and you know find the ways of, uh, you have to update that as well. But once you have a bunch of those guidelines or care pathways, then you can pick some high powered areas to see, to measure the performance how well people are adhering to those and then do QI initiatives..." Oncologists, R4

"I think my approach would be, you know, sort of determining like a top sort of 20, 30 sort of a list that GP's would desire, you know, from the Cancer Center in terms of facilitating, you know, their care for the cancer patient, and vice versa, like what do we want as GP, of GP's to facilitate, you know, care across the sort of spectrum of their journey." Oncologists, R2

Strategic Communications

Strategies for the Provincial Primary Care Program communications and engagement came through clearly in the focus groups. Including FPs in team meetings and disseminating information through the Divisions were suggested strategies to improve engagement. Building on existing resources by incorporating cancer care into the RACE line and Pathways was advocated, along with connecting BC Cancer to electronic medical records.

Choosing the right method for communication is a strategic choice to make the best use of resources for urgent consults. Generally, asynchronous methods were preferred for non-urgent questions.

"...is there something like an online forum where people can do Q&A with each other and its low maintenance and they don't actually have to make an effort to call people in person or is there anything like that?" New to Practice FPs, R5

The oncology focus group also discussed the benefits and challenges of a patient-centred portal as a tool for communication between all parties. Uptake by patients and health care providers and building layers of communications into one tool were identified as challenges.

*"...create a patient-centered portal and all the different portal will just actually feed into it and cross communicate which would include GP's, electronic health record system can feed into the portal...we feed the information or we request information directly into this patient-centered portal and feed and we can say I want to send this urgent message to the GP via the GP portal coming in, it would be ping, you would get it in the office."
Oncologists, R4*

*"...I've been very disappointed in terms of the uptake and the utilization of these kind of things. And I don't think it's, at least at this stage, applicable to the general population. Certainly...(a) percentage of people who are more technically savvy and willing to use technology to help with their care but there's other, you know, a group of patients and probably health care workers that have no interest or no means to use technology."
Oncologists, R2*

"I think it will be a multi-factorial solution because there are things that you want to discuss let's say on a patient portal with patients by email but there's things that you want to discuss, physician to physician, when you're making decisions and you don't want to necessarily confuse the patient at that level until you've come to a good decision..." Oncologists, R3

Feedback on the BC Cancer website was that it was difficult to use, when it should be the go-to resource for patients and FPs. Some respondents go to other resources that are more up to date or easier to use, though they would prefer to use a Canadian source. Respondents requested a specific physician/health professional section on BC Cancer website or an app version of the site.

"...separate kind of medical or health professional section..." Urban FPs, R5

"I would also mention that the website's good but it is a little hard to navigate and, um, it could be a little bit more detailed maybe putting it in an app format like for just not for, not the patient part of it, but the health care providers part of it, it could be put into an app that we could more easily navigate the cancer and the stage

Quality Improvement

The oncologist focus group saw a role for the Provincial Primary Care Program in QI initiatives. One respondent spoke of the value of bringing together representative groups of stakeholders to work on single, concrete issues, pointing to a need for interdisciplinary and regional involvement to work on specific needs. Another respondent supported this with a concrete example from outside Canada.

*"...it takes, you know, maybe a handful of oncologists or researchers, a handful of family doctors that sit down, find some very specific issues that they've observed and really take a look at those issues and say how can we do the very specific things better."
Oncologists, R6*

"...one year UK actually set their strategic action plan being how to improve the diagnosis of bladder cancer for patients who presented with hematuria...how do we make FPs go through more a certain pathway so that patients don't have to go turn around and around and eventually have a delayed diagnosis?" Oncologists, R4

The oncologist focus group discussed strategies for achieving QI using existing payment, care delivery, and communication systems.

"...we need to think about how can we enhance the quality of care from those offices that's extremely busy...have a certain pathway and provide some incentive for people to follow the pathway...then you can actually bill certain things..." Oncologists, R4

*"...software that actually can be in GP's computer, the electronic health records system to remind them, okay you have a breast cancer, do your mammogram every year..."
Oncologists, R4*

"...identify a few different indicators or a few different things that we know we could do better that have a major impact on let's say survival...looking at maybe some novel ways of bringing those up, um, so that includes getting the data...is it presented to the Divisions so that they can see even how their region varies from other regions and then they can think about what those reasons and you're the sort of catalyst to say how can we help you?" Oncologists, R3

Education and Resources

The direction of both questions and responses focused more on tools and resources than on specific educational activities. Top of mind for respondents was quick access to information and advice, rather than developing deeper knowledge of cancer care subjects. This may link back to issues of complexity and lack of time discussed earlier in this report.

Specifically, user-friendly tools such as risk calculators and searchable resources were popular preferences. Respondents want tools which give them, and their patients, information on-demand.

"I find that as far as patient resources go, I find like the calculator tools and that to be really helpful...put you on this treatment it'll reduce your risk by this much...those handouts and charts and that that are really clear like graphical sort of, um, resources are really nice for patients' education." New to Practice FPs, R9

"So some kind of either educational resource or tool you could click through, you know, what kind of cancer, what are the treatment options and you know what are the general protocols, not like specifically this chemo regime versus that chemo regime at my level but just so I even know to heads up the patient what kind of doctor they're going to see." Urban FPs, R2

In terms of preferences for delivery of education, respondents mentioned video links, email subscription services, and small group learning. One respondent suggested providing education via the divisions.

"...video link with other communities...to deliver the ground rounds and lectures." Oncologists, R7

"...email service. I know we did a lot of emails but, I find it useful to get things like, you know, like info poems or if there is, um, an update to a guideline or something, if there was an email service that you could subscribe..." Urban FPs, R6

"...we have the division meetings every few months so if there could be some talks within the different divisions I think that would be quite helpful to update us on different care plans and different resources." New to Practice FPs, R2

Specific educational content suggestions were focused on high priority knowledge, determined by the points at which FPs interact with patients and the location of those interactions. This supports the shift away from tumour-based education and indicates a shift to care pathway-based education. Family physicians want to know the best online sources, the ones that oncologists use and recommend. They also need information on alternative treatments, for when patients ask questions or are undergoing these treatments.

"...educational support around the both the workup component and the follow-up component of cancer management." Oncologists, R1

"...Emergency room tips where you would have those, you know, four or five like unusual but unique and commonly occurring really presentations in the course of people getting some types of treatment..." Rural FPs, R3

Oncologists discussed the role of FPs and nurses in follow-up care. They indicated that FPs and nurses could be educated to take on follow-up care or those with more cancer experience could specifically take on that role. One respondent talked about the role of nurses for particular kinds of follow-up care.

"...we probably all have to take part in thinking about how to change model of care so that work with the nursing professions. A lot of things, for example, the follow-up of some of the thyroid patients you have, or prostate patients, you have to do certain measurements, you don't need a family doctor to write down requisitions and remember oh you have to do it every four months. Off load some of the lower level of authority to another group who can probably pick it up to free up the family docs in the community to do a higher level of care." Oncologists, R4

Learning opportunities to supplement Family Practice Oncology Day included a `What's New in Oncology Day` and a suggestion to take these programs to other regions. Targeting certain roles was also suggested.

*"I really like this idea of targeted education for the different groups because it is totally different for an emergency doc. Or even someone working in the hospital setting..."
Rural FPs, R1*

CONCLUSION

To respond to the increasing demand on the health care system and build capacity in primary care, BC Cancer is expanding the Family Practice Oncology Network (FPON) to become the Provincial Primary Care Program. To inform this expansion, FPON partnered with UBC CPD to conduct a province-wide needs assessment to provide BC Cancer with a better understanding of what FPs and other PCPs need to support their patients through their cancer journey. The key objectives of this work were to understand the current and ongoing unmet needs of FPs providing care for patients throughout the continuum of cancer care and to use this information to inform the development of a robust primary care program that can strengthen relationships between BC Cancer and community FPs, provide high quality education and support, and ultimately bring the voice of primary care to BC Cancer.

Engagement took place in three phases and consisted of key informant interviews, an online needs assessment survey, and focus groups. Participants were asked for their input on a variety of topics including:

- Primary care oncology knowledge and education;
- Current attitudes, practices and challenges;
- Primary care role in cancer care; and
- BC Cancer's Provincial Primary Care Program

A summary of findings are provided below followed by a series of key recommendations.

Roles and Responsibilities

Family physicians throughout the needs assessment saw their role as the main point of contact for their patients during their cancer journey as well as the main source of psychosocial support. This reflects the lifelong relationships that FPs build with their patients and the broad scope of family medicine practice.

Cancer screening and timely referral for treatment were specifically highlighted as key parts of the FP role in cancer care along with co-morbidity management and ongoing monitoring and surveillance after treatment.

