The Development of a Nurse-Led Interprofessional Oncology Orientation

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A Practicum Report submitted

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Abstract

Background: Interprofessional collaborative practice (ICP) has been recommended to improve patient-centered care and increase service delivery efficiency. ICP contributes to positive relationships between healthcare professionals (HCPs) and patients, and can optimize outcomes. Currently there is a lack of ICP resources at the BC Cancer Agency (BCCA). **Purpose:** The purpose of this practicum project was to develop an evidence-informed nurse-led interprofessional oncology orientation to support integration of ICP in cancer care at the BCCA. **Methods:** An integrative literature review on ICP and education in a healthcare setting, and colleague consultations with key stakeholders were completed. Through this systematic process, benefits, barriers, and common themes were identified. The results were used to inform the development of the orientation. **Results:** The orientation consists of facilitated sessions which introduce a model of supportive care, common cancer symptoms and side effects, interprofessional practice competencies, a mentored observation day, and include group learning activities. The orientation provides opportunity for HCPs to learn about and with each other, apply interprofessional competencies to clinical scenarios, and develop relationships in a team-like environment. Also included is a comprehensive facilitator's guide to support independent facilitation of the orientation by nurse educators and provides access to ICP resources. **Conclusion:** The projected outcomes of the orientation are to improve: (a) the quality of care being provided to patients/families diagnosed with cancer by the interprofessional team, (b) patient/family satisfaction with care, and (c) interprofessional collaboration.

Key terms: interprofessional "and" practice, education, teamwork, care, collaboration

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Introduction

The complexity of cancer care and decision making has increased along with advancements in cancer treatments (Chen, Cheung, Spinelli, & Kennecke, 2016; Clauser, Wagner, Bowles, Tuzzio, & Green, 2011; Sumpio, Knobf, & Jeon, 2016). This increased complexity requires healthcare professionals (HCPs) to be highly specialized, but also to communicate and share responsibilities (Bunnell et al., 2013; James, Page, & Sprague, 2016). In the past, specialization of HCPs has created barriers to collaboration (Mitchell, Parker, Giles, & White, 2010; Thom et al., 2016). Interprofessional collaborative practice (ICP) however, has been recommended in Canada and internationally to improve patient-centered care, and increase efficiency in service delivery (Canadian Interprofessional Health Collaboration [CIHC], 2010; Canadian Nurses Association [CNA], 2017; World Health Organization [WHO], 2010).

Increased evidence on the benefits of interprofessional education and practice has informed the implementation of interprofessional models of care (CIHC, 2010; Lee, Fitzgerald, Downey, & Moore, 2012; Gilman, Chokshi, Bowen, Rugen, & Cox, 2014; Misra-Hebert, Rabovsky, Yan, Hu, & Rothberg, 2015). In an interprofessional model of care, HCPs collaborate to develop patient-centered care plans in healthcare settings such as ambulatory cancer units (CIHC, 2010; Lee et al., 2012; Gilman et al., 2014; Misra-Hebert et al., 2015). When considering cancer patients supportive care needs (Fitch, 2008) and cancer treatment complexity in the context of the benefits of ICP; an argument can be made to consider ICP a priority for the oncology population.

Background

The BC Cancer Agency (BCCA) is a large provincial organization with six regional centres located throughout British Columbia. This organization is responsible for providing adult outpatient oncology services. In part, the mission of the BCCA is to "improve the quality of life of people living with cancer" (BCCA, 2017). Newly hired HCPs often have minimal to no oncology education or experience. In response to this practice issue, clinical and administrative leaders at BCCA requested that nursing educators develop and implement an interprofessional oncology orientation. The request was made to: (a) address a gap in oncology orientation for newly hired HCPs, (b) align with recent organizational restructuring in which nursing and allied health report to a Vice-President of Patient Experience and Interprofessional Practice, and (c) benefit from the nurse educator's oncology knowledge and program facilitation skills.

The CIHC has described interprofessional collaboration as building relationships between HCPs, patients, and communities to improve the outcome for individuals and populations. The purpose of the practicum project was to develop a nurse-led interprofessional oncology orientation that: (a) provided newly hired HCPs with an introduction to the supportive care needs of the oncology population, (b) assisted in fostering interprofessional team collaboration, and (c) was a comprehensive resource that supported independent facilitation by the nurse educators.

Practicum Objectives

The overall goal of the practicum was to develop an evidence-informed nurse-led interprofessional oncology orientation. The practicum project was developed to provide support to the two identified target groups; (1) the newly hired interprofessional HCPs

starting employment at BCCA, and (2) the nursing educators who would be required to independently facilitate the program at all six of the BCCA regional cancer centres. The main objectives of the practicum were:

1. To identify themes from the literature review related to ICP and education,
2. To develop an evidence-informed resource that supports interprofessional practice at BCCA,
3. To support independent facilitation of a nurse-led interprofessional oncology orientation by nurse educators,
4. To integrate a theoretical foundation in the orientation, and
5. To demonstrate the Canadian Nurses Association's Advanced Nursing Practice (ANP) competencies: clinical, leadership, research, and consultation.

Overview of Methods

There were two methodologies followed to compile the evidence that supported and informed the nurse-led interprofessional oncology orientation. The first was an integrative literature review to determine what was known about interprofessional education and collaborative practice in a clinical setting. The second method used was interprofessional colleague consultations. Following these methods provided a systematic approach to meet the practicum goal and objectives.

Literature Review Summary

The integrative literature review was conducted through an extensive literature search in the following databases: CINAHL, PubMed, ProQuest, and Cochrane databases. Retrieved articles were screened for relevance, and critically analysed prior to

inclusion in the review. Quantitative study appraisal was guided by the Public Health Agency of Canada's Infection Prevention and Control Guidelines: Critical Appraisal Tool Kit (Public Health Agency of Canada [PHAC], 2014). The qualitative study appraisal was guided by the critical appraisal skills programme (Critical Appraisal Skills Programme [CASP], 2013). A summary of the literature helped to identify benefits and barriers to ICP. In addition, important themes related to interprofessional education and leadership were revealed. The complete literature review and literature summary tables have been included (see Appendix A).

ICP Benefits and Barriers

Evidence in the literature suggested that ICP in a clinical setting provided benefits to patients, HCPs, and organizations. Examples of patient benefits were improvements in management of symptoms and outcomes, and coordination of care and services which in turn resulted in increased satisfaction (Lee et al., 2012; San Martin-Rodriguez, D'Amour, & Leduc, 2008; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013; Zwarenstein et al., 2009). Benefits from ICP were also revealed for HCPs. Studies demonstrated that teams working collaboratively noted improvements in practitioner knowledge, skill and confidence, and that education delivery by HCPs was more patient-centered (Jacobs et al., 2017; Reeves et al., 2013). Organizational benefits were increased safety, efficiencies, and employee engagement (Lee, et al., 2012; Mitchell et al., 2010; Virani, 2012).

Along with benefits to ICP, there were also barriers for patients, HCPs and organizations. Barriers that affected patients were patient complexity, late consultation, negative attitudes, a lack of leadership, and team member availability for collaboration

(Bilodeau, Dubois, & Pepin, 2015; Weaver, Callaghan, Cooper, Brandman, & O'Leary, 2015). HCPs experienced barriers from a lack of role clarity, evolving scopes of practice, and time constraints (Bilodeau et al., 2015; Hepp et al., 2015). Organizational barriers existed when the systems and structures encouraged hierarchies, did not provide appropriate space for collaboration, and there were no interprofessional policies or resources (Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014). The provision of organizational support and resources such as, an interprofessional oncology orientation could potentially reduce barriers to ICP at the BCCA.

Interprofessional Education

To develop an understanding of ICP, it is necessary for HCPs to receive education on interprofessional competencies. This can influence HCPs perspectives and result in a new way of working together (WHO, 2010). The literature review identified current evidence on interprofessional education. The themes that were revealed related to the education setting and strategies, facilitator characteristics, messaging and engagement.

Education Setting and Strategies. Current recommendations are for interprofessional education to be initiated in undergraduate and graduate programs (IEC, 2011; WHO, 2010). Despite these recommendations, there were positive and negative findings to interprofessional education in both academic and clinical settings. Although students' perceived benefits from interprofessional education in an academic setting, there was a lack of analytic data to support knowledge retention and translation to future clinical application (Black, Blue, Davidson, & McCormack, 2016; Chou, Ainsworth, & O'Brien, 2016; Head et al., 2016; Konrad, Cavanaugh, Rodriguez, Hall, & Pardue, 2017).