Findings revealed that FPs value two-way communication with cancer care providers and think it is important to be involved in treatment decisions and informed of potential side-effects and necessary follow-up care during and after cancer treatment. Family physicians noted that the more information they are given, the more they can support their patients navigate the cancer care system successfully.

Clinical Knowledge and Care Delivery

The current state of FP cancer care knowledge is highly variable and is related to a number of factors including the individual provider, the complexity of the patient and the point along the cancer care continuum. Findings supported the perception that cancer screening and referral are key parts of the FP role, with most respondents agreeing that FP knowledge is strongest in the early stages of the cancer journey, particularly for common cancers.

Knowledge gaps exist when patients are transitioning into active treatment and instructions received from specialist physicians are not clear regarding post-diagnosis work-up and next steps. This was confirmed by FPs to be a point of stress when caring for their patients with cancer. Further gaps were identified around follow-up after treatment particularly with less common cancers and those without clear primary care guidelines. These results were confirmed with only 50% of survey respondents agreeing that they were confident managing post-treatment cancer follow-up and late-effects symptoms.

Shared care was identified as important and key for the sustainability of high quality patient care. Conversations around shared care were often focused on the importance of communication between members of the care team both around roles and responsibilities and with regards to access to and sharing of patient information through an electronic medical record.

Challenges related to care delivery included geographic location, care team composition, resources, time, patient characteristics (such as income status, frailty, and mental health), and delays or long wait times.

Communication

The primary method of communication from cancer care providers identified by needs assessment participants was the discharge letter or summary. Opinions varied regarding the effectiveness of this

channel, with some finding the letters very useful and others identifying their lack of detail. This likely reflects individual provider and community differences.

Participants indicated that immediately post-diagnosis, communication and knowing what to do next can be difficult. Informants agreed that specialists were easily accessible by phone if the appropriate contact information was available, but finding the appropriate contact information often posed challenges. Participants offered a number of suggestions and ideas for improving communication including:

- Access to the patient care pathway;
- Knowing the patient's appointments schedule;
- Clear information on who to contact, during the day and after hours;
- Direct lines rather than going through switchboard, receptionists, nurses etc.; and
- Specific contacts for specific questions/issues

Education Barriers and Gaps in Knowledge

Participants made multiple references to complexity of cancer care and treatment. They indicated that there are many gaps in knowledge and barriers to learning. The two main barriers are the rapidly changing, complex field of cancer care and access to high quality resources. The two main gaps in knowledge were advising on treatment options and treating side-effects or co-morbidities. Patients come to their FPs for advice on treatment options as well as when dealing with side-effects or other illnesses.

Family physicians and not just those new to practice, often do not feel equipped to provide advice on treatment options.

Respondents felt that BC Cancer should take a leadership role in establishing primary care guidelines as well as pioneering the implementation of novel strategies to maximize the effective use of practice data for QI purposes.

Other identified education needs of FPs included:

- Awareness of the education and resources are currently available to them;
- New education opportunities and resources on cancer treatments, distinguishing symptoms from side-effects, and treating general illnesses for patients with cancer;
- Communication support including physician-patient communication and community physician-specialist communication;
- Quality assurance of clinical skills; and
- New and emerging cancer care technologies

Another identified gap was resources for holistic care and allied health services. Mental health care and social workers were commonly mentioned as needed resources, and the respondents did not always know how to find or connect patients with available resources.

Respondents highlighted that education needs to be flexible and dynamic to accommodate busy schedules and learning styles. The top three most preferred identified learning formats were in-person conferences, self-paced online modules and small group learning.

Provincial Primary Care Program

A wide range of issues and suggestions came from participants with regards to role of the Provincial Primary Care Program. Discussions of stakeholders ranged from differences between urban and rural physicians and practices, to the raising the awareness of the program with the Ministry of Health, to advocating changes to compensation to better support specialist physicians and FPs who provide cancer treatment. The Divisions of Family Practice, the BC College of Family Physicians, the Doctors of BC, Health Authorities and UBC CPD were identified as key organization to partner and collaborate with for the expansion of the Provincial Primary Care Program.

In terms of education and resources, respondents identified quick access to information and advice, rather than developing deeper knowledge of cancer care subjects as important. This supports the shift away from tumour-based education and indicates a shift to care pathways-based education. Family physicians want to know the best online sources, the ones that oncologists use and recommend. They also want information on alternative treatments, for when patients ask questions or are undergoing these treatments. Respondents thought that communication with FPs should be prioritized by BC Cancer both at the individual FP level as well as the FP community as a whole.

RECOMMENDATIONS

The top priorities for the new Provincial Primary Care Program at BC Cancer, as identified by survey respondents, are:

- Advocate for improved access to appropriate clinical resources/services for patients (e.g. shorter wait times).
- Develop practice tools for supporting care for patients with cancer (e.g. treatment algorithms/pathways).
- Provide education and training for physicians.

Based on the needs analysis, there are four main areas in which to develop strategies for the Provincial Primary Care Program.

Given the scope of the recommendations, and the size of the team, it will be important to prioritize within and among the four categories of recommendations. For the strategies that are ultimately selected, setting up development and implementation patterns can assist in allocating workload and managing expectations. For instance, for a series of information resources or educational programs, establish topic/content-area

priorities, then develop one resource or program at a time, establishing a consistent release schedule with the highest impact projects completed first.

1. INFORMATION RESOURCES

The needs assessment indicates that respondents have a strong preference for “just in time” resources. Guidelines for the most common cancers were well received and there were many suggestions for additional guidelines, tips, checklists, etc.

- 1.1 Continue to develop tumour-group guidelines and update existing guidelines as needed. Both the Cancer Care Outreach Program on Education (CCOPE) final report and the FPON needs assessment identified the tumour-group guidelines as a key resource and priority for ongoing development.
 - 1.1.1 Use the needs assessment results to prioritize the order for development of the remaining guidelines: blood/lymphoid, lung, and skin.
 - 1.1.2 Set a pattern for the development timeline (i.e. one new tumour-group per year) to both use Provincial Primary Care Program human resources effectively and to manage expectations.
- 1.2 Create infographics, checklists or guidelines for commonly requested areas of knowledge, such as:
 - 1.2.1 Resources for emergency room physicians regarding how treatments protocols are adjusted or differ for patients with cancer.
 - 1.2.2 Brief explanations of treatment options for physicians to use with patients.
 - 1.2.3 Tips for differentiating side-effects from cancer-related symptoms.
 - 1.2.4 Overview of how to treat cancer patients with common illnesses or comorbidities.
 - 1.2.5 Prioritize resource development by level of impact on patient care (either due to the critical nature of the information or the number of patients it will impact).
- 1.3 Expand the most effective existing information tools to include cancer care:
 - 1.3.1 Add oncologists to Pathways.
 - 1.3.2 Add oncologists to the specialists that are available via RACE line.
 - 1.3.3 Improve interoperability of BC Cancer EHR system.
- 1.4 Improve the BC Cancer website to ensure it is the go to resource for FPs and patients with cancer.
 - 1.4.1 Improve the user interface design.
 - 1.4.2 Add portals for both patients and professionals.
 - 1.4.3 Improve content quality and implement a schedule for website review and update.
 - 1.4.4 Create a searchable database of support contacts (from social workers, to mental health clinicians, to transportation support, etc.).
 - 1.4.5 Consider developing a mobile application for the BC Cancer website.
- 1.5 Explore ways to push updates to existing guidelines and other information resources to FPs. Use existing technologies and communication channels.

2. EDUCATIONAL PROGRAMMING

Emphasize the practical application of knowledge and skills for care delivery over theoretical knowledge in all education programming. Prioritize topics that will impact the most patients and/or FPs. Vary delivery methods. Track all evaluation results to inform program planning annually.

- 2.1 Create new programming to meet the highest identified needs along the cancer care continuum, particularly at transition points. The needs assessment found that FPs have variable levels of knowledge along the cancer care continuum, find the transition points particularly problematic and stressful, and find it difficult to keep up with changing technologies, treatments and guidelines. The top four priorities for new educational programming should be:
 - 2.1.1 Post-acute treatment and long-term follow-up.
 - 2.1.2 Managing initial work-up and making a diagnosis.
 - 2.1.3 Cancer prevention.
 - 2.1.4 Managing pain during active treatment.
- 2.2 Coordinate release of new guidelines and other information resources with more in-depth education opportunities. For instance:
 - 2.2.1 Release an information resource and offer a webinar for review and discussion.
 - 2.2.2 Pair an information resource with a 5-10 minute presentation for Division of Family Practice members.
 - 2.2.3 Consider other dissemination approaches such as Youtube videos, podcasts, or social media.
- 2.3 Transition in-person workshops to self-paced online modules after two years.
 - 2.3.1 Though more respondents identified a preference for in-person learning over online self-paced modules or webinars, attendance at workshops over the four-year CCOPE program was around 800 participants from a potential 5000-6000 FPs. A participation rate of under 20% leaves room for the learning resources to reach a much larger audience. In a two-year period, especially if that time limit is known/advertised, those who prefer in-person learning will have sufficient time to participate. The time limit may actually increase participation rates among those with this learning preference.
 - 2.3.2 The existing four tumour-group workshops could be transitioned in order of either age or popularity. As new workshops are developed (tumour-groups or other topics), plan to offer them throughout the province for about two years prior to transitioning them to self-paced online modules. To retain some of the facilitator-led and peer-to-peer aspects of workshop learning, the follow-up component could be done as a webinar, with the option to attend live for questions and discussion or view later as a recording.