Evaluation of interprofessional education delivered to HCPs practicing in clinical settings demonstrated positive findings (Heath et al., 2015; Jacobs, Beyer, & Carter, 2017; Martins & Lairamore, 2016; McLeod, Curran, Dumont, White, & Charles, 2013). The results of two studies showed that interprofessional knowledge exchange increased self-confidence, provided role clarification, and generated mutual respect (Jacobs et al., 2017; McLeod et al., 2013). It was also found that interprofessional education completed by practicing HCPs supported relationship building within teams (Carlson, Pilhammar, & Wann-Hansson, 2011; Head et al., 2016; Heath et al., 2012). Interprofessional education in a clinical setting supported application of new skills and strengthened interprofessional team relationships.

Available studies on interprofessional education provided examples of learning activities that involved critical thinking and knowledge application (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw, Howard, Etz, Hudson, & Crabtree, 2012). It is important to develop educational strategies that include interactive group work which encourage sharing knowledge and relationship development (Azur et al., 2016; Head et al., 2016: Jacobs et al., 2017). Examples of activities used in the literature were problem-based case studies, reflective journaling, and practice simulation (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw et al., 2012).

Facilitator Characteristics. For successful interprofessional education, educators must be clinical experts and understand the interprofessional competencies. This is necessary to integrate these competencies into clinically relevant sessions while encouraging information exchange between groups (Derbyshire, Machin, & Crozier,

2015; McLeod et al., 2013). The information exchange from individual HCPs sharing their expertise requires the facilitator to adapt to in-the-moment learning which will enhance the connection across professional groups (Carlson et al., 2011; Derbyshire et al., 2015; Johnson, Lynch, Lockeman, & Dow, 2015). In addition, facilitators must act as role models to create and sustain group culture (Carlson et al., 2011; Derbyshire et al., 2015; Johnson et al., 2015; McLeod et al., 2013). By setting a respectful tone and capitalizing on critical moments, facilitators can assist HCPs to increase role clarification and develop patient-centered goals through shared knowledge (Black et al., 2016; Carlson et al., 2011; Johnson et al., 2015; McLeod et al., 2013).

Messaging and Engagement. It was identified that positive messaging to HCPs was necessary for engagement in interprofessional education as it connected the benefits of interprofessional practice to patients and HCPs (Black et al., 2016; Derbyshire et al., 2015; McLeod et al., 2013). This is in alignment with information from the Interprofessional Education Collaborative (2011) which discussed that when developing interprofessional education, it is important to strategically make the connection between education and clinical practice for successful implementation.

Interprofessional Leadership

Leadership was noted as a recurring theme in interprofessional education and collaborative practice. Facilitators require leadership skills to model interprofessional values and behaviour, and promote culture change (Carlson et al., 2011; Derbyshire et al., 2015; Johnson et al., 2015). Available evidence has identified leadership qualities in nurses such as communication, organization, and leading interprofessional teamwork,

that make them a good fit to facilitate and support interprofessional education (Azur et al., 2016; Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014; Johnson et al., 2015). Since it is considered important to model interprofessional competencies to team members, leadership skills were also emphasized for HCPs engaging in ICP (Azur et al., 2016; Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014). Organizational leaders can support ICP through developing policies and guidelines (Chatalalsingh & Reeves, 2014).

Limitations and Implications

Although there are strong recommendations for ICP in healthcare, (CIHC, 2010; CNA, 2017; IEC, 2011; WHO, 2010) evidence revealed gaps in program evaluation. Research examining ICP lacked strong analytic and randomized controlled studies (RCTs). Recommendations were to increase the size and rigor of RCTs and conduct long term evaluation of ICP and education in healthcare. The development, implementation and evaluation of a theoretically based nurse-led interprofessional oncology orientation could be beneficial in generating new nursing knowledge related to ICP.

Summary of Consultations

The second methodology completed for the practicum project was colleague consultations. A total of 10 key stakeholders from the interprofessional team were interviewed to: (a) determine how the evidence from the literature would best translate to an interprofessional oncology orientation, and (b) to identify any new information that might augment the literature review findings. Interview questions were informed by the literature review and developed to guide the consultation interviews. Key stakeholders from BCCA included a Manager of Clinical Services, Education Resource Nurse,

Clinical Nurse Coordinator, Pharmacist, Dietician, Patient and Family Counsellor, Radiation Therapy-Treatment Module Leader, and a General Practitioner in Oncology. One out of province stakeholder was the Director for Professional Practice and Education from Cancer Control Alberta, Alberta Health Services. The second was a Clinical Educator for Oncology from Dr. H. Bliss Murphy Cancer Centre, Eastern Health Authority in Newfoundland.

Stakeholders were asked to participate based on their subject matter knowledge and invited by an e-mail letter. All stakeholders agreed to participate, and the 20 to 30 minute interviews were conducted either in-person or by telephone. The Health Research Ethics Authority Screening Tool was completed, and indicated that a Research Ethics Board (REB) approval was not required. A comprehensive report on the consultations has been included in this report (see Appendix B).

Consultation Results

To consider the relevancy of the literature review results in relation to current clinical practice at BCCA and the external cancer organizations, the interview data were first reviewed to identify concepts relevant to all stakeholders. Then the interview data were compared to the literature review. The results demonstrated benefits, barriers, and themes related to ICP.

ICP Benefits and Barriers

The consultation data showed ICP benefits to patients, HCPs, and organizations which were similar to those found in the literature review. The stakeholders discussed that patients benefited from ICP within oncology teams through increased comprehensive

care delivery, satisfaction and trust, and reduced occurrence of errors. This was described as team cohesiveness and communication which led to reduced repetition of information. These benefits were present in the literature review findings as patients rated their care higher when their information was known by multiple team members; perceiving this to indicate better ICP and communication (Azur et al., 2016; Bilodeau et al., 2015). Benefits cited by the stakeholders for HCPs were shared responsibility and a broadened perspective and knowledge base. This is related to improved relationship, role clarity and learning through colleagues (CIHC, 2010). Organizational cohesiveness was perceived as an organization benefit, and was described as a commitment to patient-centered care.

The key stakeholders also discussed barriers that were common across professions throughout BCCA and the two external cancer organizations. These barriers were time, system structures, and individual and group engagement. Time was the most prevalent barrier to ICP, and was acknowledged through discussion of the extra commitment required to practice collaboratively. The stakeholders reported feeling that ICP was not always possible due to patient urgency and the busy work environments/ schedules which limit time to connect with colleagues. It was also discussed that when it was not clear which HCP was needed for ICP, time was spent on activities such as, multiple phone calls to sort this out. ICP was also considered a process which was either unscheduled or difficult to coordinate. Although time was not a direct barrier in the literature review, a lack of time was considered a factor that decreased patient-centered care (Hepp et al., 2015). Additional time related barriers were team member availability and late consultations (Bilodeau et al., 2015; Hepp et al., 2015; Weaver et al., 2015).

System structures that were identified as barriers were physical space and hierarchies. Physical space was described as a lack of work space in patient clinics, and the segregation of services. The stakeholders discussed that these space concerns created silos that inhibited relationships. Hierarchies were also considered to inhibit relationship formation. The stakeholders perceived hierarchies as a system structure in relation to work flow, processes, and policies that have created a power differential between HCPs. Evidence on ICP also considered hierarchies a barrier and recommended that hierarchies be reduced through the implementation of supportive policy and creation of ICP opportunities (Chatalalsingh & Reeves, 2014; Shaw et al., 2012; WHO, 2010).

The final barrier identified by stakeholders was a lack of engagement or buy-in from individuals and groups. It was discussed that when individuals do not have buy-in, they can negatively influence the team. This was stated to occur from HCPs protecting their practice scope and not wanting to share responsibility, and from individual personalities. This barrier was also noted in the literature (Mitchell et al., 2010; Thom et al., 2016; VanKuiken, Schaefer, Hall, & Browne, 2016; Xyrichis & Lowton, 2007).

Interprofessional Practice Themes

Role Clarity and Supporting Colleagues. The key stakeholders discussed role clarity and the importance of team members knowing the scope of practice of all HCPs. It was perceived that role clarity increased respect and value for other HCP roles. There was a desire expressed by the stakeholders to increase awareness of discipline specific knowledge within the interprofessional team. Practical advantages to role clarity were to assist with appropriate referral, delegation of workload, timely communication, and

promoting a unified approach to care. The information discussed on role clarity aligned with the importance of HCPs understanding their own scope of practice and the roles of other team members (CIHC, 2010). Another consistent theme discussed by the stakeholders was supporting team members. Similar to role clarity, stakeholders wanted to meet expectations of team members and for others to be aware of their role in supporting patients and colleagues. Some stakeholders discussed being experts with a narrow scope, however, stated their knowledge could support the team.

Patient-Centered Care. All stakeholders discussed their role as being patient-focused, with a desire to enhance patient care and experience. Related ICP concepts, such as cohesiveness and streamlining care, were discussed as important measures to improve the patient experience. It was perceived by the stakeholders that in order to remain patient-centered with the complexity of cancer patients, ICP was necessary.