- 2.3.3 This strategy will address the learning preferences of a larger audience and may allow for the initial round of development and engagement to benefit from the more immediate feedback and iteration possible with in-person teaching and learning.
- 2.4 Review the CCOPE workshop participation data and analyse for month and location participation rates.
 - 2.4.1 Determine highest participation months and cluster workshops in those months. This strategy will enable marketing to focus on normalizing certain months or dates, so they become part of the expected rhythm of the year, enabling participants to plan ahead, partially addressing the primary barriers identified and potentially increasing attendance.
 - 2.4.2 Set a location pattern for the workshops that encourages regional participation and does not split enrolment between locations. For instance, rather than offer a workshop in Port Alberni one day and Parksville the next, offer at one location in spring and one in fall. This still gives the choice of attending in your home location or the option of attending earlier in the same region. Track participation rates and refine locations over time.
- 2.5 Target education and resources at the transition points (such as diagnosis to treatment and graduation to follow-up) and to specific roles (FPs, locum FPs, emergency room physicians, nurse navigators).
 - 2.5.1 Create learning resources and education opportunities that equip FPs to better support patients at these transition points, thus reducing their stress in providing patient care.
 - 2.5.2 Create quick reference information resources for emergency room physicians on identified issues such as protocol variations for cancer patients being treated for other illnesses or conditions.
 - 2.5.3 Develop training to prepare nurses for the navigator role.
 - 2.5.4 Develop communication skills education for locums giving diagnoses to patients they have just met, along with tips for connecting these patients to supports.
- 2.6 Track program metrics by delivery method (workshop, conference, webinar, self-paced online module) and use the data to inform annual programming decisions. For instance:
 - 2.6.1 Total number of each program offered, number run, number cancelled, cancellation rate (i.e. 20 workshops offered, 15 run, 5 cancelled, 25% cancellation rate).
 - 2.6.2 Average participation rates per program (i.e. 20 webinars offered, 400 participants in total, average participation per webinar = 20).
- 2.7 Track program metrics by topic, such as:
 - 2.7.1 Within the webinar program, track participation by live attendance and recording viewed for every topic. Determine which webinar topics are no longer needed (low attendance and viewings), which topics do not need to be done live (much higher viewing, with correspondingly high satisfaction rates), and which topics need to be live (higher attendance, lower satisfaction when recording viewed).

2.7.2 Watch for workshop attendance to drop off by tracking cancellation rates and average participants per course. Discontinue or transition those topics to a webinar or online module format.

2.8 As part of the development process and when updating any course or program, address non-technical aspects of cancer care:

2.8.1 Review the language and cultural indicators to ensure that cancer is identified as a chronic disease.

2.8.2 Identify and provide guidance for dealing with social barriers.

2.9 Given that conferences are a) more popular than workshops; b) awareness of CME Day is higher than workshops; c) respondents would like more education near them; and d) it is difficult for physicians to set aside time for frequent educational programming: consider making CME Day a regional event on a standard annual schedule to strengthen regional relationships. Although in-person conferences experience the highest attendance, small group learning and self-paced learning are more effective learning formats.

2.9.1 To maximize learning impact, prioritize the following education formats: small group learning, self-paced online modules, followed by in-person conferences.

3. COMMUNICATION PRACTICES

The needs assessment identified areas where communication practices and channels can be improved to facilitate better care delivery and reduce stress for FPs and oncologists. Communication can also provide a channel for physicians to give input to BC Cancer and the Provincial Primary Care Program, as well as for raising awareness of programs and resources.

3.1 Reduce the number of communication channels/tools and the number of steps to get to advice or information.

3.1.1 Identify the most accessible and effective communication types and develop strategies to use them, limiting duplications.

3.1.2 Ensure that clear and accurate contact information is included with every communication or documentation.

3.1.3 Discontinue and replace or reroute dated communication techniques such as letters and faxes.

3.1.4 Modify the discharge letter to address feedback regarding its limitations; create a template and conducting training as needed.

3.2 Focus on two types of communication:

3.2.1 Urgent: real-time consults such as secure text messaging, direct phone.

3.2.2 Non-urgent: asynchronous such as email, websites or electronic medical record.

3.3 BC Cancer should prioritize communication with FPs:

3.3.1 Foster relationships with individual FPs.

3.3.2 Communicate to the broader FP community as a whole to improve communications.

3.4 Host a monthly poll on the BC Cancer website, particularly if/when a professional portal is added, to do straw votes on topics for information resources and education programs. Ask questions such as:

3.4.1 What are the most common questions you get from your patients with cancer that you are not certain how to answer?

3.4.2 What are your top three cancer-related CME needs this year?

3.4.3 What is the best cancer resource you have found in the past month?

3.5 Use existing and preferred communication channels to increase awareness of FPON/Provincial Primary Care Program programs (email, websites, and Divisions of Family Practice meetings).

4. RELATIONSHIP BUILDING

It is important that relationship building be undertaken not as an additional drain on time or increase in complexity of communication, but to make real improvements in care delivery with reduction of stress for health care providers.

4.1 Use Quality Improvement projects as a key method for relationship building among FPs, specialist physicians, nurses, and allied health professionals.

4.1.1 Identify areas where improvements in care delivery are needed and bring together care teams to create and test guidelines and strategies.

4.1.2 Ensure teams are representative of all groups that would be involved in implementation, which may vary project by project.

4.1.3 Provide teams with the best available practice data.

4.1.4 Give a practical and immediate focus to building relationships, setting goals, and measuring outcomes.

4.2 Further develop shared care and inter-professional team approaches.

4.2.1 Include FPs in inter-professional teams, even if virtually or asynchronously.

4.2.2 Develop one team member, likely a nurse, to take on the Navigator role, with additional duties, training and time allocated to providing navigation services to patients and FPs.

4.2.3 Have one point of contact (e.g. nurse, medical office assistant, program assistant) for patients and for primary care providers, with that contact reaching out to other resources as needed.

4.3 Use existing methodologies, procedures, and technologies from other specialties.

4.3.1 Learn from how other specialists interact with FPs and adapt what works well.

4.3.2 Adapt specific processes such as the gastrointestinal first access referral sheets.

4.3.3 Use the electronic medical record system to expand shared care for cancer patients, by connecting BC Cancer to other systems and by normalizing use for team communications.

4.4 Partner with key stakeholders and organizations to ensure alignment of priorities and to maximize communication channels.

- 4.4.1 Involve the Divisions of Family Practice, the BC College of Family Physicians, Doctors of BC, the Collaborative Committees, the Practice Support Program and UBC CPD in the expansion of the Provincial Primary Care Program.

REFERENCES

1. Canadian Cancer Statistics Advisory Committee. Canadian Cancer Statistics 2018. Toronto, ON: Canadian Cancer Society; 2018. Available at: cancer.ca/Canadian-Cancer-Statistics-2018-EN (accessed July, 2018).

APPENDICES

APPENDIX A: WORKING GROUP

Name	Role	Affiliation
Catherine Clelland	Provincial Lead, Primary Care	BC Cancer
Jennifer Wolfe	Program Manager, Family Practice Oncology Network	BC Cancer
Kelly Little	Family Physician	N/A
Brenna Lynn	Associate Dean	UBC CPD
Dawson Born	Research Assistant	UBC CPD
Laura Beamish	Project Manager	UBC CPD

APPENDIX B: KEY INFORMANT INTERVIEW BASE PROTOCOL

Key Informant Interview Protocol

Key Informant:

Housekeeping Items and ground rules

- Introduce facilitators: name and affiliation
- Thank participants for their taking the time to participate
- This project is being funded by the BC Cancer Agency. BC Cancer's mission is to reduce the incidence of cancer, reduce the mortality rate of people with cancer, and improve the quality of life of people living with cancer.
- The purpose of this interview is to learn more about your experiences with and recommendations related to oncology care and education needs for GPs in the province of BC; strategies and recommendations to develop a Provincial Primary Cancer Care Program and an ongoing communication and engagement strategy between BC Cancer and community GPs.
- This interview will last 30 minutes.
- Did you read the letter of contact that was sent to you? Do you have any questions?
- Everything you tell us will be confidential. To protect your privacy, we won't connect your name with anything you say and we ask that you keep this discussion confidential
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also stop the interview at any time, for any reason.
- Please remember that we want to know what you think and feel and that there are no right or wrong answers.
- We will be recording the interview today, is that okay with you? [If YES, turn on recorder]

The following protocol represents the questions and topic areas to be discussed. Questions are open-ended and this protocol is designed to be used in a responsive manner with participants i.e. questions may be modified and additional follow-up questions added as needed to fit the flow of the discussion.

Questions

1. **What are your thoughts on General Practitioner (GP)/Family Physician (FP) knowledge along the cancer continuum of care?**

Probe [[GAPS ALONG THE CONTINUUM](#)]: What do you perceive to be the greatest gap or need related to clinical knowledge for GPs/FPs?

Probe: Are the gaps related to knowledge around screening, diagnosis, treatment and follow-up?

Probe [**GUIDELINE IMPLEMENTATION**]: What is the current state of GP/FP knowledge with regards to adoption and implementation of the GPAC cancer care guideline?

Probe: i.e. Breast Cancer, Genital Tract Cancers, Palliative Care, Colorectal Cancer, etc.

Probe [**EMERGING TECHNOLOGIES**]: Do you believe GPs/FPs are aware of new and emerging technologies in cancer care?

Probe: i.e. New advances in skin cancer treatment?

Probe: Do you think GPs go to BC Cancer to seek out this information?

Probe [**ROLE OF GP IN CANCER CARE**]: What do GPs/FPs perceive their role to be in ensuring their patients receive high quality cancer care?

2. What is BC Cancer's role in connecting with and supporting GPs/FPs providing cancer care in the community?

Probe [**FPON PROGRAMS AND EDUCATION**]: Are you aware of the programs and education offered by FPON?

Probe: GPO training twice a year, FPON webinars, FPON CME Day, FPON GPO Case Study Day, FPON Journal, CCOPE, Clinical Guidelines

Probe: Do you believe GPs/FPs are aware of programs offered by FPON and BC Cancer?

Probe [**EDUCATION**]: What are the greatest gaps or needs related to education activities and programs in primary cancer care?

Probe [**COMMUNICATION AND ENGAGEMENT**]: In a few sentences, please describe the current state of communication practices and processes between BC Cancer or community oncology champions (GPOs) and GPs/FPs during ongoing treatment and during cancer follow-up care.

Probe [**COORDINATION OF SERVICES**]: Can you describe the communication pathways between BC Cancer Agency sites, the Community Oncology Sites and GPs/FPs providing cancer care in the community?

3. How would a Provincial Primary Care Program within the BC Cancer Agency look or operate?

Probe [**KEY STAKEHOLDERS**]: Who are the key stakeholders or partners that need to be involved in efforts to develop a Provincial Primary Care Program?

Probe: What role should the Divisions of Family Practice Play?

Probe [EDUCATION FORMAT]: What strategies should be pursued or developed to enhance education aimed at supporting primary care providers in providing high quality cancer care?

Probe: What sources of data could be used to support education?

Probe [COMMUNICATION AND ENGAGEMENT]: What strategies should be pursued or developed to enhance communication between BC Cancer, Community Oncology Sites and GPs/FPs?

Wrap-up: Thank everyone for participating. Ask if they would like to be informed once the results of the study have been compiled.

APPENDIX C: NEEDS ASSESSMENT SURVEY

Family Practice Oncology Network Primary Care Needs Assessment

Needs Assessment Survey

Dear Colleague,

My name is Dr. Catherine Clelland and as the Provincial Lead of the Primary Care Program at BC Cancer, I would like to invite you to complete this short survey to help bring the voice of primary care to the work we do. The Family Practice Oncology Network (FPON) is expanding to become the Provincial Primary Care Program and **your input is needed to provide BC Cancer with a better understanding of what you need to support your patients through their cancer care journey.**

By engaging Family Physicians and Nurse Practitioners in this process, **we aim to design and implement a Provincial Primary Care Program that truly supports you and your patients through improved communication, educational offerings, and engagement opportunities.** This survey was developed and implemented in partnership with the Division of Continuing Professional Development at the University of British Columbia (UBC CPD) with funding support from BC Cancer.

The survey will take **approximately 10 minutes** to complete. Please note that this survey is targeted at physicians and nurse practitioners providing primary care in British Columbia and the Yukon.

Upon completion of the survey, you will have the opportunity to **enter into a draw to win your choice of one of three prizes:** an Apple iWatch (latest model) or a \$500 Amazon gift card. Winners will be randomly selected and notified on **Thursday, February 15th 2018** and again after the survey close date on **Thursday, March 1st 2018**. If you complete the survey earlier, you will have an increased chance of winning one of the prizes.

CONSENT: Please note that participation in this survey is voluntary. By completing this survey (i.e. pressing **SUBMIT**), you are providing implied consent for your responses to be collected as data in this project.

All data collected in the study will be treated with utmost confidentiality to protect each individual's identity. The data collected will (i) be accessible to members of the project team only, (ii) be presented in aggregate format only, and (iii) be included in reports with no individual identifiers. Any contact information you provide will be kept separate from your feedback provided.

For more information about this needs assessment, please contact any of the study team members listed below.

Needs Assessment Team

Cathy Clelland, Provincial Lead, BC Cancer Primary Care Program, cathy.clelland@bccancer.bc.ca

Brenna Lynn, Associate Dean, CPD, UBC Faculty of Medicine, brenna.l@ubc.ca

Jennifer Wolfe, Program Manager, FPON, jennifer.wolfe@bccancer.bc.ca

Laura Beamish, Consulting Project Manager, UBC CPD, Faculty of Medicine, laura.beamish@gmail.com

Loulou Chayama, Research Assistant, UBC CPD, Faculty of Medicine, loulou.c@ubc.ca

Dawson Born, Research Assistant, UBC CPD, Faculty of Medicine, dawson.b@ubc.ca

Julie (Junli) Wei, Evaluation Associate, UBC CPD, Faculty of Medicine, julie.w@ubc.ca

Section A- Current Practices

1. Please rate your level of agreement with the following statements with respect to your current experience providing care for your patients with cancer: **[Please answer for each statement]**

	Strongly Disagree	Neutral			Strongly Agree	Not Applicable
	1	2	3	4	5	
a) It is easy for me to communicate with my local/regional General Practitioners in Oncology (GPOs)	<input type="checkbox"/>					
b) It is easy for me to communicate with my local/regional BC Cancer centre/ specialists	<input type="checkbox"/>					
c) It is easy for me to communicate with my local/regional surgeons	<input type="checkbox"/>					
d) It is easy for me to refer my patient to BC Cancer (or a Community Oncology Clinic)	<input type="checkbox"/>					
e) It is easy for me to get information about the treatment my patient is receiving at BC Cancer or a Community Oncology Clinic	<input type="checkbox"/>					
f) I know who to contact and how to reach BC Cancer if my patient with cancer develops problems	<input type="checkbox"/>					
g) I receive useful clinical information (e.g. patient care, treatment plans) from BC Cancer	<input type="checkbox"/>					
h) I receive timely clinical information (e.g. patient care, treatment plans) from BC Cancer	<input type="checkbox"/>					

i) I feel confident screening, managing initial diagnostic work-up, and referring my patients for cancer treatment	<input type="checkbox"/>					
j) I feel confident managing post-treatment cancer follow-up and late-effect symptoms , including advance care planning when appropriate	<input type="checkbox"/>					
k) I feel confident managing my patient through end of life or palliative care if required	<input type="checkbox"/>					
l) I receive useful non-clinical information from BC Cancer/FPON (e.g. guidelines updates, education resources)	<input type="checkbox"/>					

[Please provide any additional comments you have]

Section B- Primary Care Role in Cancer Care

2. To provide high quality care to my patients, it is important for me to: [Please answer for each statement]

	Not Important		Neutral		Very Important
	1	2	3	4	5
a) Actively participate as a member of the care team	<input type="checkbox"/>				
b) Understand my role as the primary care provider in the care of my patient	<input type="checkbox"/>				
c) Understand the role of BC Cancer/specialists in the care of my patient	<input type="checkbox"/>				
d) Screen , manage initial diagnostic work-up , and refer patients for further treatment	<input type="checkbox"/>				
e) Manage post-treatment cancer follow-up and late-effect symptoms , including advance care planning when appropriate	<input type="checkbox"/>				
f) Manage my patient through end of life or palliative care (e.g. advance care directives) if required	<input type="checkbox"/>				
g) Be included in my patients' care conferences	<input type="checkbox"/>				
h) Access information about the treatment my patient is receiving	<input type="checkbox"/>				
i) Engage in two-way communication with BC Cancer/specialists	<input type="checkbox"/>				
j) Receive detailed care plans to improve follow-up of my patients	<input type="checkbox"/>				

[Please provide any additional comments you have]

Section C – BC Cancer Provincial Primary Care Program (FPON)

3. Please rate the extent to which you agree that the Provincial Primary Care Program at BC Cancer (FPON) should focus on each of the following factors in order to better support your patients with cancer: **[Please answer for each factor]**