Policy-to-Practice Disconnection. Stakeholders noted that ICP occurred in direct patient care, and at organizational policy development levels. It was perceived that there was a disconnection between these areas. Although interprofessional groups worked to develop and move policy and agendas forward, stakeholders stated that information was not communicated effectively. In addition, it was expressed that there was a lack of opportunity for direct care HCPs to participate in organizational decision-making.

Resources and Orientation Components. Stakeholders discussed that the most valuable interprofessional resource was their colleagues. It was emphasized that opportunities to develop interprofessional relationships were essential. Educators and leaders especially considered that they were the resource for other HCPs, using words

such as, mediator, liaison, and connector to describe their role in ICP. Many of the stakeholders expressed that other types of interprofessional resources were not available or not known to them.

Considering the lack of resources, stakeholders discussed a need for a formalized orientation that utilized resources from other organizations, included a variety of learning methods, increased resource awareness, and connected HCPs to mentors. It was discussed that oncology information should include introductory knowledge related to supporting people diagnosed with cancer. Scheduling opportunities to pair HCPs with differing professionals in the clinical setting to increase role clarity was suggested as important.

Consultation Implications

The consultation data suggested ICP was valued by the key stakeholders. It was identified however, that there was a gap in interprofessional resources and education for HCPs. To address these issues, a commitment is needed from organizational leadership to support development of ICP education and resources. Additional implications included advocating for clinical HCPs involvement in interprofessional policy development and increased opportunities to develop relationships. Considering these implications, a nurse-led interprofessional oncology orientation would be an appropriate recommendation.

Orientation Framework

The three foundational frameworks used in the development of the nurse-led interprofessional oncology orientation were: (a) the National Interprofessional Competency Framework (CIHC, 2010), (b) the Supportive Care Framework (Fitch, 2008), and (c) Knowles' Theory of Andragogy (1984).

Interprofessional Competencies

The National Interprofessional Competency Framework (CIHC, 2010) lists the six competencies as: (a) interprofessional communication, (b) patient/ client/ family/ community-centered care, (c) role clarification, (d) team functioning, (e) collaborative leadership, and (f) interprofessional conflict resolution (see Appendix C). These competencies were integrated into the orientation content through a knowledge-based session and interactive group learning activities. The activities provide an opportunity for application of critical thinking to problem-based group work.

Supportive Care Framework

While the focus is on interprofessional competencies, it was necessary to develop content that provided knowledge and a framework for addressing the needs of the oncology population. The Supportive Care Framework (Fitch, 2008) has been used extensively in national and international cancer education programs, supportive care guidelines, and models of care (Busolo, & Woodgate, 2016; Canadian Association of Psychosocial Oncology [CAPO], 2010; Cancer Australia, 2017; Cancer control Alberta, 2016; Cancer Journey Portfolio, 2012). The model identifies seven need categories of people with cancer. The need categories are physical, informational, social, spiritual, psychological, social and practical. Permission was obtained from Dr. Fitch to use the supportive care framework in the orientation (see Appendix D).

Theory of Andragogy

To ensure that the orientation was developed to meet the needs of adult learners, Knowles' Theory of Andragogy (1984) was used to guide the development of the

orientation sessions and learning activities. Knowles (1984) theory of adult education is based on the assumptions that learning is: (a) self-directed, (b) built on previous knowledge and experience, (c) problem-based and set in a real life context, (d) intrinsically motivated, and (e) occurs when there is a readiness to learn. In the context of interprofessional education, the goal of participants learning from each other, and the recommended problem-based interactive learning activities align with these assumptions.

Knowles (1984) principles of adult learning were also applied during the practicum project. The first principle required that learners be included in the education planning. Key stakeholders were consulted and the resulting information was used to inform the program. The second principle was to base the learning activities on experience. The orientation provides opportunities for learners to contribute based on their previous experience as the integration of the interprofessional competencies, allow the HCPs to share knowledge and define their role. The activities are set in case-based oncology scenarios making them relevant to the learner's work which meets the third principle set forth by Knowles (1984). The final principles integrated into the orientation were the inclusion of problem-based learning activities and structured knowledge content that informed the importance of supporting the oncology population.

The Interprofessional Oncology Orientation

The results of the integrative literature review and colleague consultations supported the development of a nurse-led interprofessional oncology orientation. Although different formats were considered for the orientation, the evidence from the literature review, along with the interprofessional competencies, influenced the final

decision to develop a facilitated in-person orientation. An in-person format provides the opportunity to develop role clarity, team problem-solve, and form relationships (Black et al., 2016; Carlson et al., 2011; Chou et al., 2016; CIHC, 2010; Derbyshire et al., 2015; Head et al., 2016; Heath et al., 2015; Jacobs et al., 2017; Johnson et al., 2015; Shaw et al., 2012). To support the two target groups, the orientation was developed as nine separate components that make up a toolkit for the facilitator. The toolkit has been included (see Appendix E), and will be made available to the nurse educators in an electronic format which can be stored and accessed from the nursing educator's shared BCCA internal drive. The components of the toolkit are the: (1) Facilitator Guide, (2) Instructions for Interprofessional Activities and Activity Handouts, (3) Interprofessional Oncology Orientation: Introduction, (4) Supportive Care for Oncology Patients, (5) Managing Common Symptoms and Side effects of Cancer Treatments, (6) Interprofessional Competencies, (7) Case Study: Facilitator Guide, (8) Case Study, and (9) Clinical Observation Day Guide.

Facilitator Guide

The Facilitator Guide was created to support nurse educators to independently facilitate the orientation and provides an overview of ICP and education. The guide contains background information on how ICP fits within cancer care at BCCA. Also included are goals and objectives for the nurse educator's facilitation of the orientation, and an orientation outline. The outline presents information on each session, the learning activities, required resources/supplies, and timeframes for completion. Included in the facilitator guide are links to helpful resources to assist with interprofessional facilitation

skills, and promote development of interprofessional knowledge and leadership. The linked resources have been grouped into three specific topics which include the following: (1) the benefits of ICP, (2) integrating interprofessional competencies into education programs and learning plans, and (3) facilitation of interprofessional education. This guide has been formatted as a word document for electronic access.

Instructions for Interprofessional Activities

The Instructions for Interprofessional Activities and Activities Handout was developed as a facilitator resource with interactive learning activities for each session. It contains instructions on activity facilitation, additional notes and discussion points for debriefing sessions, and short oncology patient vignettes. Appended to the electronic word document are the activities without the facilitator notes for printing to use as handouts during the orientation session. The activities incorporate information from each session and integrate the interprofessional competencies in a step-wise fashion.

Interprofessional Oncology Orientation Introduction

The Interprofessional Oncology Orientation Introduction is the first of five facilitated information sessions. This resource was developed as a PowerPoint presentation. It includes the objectives of the orientation, an introduction to ICP, and initiates role clarity and relationship building. The session has comprehensive notes for the facilitator.

Supportive Care for Oncology Patients

The second facilitated session provides an overview of The Supportive Care Framework (Fitch, 2008). Relevant oncology content is a required component of an

oncology orientation, and giving support to people with cancer and their families is the central focus of all HCPs working at BCCA. The framework provides a patient-centred approach to ICP as it addresses developing an interprofessional plan of care that is focused on supporting the seven need domains. This session is in the format of a PowerPoint resource with comprehensive facilitator notes.

Symptoms and Side Effects

The practical aspect for HCPs that support people on active cancer treatments is to help minimize and manage the symptoms and side effects of cancer and treatment. It is important for HCPs to know common side effects and how to collaborate to keep the patient well and/or safe in these circumstances. The third facilitated session provides an overview of 11 of the 16 most common symptoms and side-effects of cancer treatment and includes management strategies. This PowerPoint session also includes a discussion of BCCA resources that are available for patients and HCPs.

Interprofessional Competencies

The interprofessional competencies session is the last session that provides new information. It includes an overview of the National Interprofessional Competency Framework's (CIHC, 2010) six competencies. Similar to the previous sessions, it is a PowerPoint presentation with detailed facilitator notes, and concludes with an interactive group activity. In addition to this session, the interprofessional competencies have been integrated into all activities to build familiarity with the competencies and provide an opportunity to apply them prior to entering clinical practice.

Case Study

The case study provides a summary and review of key take home points from the interprofessional oncology orientation. The questions and activities integrate information from the sessions on supportive care, symptom management and interprofessional competencies. It is the last facilitated session and has been developed as two separate resources. There is a handout for participants that provide the case study and questions. In addition to this, the facilitator's resource includes informed answers, and probing questions for the debriefing segments. The case study is developed to be completed in sections; prior to moving to the next section there are questions or critical thinking activities to complete in small groups followed by large group discussion. The case study has been developed as an electronic word document for printing handouts.