	Strongly Disagree	Neutral		Strongly Agree	Don't know	
	1	2	3	4		5
a) Improve communication between BC Cancer/specialists and primary care providers at the local/regional referral centre level	<input type="checkbox"/>					
b) Develop a process for primary care providers to give input directly to BC Cancer at the provincial level	<input type="checkbox"/>					
c) Develop a two-way communication process between BC Cancer and the Divisions of Family Practice to inform and support cancer care strategies	<input type="checkbox"/>					
d) Provide education and training for physicians and other primary care providers	<input type="checkbox"/>					
e) Develop and implement primary care guidelines	<input type="checkbox"/>					
f) Develop practice tools for supporting care for patients with cancer (e.g. treatment algorithms/pathways)	<input type="checkbox"/>					
g) Advocate for improved access/inter-operability to health information systems between BC Cancer and primary care electronic health records	<input type="checkbox"/>					
h) Advocate for access to population level data from BC Cancer for use by the Divisions of Family Practice and Primary Care Networks	<input type="checkbox"/>					
i) Advocate for access to practice level data to allow clinicians to better	<input type="checkbox"/>					

understand their patients with cancer as part of panel management						
j) Provide resources and education for patients (e.g. cancer prevention materials, self-management tools, risk-benefit decision support)	<input type="checkbox"/>					
k) Advocate for improved access to appropriate clinical resources/services for patients (e.g. shorter wait times)	<input type="checkbox"/>					

4. Clinical practice [guidelines](#) exist for the following tumour groups:

- Breast
- Colorectal
- Female Genital Tract
- Upper Gastrointestinal (including Pancreatic)
- Palliative Care
- Prostate (in development)

The area with greatest need for further guideline development is: **[Please select up to THREE]**

Tumour group	Select
a) Blood, Lymphoid, and Multiple Myeloma	<input type="checkbox"/>
b) Bone and Soft Tissue	<input type="checkbox"/>
c) Brain and Central Nervous System	<input type="checkbox"/>
d) Head and Neck (HPV or non-HPV related)	<input type="checkbox"/>
e) Lung	<input type="checkbox"/>
f) Skin (Melanoma and non-Melanoma)	<input type="checkbox"/>
g) Testicular	<input type="checkbox"/>
h) Thyroid	<input type="checkbox"/>
i) Urinary Tract (Bladder/Renal)	<input type="checkbox"/>
j) Other [Please specify]: _____	

5. I am aware of the following FPON programs: **[Please select either YES or NO]**

FPON PROGRAMS	Aware	
	Y/N	
a) Oncology CME Webcasts (Third Thursday of each month, 8-9am)	<input type="checkbox"/>	<input type="checkbox"/>
b) Family Practice Oncology CME Day (every November in Vancouver)	<input type="checkbox"/>	<input type="checkbox"/>
c) GPO Case Study Day (afternoon prior to CME Day)	<input type="checkbox"/>	<input type="checkbox"/>
d) Journal of Family Practice Oncology (published twice yearly)	<input type="checkbox"/>	<input type="checkbox"/>
e) Case-based Cancer Workshops: Cancer Care Outreach Program on Education (CCOPE) Breast, Colorectal, Prostate, and Advanced Cancers	<input type="checkbox"/>	<input type="checkbox"/>
f) GP in Oncology (GPO) Training Program (8-week program offered twice yearly at BC Cancer)	<input type="checkbox"/>	<input type="checkbox"/>
g) Primary care guidelines to support management of patients with cancer	<input type="checkbox"/>	<input type="checkbox"/>

6. My preferred method(s) of communication (e.g. guideline updates, education opportunities, requests for feedback, etc.) from the expanded Provincial Primary Care Program at BC Cancer will be: **[Please select ALL that apply]**

Method	Education/Guidelines/Feedback	Patient/Treatment
a) Website	<input type="checkbox"/>	<input type="checkbox"/>
b) Email	<input type="checkbox"/>	<input type="checkbox"/>
c) Social Media	<input type="checkbox"/>	<input type="checkbox"/>
d) Mail	<input type="checkbox"/>	<input type="checkbox"/>
e) Fax	<input type="checkbox"/>	<input type="checkbox"/>
f) Listserv	<input type="checkbox"/>	<input type="checkbox"/>
g) Word of mouth	<input type="checkbox"/>	<input type="checkbox"/>
Other [Please specify]: _____		

7. I feel the following organizations should partner with FPON/BC Cancer to guide the activities of the new Provincial Primary Cancer Care Program: **[Please select all that apply]**

Organization	Select
a) BC College of Family Physicians	<input type="checkbox"/>
b) BC Patient Safety Quality Council	<input type="checkbox"/>
c) Divisions of Family Practice	<input type="checkbox"/>

d) Doctors of BC	<input type="checkbox"/>
e) General Practice Services Committee	<input type="checkbox"/>
f) Health Authorities	<input type="checkbox"/>
g) Ministry of Health	<input type="checkbox"/>
h) Patient Voices Network	<input type="checkbox"/>
i) UBC Continuing Professional Development	<input type="checkbox"/>
j) UBC Department of Family Practice	<input type="checkbox"/>
Other [Please specify]: _____	

8. Do you have additional comments or suggestions related to the expansion of the Provincial Primary Care Program within BC Cancer?

Section D - Primary Cancer Care Knowledge and Education

9. Please rate your level of interest in participating in continuing professional development (CPD) activities in the following areas [**Please answer for each area**]:

	Not-at-all Interested		Neutral		Very Interested
	1	2	3	4	5
a) Screening	<input type="checkbox"/>				
b) Managing initial work-up and making a diagnosis	<input type="checkbox"/>				
c) Managing side-effects and co-morbidities during active treatment	<input type="checkbox"/>				
d) Managing pain during active treatment	<input type="checkbox"/>				
e) Post-acute treatment or long-term follow-up	<input type="checkbox"/>				
f) Advance care planning , including palliative care and end of life support when appropriate	<input type="checkbox"/>				
g) Providing psychosocial support for patients throughout their cancer journey	<input type="checkbox"/>				
h) Staying up to date with advances in oncology treatment and care	<input type="checkbox"/>				
i) Cancer prevention	<input type="checkbox"/>				
j) Other oncology related learning needs: [Please list up to three]	1.				
	2.				
	3.				

10. Please rate your preference for learning in each of the following CPD formats: **[Please answer for each format]**

Educational Format	Not-at-all Preferred		Neutral		Highly Preferred
	1	2	3	4	5
a) Small group learning (e.g. peer study group, journal club, workshop)	<input type="checkbox"/>				
b) In-person conference	<input type="checkbox"/>				
c) Webinar	<input type="checkbox"/>				
d) Mentoring/Coaching	<input type="checkbox"/>				
e) Self-directed learning (e.g. literature review, personal learning project)	<input type="checkbox"/>				
f) Self-paced online module	<input type="checkbox"/>				
Other [Please specify]:					

11. The following factors **motivate me** to participate in cancer-related CPD activities: **[Please answer for each factor]**

	Never	Seldom	Sometimes	Often	Always
	1	2	3	4	5
a) Ability to improve the care of my patients living with cancer	<input type="checkbox"/>				
b) Ability to learn about new and emerging technologies in cancer care	<input type="checkbox"/>				
c) Quality of the presenter/facilitator	<input type="checkbox"/>				
d) Specific topic area/learning objectives that will be addressed	<input type="checkbox"/>				
e) Ability to collaborate with colleagues/other healthcare professionals to ensure best practices and patient outcomes	<input type="checkbox"/>				

f) Continuing Medical Education (CME) credits	<input type="checkbox"/>				
g) Local or regional educational offerings	<input type="checkbox"/>				
h) Provision of food/meals	<input type="checkbox"/>				
Please identify any additional motivators:					

12. The following factors are **barriers** to me participating in cancer-related CPD activities: **[Please answer for each factor]**

	Never 1	Seldom 2	Sometimes 3	Often 4	Always 5
a) Professional obligations	<input type="checkbox"/>				
b) Social/family obligations	<input type="checkbox"/>				
c) Content/relevance of CPD activity	<input type="checkbox"/>				
d) Geographic location	<input type="checkbox"/>				
e) Duration (hrs) of CPD activity	<input type="checkbox"/>				
f) Timing (time of day/month)	<input type="checkbox"/>				
g) Direct program cost (e.g. registration, travel)	<input type="checkbox"/>				
h) Loss of income from practice	<input type="checkbox"/>				
i) Ability to find clinical practice coverage	<input type="checkbox"/>				
j) CME fatigue	<input type="checkbox"/>				
Please identify any additional barriers:					
Do you have suggested solutions to address the barriers listed above?					

Section E - Additional Comments

In closing, please provide any other comments relating to your primary cancer care needs that have not already been covered in this survey.