Clinical Observation Day Guide

The final resource is a clinical observation day guide. Following the one day orientation, the learners will have the opportunity to spend a day with an interprofessional mentor. The observation day was informed from the consultations, as many commented that the most important interprofessional resource was their colleagues. They suggested that mentoring and spending clinical time with interprofessional team members was an important component to include in the interprofessional oncology orientation. The observation day guide provides objectives and expectations for the learner. It also includes reflective questions to provide opportunity to apply critical thinking and increase awareness of the interprofessional competencies in practice. It is recommended that the learner and mentor set aside time prior to the end of the shift to review the questions and provide any necessary feedback.

Advanced Nursing Practice Competencies

A component of the Master of Nursing (MN) program was to demonstrate the Canadian Nurses Association (CNA, 2008) Advanced Nursing Practice (ANP) competencies. Planning, implementing and evaluating effective healthcare programs benefit from the expertise of nurses practicing at an advanced level. The following section will provide a reflection on how the four ANP competencies, Clinical, Research, Leadership, and Consultation, were demonstrated and applied to the practicum project.

The CNA (2008) considers "…expertise in a specialized area of nursing" (p. 22) to be the foundation of ANP. The courses completed in the MN program have provided me with an increased understanding of how nursing knowledge and theory integration are necessary to practice at an advanced level. Direct clinical competency was difficult to demonstrate in the development of the practicum project as there was no clinical component or requirement. Development of the practicum project did provide me with an opportunity to combine my knowledge as a CNA certified Oncology Nurse with nursing and interprofessional frameworks. The project was planned, initiated, and co-ordinated based on an organizational determined priority. The combining of an organizational need, oncology nursing knowledge, theory, and evidence resulted in the development of an evidence-informed resource that will support nursing educators and the interprofessional team in providing person and family-centered collaborative care. It was necessary to have an understanding of how a person living with cancer is impacted by the disease and treatment, and the supportive role that is required from the interprofessional team, to determine the appropriate resources in the development of the orientation content.

Previous clinical experience helped to inform the problem-based learning activities that mirrored clinical situations. These activities will support team members to engage in problem solving at the individual level and further develop skill to guide complex team decision making.

The practicum project required utilization of several of the ANP research competencies in my practice. Critical analysis of qualitative and quantitative studies was carried out in the integrative literature review. This required the identification and synthesis of common themes related to ICP and education. These themes were then used to directly inform the nurse-led interprofessional oncology orientation. A result of the evidence from the research studies informing the project is that it will provide an opportunity to translate this information into practice should the program be piloted and evaluated at the BCCA Centre for the North.

An essential competency of research is to disseminate information. The practicum project has been disseminated through a practicum presentation at the Memorial University School of Nursing. In addition, an abstract has been prepared for submission to the Canadian Association of Nurses in Oncology (CANO/ACIO) conference occurring on Prince Edward Island in October of 2018. Further dissemination and sharing of the information will occur at BCCA Centre for the North to discuss the pilot project.

ANP leadership competencies were demonstrated in the completion of the practicum project. I have advocated for, and completed, an evidence-informed approach to address a learning need identified by clinical and administrative leaders at BCCA. To develop the project, initiation was taken to request a meeting with the Senior Director of

Regional Operations. During the meeting a discussion occurred in relation to an overview of the project proposal, goals, and vision. An agreement was made to review the completed project to consider a pilot implementation of the orientation at Centre for the North. In aligning with current organizational vision at the BCCA, leadership was demonstrated by developing a resource which will support the professional development of nurse educators and HCPS, and contribute to a collaborative culture.

At an ANP level, nurses need to consult with colleagues locally, provincially, and nationally in a timely and efficient manner (CNA, 2008). I believe that I have been able to demonstrate competencies of consultation through the key stakeholder interviews. Specifically, I formulated a plan and the methods to conduct consultation interviews, met with and interviewed the stakeholders, and reviewed the data for relevancy to inform the development of the practicum project. In conducting the interviews, I was able to demonstrate skill in effective and respectful communication, while ensuring that the stakeholders could provide complete answers and that note taking was accurate.

Next Steps and Future Recommendations

There are several steps that need to be taken to work towards implementation and further project dissemination with the completion of the nurse-led interprofessional oncology orientation. Arrangements have been made to review the orientation with the Senior Director of Centre for the North in September, 2017. This is necessary to receive final approval to pilot the project. Once approval is granted, a date that coincides with new staff hiring will be chosen to deliver the orientation. The initial orientation delivery

will be co-facilitated by the nurse educator and me. Toolkit access will be available to the nurse educator, and a planned meeting will be scheduled for review and questions.