Section F - Demographic Information

Information collected in this section will help us better understand your context of care. None of the information will be used to identify any individual physician. Your confidentiality will be maintained at all times.

1. I am a: **[Please select ONE]**

- | | |
|--|---|
| <input type="checkbox"/> General Practitioner/Family Physician | <input type="checkbox"/> Nurse Practitioner |
| <input type="checkbox"/> Specialist | <input type="checkbox"/> Other [Please specify]: _____ |
| <input type="checkbox"/> Resident | <input type="checkbox"/> General Practitioner in Oncology |

2. I practice in a _____ community. **[Please select ONE]**

- Urban
 Rural

3. What is the approximate size of the community in which you are situated: **[Please select ONE]**

- | | |
|---|---|
| <input type="checkbox"/> Under 10,000 | <input type="checkbox"/> 100,000 to 499,999 |
| <input type="checkbox"/> 10,000 to 49,999 | <input type="checkbox"/> Over 500,000 |
| <input type="checkbox"/> 50,000 to 99,999 | |

4. I currently practice: **[Please select ONE]**

- | | |
|------------------------------------|--|
| <input type="checkbox"/> Full-time | <input type="checkbox"/> Other [Please specify]: _____ |
| <input type="checkbox"/> Part-time | <input type="checkbox"/> Locum |
| <input type="checkbox"/> Retired | |

5. The number of other physicians in my practice is: **[Please select ONE]**

- Solo practice
- _____ [# of other physicians]
- Not applicable

6. I have been providing care for: **[Please select ONE]**

- Less than 5 years
- 5 to 10 years
- 11 to 20 years
- 21 to 30 years
- Over 30 years

7. I typically spend the following number of **days per week** in direct patient care: _____

8. The professional income from my practice is derived primarily (>50%) from the following payment method: **[Please select ONE]**

- Fee for service
- Sessional
- Salary
- Service Contract
- Blended Payment
- Other [Please specify]: _____

9. My age is: _____ **years** old. (Please enter a numerical value)

10. I identify as:

- Female
- Male
- Trans/non-binary
- Prefer not to say

11. My practice includes work in the following: **[Please select ALL that apply]**

- A private office or clinic
- Emergency room care
- In-patient care
- Long-term care facility
- Walk-in clinic
- Other [Please specify]: _____

12. I practice in a team-based care setting:

- Yes
- No

13. If yes, my care team is made up of the following providers: **[Please select all that apply]**

- Nurse
- Nurse Practitioner
- Physiotherapist
- Occupational Therapist

Pharmacist

Psychologist

Social workers

Other [Please specify]: _____

14. My **primary practice location** is in or under the following health authority [**Please select ONE**]

First Nations Health Authority

Vancouver Coastal/Providence HC
Health Authority

Fraser Health Authority

Vancouver Island Health Authority

Interior Health Authority

Other [Please specify]: _____

Northern Health Authority

15. I use an **EMR** in my primary practice setting:

Yes

No

Section G: A Final Note

You're Done!

Thank you for completing this survey. If you have any questions, please contact UBC CPD Research Assistant, Dawson Born, at dawson.b@ubc.ca | 604.875.4111 ext. 21440

If you would like to enter into a **draw to win one of three prizes (an Apple iWatch (latest model), a case of BC VQA wine or a \$500 Amazon gift card)** and/or would like to be placed into a pool of potential participants for a **follow-up interview or focus group**, please provide us with your contact information by completing the form available at the following link: [<insert link to prize draw survey>](#)

Your personal information will be kept separate from your responses to the needs assessment survey and your confidentiality will be maintained at all times. Prize winners will be notified via email or phone.

PRIZE DRAW

Your personal information will be kept separate from your responses to the needs assessment survey and your confidentiality will be maintained at all times.

1. Contact Information

Name: _____

Email: _____

Phone: _____

What is the best time of day to contact you? _____

2. Please rank the available prizes in order of preference from 1 to 3 with 1 being "most preferred."

- Apple iWatch (latest model)
- A case of BC VQA wine
- \$500 Amazon gift card

Would you like to be placed into a pool of participants who may be invited to take part in an **interview or focus group discussion** further exploring primary cancer care in BC?

NOTE: All interview/focus group participants will receive compensation at a rate of \$132.57/hour.

- Yes
- No

APPENDIX D: FOCUS GROUP PROTOCOLS

Focus group Protocol

Family Physicians- New to Practice Protocol

Housekeeping Items

- Introduce facilitators: Dr. Cathy Clelland, Provincial Lead, Provincial Primary Care Program
- Thank participants for their taking the time to attend and provide their input
- Inform participants that the focus group will last approximately **90 minutes**
- This project is being funded by BC Cancer in partnership with the UBC CPD. BC Cancer's mission is to reduce the incidence of cancer, reduce the mortality rate of people with cancer, and improve the quality of life of people living with cancer.
- The purpose of this focus group is to learn more about your experiences with and recommendations related to oncology care and education needs for family physicians in the province of BC; strategies and recommendations to develop a Provincial Primary Cancer Care Program and an ongoing communication and engagement strategy between BC Cancers and community.
- Inform participants that the focus group is set to capture different perspectives and that different focus groups are being conducted with the following demographics: [urban FPs, new to practice FPs; rural FPs, and oncologists]
- Remind participants that we are interested in their thoughts and experiences, and that there are no right or wrong answers
- Remind participants that the session will be audio-recorded and that we will keep their feedback confidential. All responses will only be presented in aggregate format and will be anonymous.
- Ask participants to state their name before speaking to aid the transcription process
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also decline to participate at any time, for any reason.

The following protocol represents the questions and topic areas to be discussed. Questions are open-ended, and this protocol is designed to be used in a responsive manner with participants i.e. questions may be modified, and additional follow-up questions added as needed to fit the flow of the discussion.

Questions

Introductions (*ask each person to **be brief** – around 30 seconds max per introduction*). Please introduce yourself: name, discipline, place of practice, how many patients with cancer are in your practice, and what you hope to contribute to the focus group.

[Note to facilitator]: Remind participants *of the current mandate- to provide education and training for family physicians and general practitioners in oncology. This currently consists of CME events, primary care guidelines, an annual conference, publications, and a preceptorship program (GPO training).*

[Note to facilitator]: Remind participants that we are looking for *future state* perspectives, not *current state*. Encourage participants to focus on solutions and ideas, not only challenges and barriers.

4. As a new to practice family physician, what do you believe your role could and should be in caring for your patients throughout their cancer journey?

- a. **Probe:** *To improve the continuity of care for your patients with cancer, how would you prefer to be involved in their care?*
 - i. *Examples: Screening, coordinating care, psychological support, patient education, advocacy, follow-up support, etc.*
- b. **Probe:** *Are there redundancies/inefficiencies you see that could be eliminated, and do you have any suggested solutions for these areas?*
- c. **Probe:** *Do you know who to contact at BC Cancer if your patient is experiencing problems? How do you contact them?*
- d. **Probe:** *How could you be supported to effectively and confidently provide primary care for your patients in this way?*
 - i. *IT/software, PMH networks, better understanding of BC Cancer supportive care program, etc.*
- e. **Probe:** *What should the role of the oncologist and other specialists be during the cancer care journey?*

5. How can the expanded Provincial Primary Care Program (FPON) improve education and resources aimed at supporting new to practice family physicians to provide high quality care to their patients with cancer?

- a. **Probe [Tools and Resources]:** *What tools would be most useful for patient related information?*
 - i. *Examples: referrals, care plans, consultations, etc.*
- b. **Probe [Tools and Resources]:** *What tools would be most useful for oncology related/CME information? What would make existing resources more useful?*
 - i. *Examples: RACE line, guidelines, etc.*

Program and an ongoing communication and engagement strategy between BC Cancers and community.

- Inform participants that the focus group is set to capture different perspectives and that different focus groups are being conducted with the following demographics: [urban FPs, new to practice FPs; rural FPs, and oncologists]
- Remind participants that we are interested in their thoughts and experiences, and that there are no right or wrong answers
- Remind participants that the session will be audio-recorded and that we will keep their feedback confidential. All responses will only be presented in aggregate format and will be anonymous.
- Ask participants to state their name before speaking to aid the transcription process
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also decline to participate at any time, for any reason.

The following protocol represents the questions and topic areas to be discussed. Questions are open-ended, and this protocol is designed to be used in a responsive manner with participants i.e. questions may be modified, and additional follow-up questions added as needed to fit the flow of the discussion.

Questions

Introductions (*ask each person to be brief – around 30 seconds max per introduction*). Please introduce yourself: name, discipline, place of practice, how many patients with cancer are in your practice, payment model, and what you hope to contribute to the focus group.

[Note to facilitator]: Remind participants *of the current mandate- to provide education and training for family physicians and general practitioners in oncology. This currently consists of CME events, primary care guidelines, an annual conference, publications, a GPO education program, and monthly webinars.*

[Note to facilitator]: Remind participants that we are looking for *future state* perspectives, not *current state*. Encourage participants to focus on solutions and ideas, not only challenges and barriers.

1. As a family physician, what do you believe your role could and should be in caring for your patients throughout their cancer journey?

- Probe:** *To improve the continuity of care for your patients with cancer, how would you prefer to be involved in their care?*
 - Examples: Screening, coordinating care, psychological support, patient education, advocacy, follow-up support, etc.*
- Probe:** *Are there redundancies/inefficiencies you see that could be eliminated, and do you have any suggestions solutions for these areas?*

- c. **Probe:** *Do you know who to contact at BC Cancer if your patient is experiencing problems? How do you contact them?*
 - d. **Probe:** *How could you be supported to effectively and confidently provide primary care for your patients in this way?*
 - i. *IT/software, PMH networks, better understanding of BC Cancer supportive care program, etc.*
 - e. **Probe:** *What should the role of the oncologist and other specialists be during the cancer care journey?*
- 2. How can the expanded Provincial Primary Care Program (FPON) improve education and resources aimed at supporting family physicians to provide high quality care to their patients with cancer?**
- a. **Probe [Tools and Resources]:** *What tools would be most useful for patient related information?*
 - i. *Examples: referrals, care plans, consultations, etc.*
 - b. **Probe [Tools and Resources]:** *What tools would be most useful for oncology related/CME information? What would make existing resources more useful?*
 - i. *Examples: RACE line, guidelines, etc.*
 - c. **Probe [Tools and Resources]:** *What resources do you want that don't exist? Are there resources from other programs that work well that you wish BC Cancer had?*
 - i. *Examples: Apps, etc.*
 - ii. *Are there resources that exist that you don't use? Why not?*
 - d. **Probe [Advocacy]:** *What are the key areas of cancer care where FPON can advocate for primary care?*
 - i. *Education, resources, system navigation, and other communication needs.*
- 3. Helping patients manage cancer can be emotional and stressful- can you identify potential areas where the expanded Provincial Primary Care Program (FPON) can support family physicians in reducing undue stress?**
- a. **Probe:** *What are some of the key factors that create undue stress when treating patients with cancer?*
 - i. *Examples: Delayed referrals, poor communication, emotional burden of caring for patients you know, emotional burden of supporting worried patients and families etc.*
 - b. **Probe:** *How can BC Cancer advocate on your behalf to address this type of stress?*
- 4. Are there any other topics related to primary care and BC Cancer/FPON that you think we haven't addressed so far that you would like to comment on?**

Wrap-up: Thank everyone for participating. We will make a summary of our findings/recommendations available to all of our participants once our report is complete.

Focus group Protocol

Oncologist Protocol

Housekeeping Items

- Introduce facilitator: Dr. Cathy Clelland, Provincial Lead, Provincial Primary Care Program
- Thank participants for their taking the time to attend and provide their input
- Inform participants that the focus group will last approximately **90 minutes**
- This project is being funded by BC Cancer in partnership with the UBC CPD. BC Cancer's mission is to reduce the incidence of cancer, reduce the mortality rate of people with cancer, and improve the quality of life of people living with cancer.
- The purpose of this focus group is to learn more about your experiences with and recommendations related to oncology care and education needs for family physicians in the province of BC; strategies and recommendations to develop a Provincial Primary Cancer Care Program and an ongoing communication and engagement strategy between BC Cancers and community.
- Inform participants that the focus group is set to capture different perspectives and that different focus groups are being conducted with the following demographics: [urban FPs, new to practice GPs; rural FPs, and oncologists]
- Remind participants that we are interested in their thoughts and experiences, and that there are no right or wrong answers
- Remind participants that the session will be audio-recorded and that we will keep their feedback confidential. All responses will only be presented in aggregate format and will be anonymous.
- Ask participants to state their name before speaking to aid the transcription process
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also decline to participate at any time, for any reason.

The following protocol represents the questions and topic areas to be discussed. Questions are open-ended, and this protocol is designed to be used in a responsive manner with participants i.e. questions may be modified, and additional follow-up questions added as needed to fit the flow of the discussion.

Questions

Introductions (*ask each person to **be brief** – around 30 seconds max per introduction*). Please introduce yourself: name, discipline, place of practice, and what you hope to contribute to the focus group.

[Note to facilitator]: Remind participants of the current mandate- to provide education and training for family physicians and general practitioners in oncology. This currently consists of CME events, primary care guidelines, an annual conference, publications, a GPO education program, and monthly webinars.

[Note to facilitator]: Remind participants that we are looking for future state perspectives, not current state. Encourage participants to focus on solutions and ideas, not only challenges and barriers.

5. As an oncologist, what do you believe the role of family physicians could and should be when caring for their patients throughout their cancer journey?

- a. **Probe:** *To improve continuity of care, how could family physicians be more effectively involved in the care of their patients with cancer to support/complement the care you provide?*
 - i. *Examples: Comorbidities, coordinating care, psychological support, patient education, patient advocacy, follow-up support, etc.*
 - ii. *Are there things that family physicians could/should not be doing for their patients during their cancer journey?*
- b. **Probe:** *What do you think would be the best way for you to collaborate with FPs in the care of their patients with cancer?*
- c. **Probe:** *What do you think would support them to be involved in this way?*
 - i. *IT/software, PMH networks, better understanding of BC Cancer supportive care program, etc.*

[Note to facilitator]: PMH/care networks may need some explanation for the oncologists as this isn't even commonly understood amongst GPs yet.

6. If your patient has a family physician, how easy is it for you to communicate with them when it is clinically important? (E.g. To inform their treatment and/or follow-up?)

- a. **Probe:** *Specifically, two-way communication, direct (phone, text, email) vs. indirect (fax, consults)*
- b. **Probe:** *If you don't regularly communicate with your patient's family physician, why not?*
- c. **Probe:** *If you do, what makes this communication possible?*

7. What do you think the role of the expanded Provincial Primary Care Program (FPON) should be going forward?

- a. **Probe [Tools and Resources]:** *From your perspective, what tools would be most useful for sharing/disseminating patient-related information to family physicians for their patients with cancer?*
 - i. *Examples: referrals, care plans, consultations, transitions in care, etc.*

Program and an ongoing communication and engagement strategy between BC Cancers and community.

- Inform participants that the focus group is set to capture different perspectives and that different focus groups are being conducted with the following demographics: [urban FPs, new to practice FPs; rural FPs, and oncologists]
- Remind participants that we are interested in their thoughts and experiences, and that there are no right or wrong answers
- Remind participants that the session will be audio-recorded and that we will keep their feedback confidential. All responses will only be presented in aggregate format and will be anonymous.
- Ask participants to state their name before speaking to aid the transcription process
- At any time during our conversation, please feel free to let me know if you have any questions or if you would rather not answer any specific question. You can also decline to participate at any time, for any reason.

The following protocol represents the questions and topic areas to be discussed. Questions are open-ended, and this protocol is designed to be used in a responsive manner with participants i.e. questions may be modified, and additional follow-up questions added as needed to fit the flow of the discussion.

Questions

Introductions (*ask each person to **be brief** – around 30 seconds max per introduction*). Please introduce yourself: name, discipline, place of practice, how many patients with cancer are in your practice, payment model, and what you hope to contribute to the focus group.

[Note to facilitator]: Remind participants *of the current mandate- to provide education and training for family physicians and general practitioners in oncology. This currently consists of CME events, primary care guidelines, an annual conference, publications, a GPO education program, and monthly webinars.*

[Note to facilitator]: Remind participants that we are looking for *future state* perspectives, not *current state*. Encourage participants to focus on solutions and ideas, not only challenges and barriers.

10. As a rural family physician, what do you believe your role could and should be in caring for your patients throughout their cancer journey?

- Probe:** *To improve the continuity of care for your patients with cancer, how would you prefer to be involved in their care?*
 - Examples: Screening, coordinating care, psychological support, patient education, advocacy, follow-up support, supporting access to care, etc.*
- Probe:** *Are there redundancies/inefficiencies you see that could be eliminated, and do you have any suggestions solutions for these areas?*

- c. **Probe:** Do you know who to contact at BC Cancer if your patient is experiencing problems? How do you contact them?
 - d. **Probe:** How could you be supported to effectively and confidently provide primary care for your patients in this way?
 - i. IT/software, PMH networks, better understanding of BC Cancer supportive care program, etc.
 - e. **Probe:** What should the role of the oncologist and other specialists be during the cancer care journey?
- 11. How can the expanded Provincial Primary Care Program (FPON) improve education and resources aimed at supporting rural family physicians to provide high quality care to their patients with cancer?**
- a. **Probe [Tools and Resources]:** What tools would be most useful for patient related information?
 - i. Examples: referrals, care plans, consultations, etc.
 - b. **Probe [Tools and Resources]:** What tools would be most useful for oncology related/CME information? What would make existing resources more useful?
 - i. Examples: RACE line, guidelines, etc.
 - c. **Probe [Tools and Resources]:** What resources do you want that don't exist? Are there resources from other programs that work well that you wish BC Cancer had?
 - i. Examples: Apps, virtual resources, etc.
 - ii. Are there resources that exist that you don't use? Why not?
 - d. **Probe [Advocacy]:** What are the key areas of cancer care where FPON can advocate for primary care?
 - i. Education, resources, access to services, telehealth, and other communication needs.
- 12. Helping patients manage cancer can be emotional and stressful- can you identify potential areas where the expanded Provincial Primary Care Program (FPON) can support rural family physicians in reducing undue stress?**
- a. **Probe:** What are some of the key factors that create undue stress when treating patients with cancer?
 - i. Examples: Delayed referrals, poor communication, emotional burden of caring for patients you know, emotional burden of supporting worried patients and families, poor access to services, etc.
 - b. **Probe:** How can BC Cancer advocate on your behalf to address this type of stress?

13. Are there any other topics related to primary care and BC Cancer/FPON that you think we haven't addressed so far that you would like to comment on?

Wrap-up: Thank everyone for participating. We will make a summary of our findings/recommendations available to all of our participants once our report is complete.

APPENDIX E. QUALITATIVE ANALYSIS CODE BOOK

BC Cancer FPON Needs Assessment: Qualitative Data Codebook

#	Name	Mnemonic Code	Full Description
1	GP/FP Knowledge: Cancer Care	1.1 KNOW.CANCER	Overall GP/FP knowledge around cancer care
2	GP/FP Knowledge: Cancer Care Gaps	1.1.1 KNOW.CANCER.GAPS	Gaps in overall GP/FP knowledge of cancer care
3	GP/FP Knowledge: Screening	1.2 KNOW.SCREEN	GP/FP knowledge around cancer screening
4	GP/FP Knowledge: Screening Gaps	1.2.1 KNOW.SCREEN.GAPS	Gaps in GP/FP knowledge specifically pertaining to screening
5	GP/FP Knowledge: Diagnosis	1.3 KNOW.DIAG	GP/FP knowledge around cancer diagnosis
6	GP/FP Knowledge: Diagnosis Gaps	1.3.1 KNOW.DIAG.GAPS	Gaps in GP/FP knowledge specifically pertaining to diagnosis
7	GP/FP Knowledge: Transition of Care	1.4 KNOW.TRANS	GP/FP knowledge regarding knowledge of transfer of care between GP/FP and specialists
8	GP/FP Knowledge: Transition of Care Gaps	1.4.1 KNOW.TRANS.GAPS	Gaps in GP/FP knowledge specifically pertaining to transition of care
9	GP/FP Knowledge: Treatment	1.5 KNOW.TREAT	GP/FP knowledge around cancer treatment
10	GP/FP Knowledge: Treatment Gaps	1.5.1 KNOW.TREAT.GAPS	Gaps in GP/FP knowledge specifically pertaining to treatment
11	GP/FP Knowledge: Follow-up	1.6 KNOW.FOLLOW	GP/FP knowledge around cancer follow-up
12	GP/FP Knowledge: Follow-up Gaps	1.6.1 KNOW.FOLLOW.GAPS	Gaps in GP/FP knowledge specifically pertaining to follow-up
13	GP/FP Knowledge: GPAC Guideline	1.7 KNOW.GPAC	GP/FP knowledge around adoption and implementation of the cancer care guidelines, e.g. GPAC
14	GP/FP Knowledge: GPAC Guidelines Gaps	1.7.1 KNOW.GPAC.GAPS	Gaps in GP/FP knowledge specifically pertaining to adoption and implementation of cancer care guidelines, e.g. GPAC
15	GP/FP Knowledge: Emerging Technologies	1.8 KNOW.TECH	GP/FP awareness or knowledge of new and emerging technologies in cancer care

16	GP/FP Knowledge: Emerging Technologies Gaps	1.8.1 KNOW.TECH.GAPS	Gaps in GP/FP knowledge of new and emerging technologies in cancer care
17	GP/FP Knowledge: Tech Knowledge Sources	1.8.2 KNOW.TECH.SOURCE	Sources of information that GPs/FPs consult to gain new knowledge regarding new and emerging technologies along the cancer care continuum
18	GP/FP Knowledge: GP/FP Role	1.9 KNOW.ROLE	GPs'/FPs' perceived role along the cancer care continuum
19	GP/FP Knowledge: FPON	1.10 KNOW.FPON	GP/FP awareness or knowledge of the programs and education offered by FPON
20	GP/FP Knowledge: Non-medical Issues	1.11 KNOW.NONMED	GP/FP knowledge of non-medical issues pertaining to the support of patients along the cancer care continuum (e.g. mental health, social support, etc.)
21	BCCA: GP/FP Support	2.1 BCCA.SUPPORT	BCCA's role in supporting GPs/FPs provide cancer care in the community
22	BCCA: Guidelines	2.2 BCCA.GUIDE	BCCA's role in providing cancer care guidelines for GPs/FPs
23	BCCA: Education Gaps/Needs	2.3 BCCA.EDGAPS	Gaps/needs related to education activities and programs in primary cancer care
24	Communication and Engagement: GPs/FPs (Current State)	3.1 COMM.GPFP	Current communication practices and processes between BC Cancer or GPOs and GPs/FPs along the continuum of cancer care
25	Communication and Engagement: Barriers	3.2 COMM.BARR	Barriers to communication between GPs/FPs and BCCA or GPOs
26	Communication and Engagement: Desired Communication Channels	3.3 COMM.DESIRED	Desired communication channels between GPs/FPs and BCCA or GPOs
27	Communication and Engagement: Coordination of Services	3.4 COMM.COORD	Communication pathways between BCCA Agency sites, the Community Oncology Sites and urban/rural GPs/FPs or new grads/residents providing cancer care in the community
28	Communication and Engagement: BCCA Documentation	3.5 COMM.DOCS	Discussion related to documents including referral letters, discharge letters, care plans

			Issues/suggestions around and barriers/facilitators to improving billing processes
29	Provincial Primary Care Program (PPCP): Key Stakeholders	4.1 PPCP.STAKE	Key stakeholders or partners that need to be involved in efforts to develop a Provincial Primary Care Program
30	PPCP: Divisions of Family Practice/Interdivisional Councils	4.2 PPCP.DOFP	Role of Divisions of Family Practice and Interdivisional Councils in operation of a Provincial Primary Care Program
31	PPCP: Education Format for GPs/FPs	4.3 PPCP.ED	Strategies a Provincial Primary Care Program should pursue to enhance education aimed at supporting GPs/FPs in providing high quality cancer care
32	PPCP: Barriers	4.4 PPCP.BARR	Barriers to implementation and FP/GP engagement with a Provincial Primary Care Program
33	PPCP: Data, EMR	4.5 PPCP.DATA	Sources of data that a Provincial Primary Care Program should pursue could use to support education; or enhance EMR use
34	PPCP: Quality Improvement	4.6 PPCP.QI	Strategies a Provincial Primary Care Program should pursue to embed quality improvement
35	PPCP: Communication and Engagement	4.7 PPCP.COMM	Strategies a Provincial Primary Care Program should pursue to enhance communication between BC Cancer, Community Oncology Sites and GPs/FPs
36	CARE DELIVERY: Role of Healthcare Professional	5.1 CARE.ROLE	Role of healthcare professional including: oncologists/specialists, nurses, GPOs, health professionals
37	CARE DELIVERY: Team-based care	5.2 CARE.TEAM	Discussion related to team-based care and integrated care delivery; shared care
38	CARE DELIVERY: Patients	5.3 CARE.PTS	Patient education or patient as partners
39	CARE DELIVERY: Barriers	5.4 CARE.BARR	Barriers to patients having access to or engaging with high quality cancer care e.g. geographic separation, wait times, etc.

40	CARE DELIVERY: Chronic Disease Management	5.5 CARE.CHRON	References to cancer being a chronic condition and associated challenges that come along with managing a chronic disease.
41	PRACTICE MANAGEMENT: Billing	6.1 PRAC.BILL	Issues/suggestions around and barriers/facilitators to improving billing processes
42	SOCIAL DETERMINANTS OF HEALTH	7 SDH	Discussion related to social, economic and cultural conditions, and their distribution among the population that influence individual and group differences in health status; include discussion related to patient's income and social status; social support networks; education; employment/working conditions; social environments; physical environments; personal health practices and coping skills; healthy child development; gender; and culture.
43	MEDICAL CULTURE	8 MED.CULTURE	Gaps/needs related to collaboration and communication influenced by the level of hierarchy in place or culture of medicine
44	EDUCATION BARRIER	9 ED.BARR	Generalized code for references to barriers preventing FPs access to or engagement with education resources.