Evaluation of the orientation would be an immediate priority. There is potential to evaluate many aspects of the orientation. Some of these include the facilitators experience and the experience of both the mentors and HCPs attending the clinical observation day. Even though there are examples in the literature that have described improvement in learners' knowledge, skills and understanding of ICP, it has been acknowledged by researchers that it is difficult to establish a direct relationship between interprofessional education and patient outcomes, (Brashers, Owen, & Haizlip, 2015; Cox, Cuff, Brandt, Reeves, & Zierler, 2016; IOM, 2015; Reeves et al., 2011; Reeves, Boet, Zierler & Kitto, 2015; Thistlethwaite, 2012; Zwarenstein et al, 2009). Taking this into consideration, a primary focus of the evaluation will be through the self-assessment of interprofessional competency application using the National Interprofessional Competency Framework Self-Assessment tool (CIHC, 2010), (see Appendix F). This tool has been adapted from the interprofessional competency framework. Users self-rate their ability to apply the competencies on a Likert scale ranging from never to almost always. HCPs attending orientation will be asked to complete the tool immediately pre and post the orientation, as well as three months post orientation. The purpose is to determine if self-rated use of interprofessional competencies remain constant, decrease, or improve for the HCP. Retention or improvement in use of interprofessional competencies would be considered positive and would support a formal request to implement the orientation at

all six BCCA Centres. In addition, evaluation of the Supportive Care Framework and cancer symptoms will need to be considered and developed.

Implementation and standardization of orientation at all BCCA Centres is the long term goal to support newly hired HCPs and to standardize orientation. This would take additional planning to communicate to BCCA leaders and nurse educators. Prior to facilitating, educators also need an opportunity to review the toolkit. This would occur by a pre-arranged video-link conference where the orientation toolkit could be shared and reviewed with them. During this session, successes and challenges that occurred during the pilot could be shared with the participants.

Future plans include project dissemination and pilot. An abstract has been prepared to submit to the CANO/ACIO National Conference taking place in October of 2018. If selected, this conference will provide an opportunity to share the information at a national oncology nursing forum. To address recommendations from the literature and stakeholders for ongoing interprofessional development opportunities, one recommendation is to develop interprofessional lunch and learn education sessions. The lunch and learn program is an accessible and popular in-person education forum at BCCA Centre for the North. Nurse educators could further develop problem-based learning sessions to offer interprofessional education for staff. These sessions could target all HCPs or be specifically planned to bring the orientation groups back together to reinforce their learning. The final recommendation, and a personal goal, would be to seek publication.

Conclusion

The completion of the practicum project provided the opportunity to follow a systematic process to plan, develop and consider the next steps for implementation of an education resource to address a gap for newly hired HCPs at the BCCA. The process included, undertaking an integrative literature review, identifying appropriate theories and frameworks, conducting interprofessional colleague consultations, and developing a nurse-led interprofessional oncology orientation. The results of the literature review and consultations informed the format and content of the project. Throughout the practicum project the four Canadian Nurses Association ANP competencies: (a) clinical, (b) research, (c) leadership, and (d) consultation, were demonstrated in my performance.

Evidence from the literature suggested that facilitators of interprofessional education need support and opportunities to develop their knowledge of ICP and education as well as leadership skills. Nurse educators at the BCCA are considered to be experts in oncology knowledge and skilled facilitators; however, they are new to facilitating interprofessional education. To support the nurse educators, the interprofessional oncology orientation was developed as a toolkit with resources to support independent facilitation of the program. Next steps include piloting and evaluating the nurse-led interprofessional oncology orientation at Centre for the North. Dependent on the evaluation results, there is potential to implement the orientation at all six BCCA Centres. An abstract has been prepared for submission to the CANO/ACIO conference and, if selected, will further disseminate information on the practicum project. The final personal goal is to write a manuscript and seek publication of this work.

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Appendix A

Integrative Literature Review

Development of a Nurse-Led Interprofessional Oncology Orientation: An Integrative Literature Review

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April 22, 2017

Development of a Nurse-Led Interprofessional Oncology Orientation

Over the last several decades, advancements in cancer treatments, care and decision making have become increasingly complex (Chen, Cheung, Spinelli, & Kennecke, 2016; Clauser, Wagner, Bowles, Tuzzio, & Green, 2011; Sumpio, Knobf, & Jeon, 2016). This increased complexity requires healthcare professionals (HCPs) to be highly specialized and to communicate and share responsibilities (Bunnell et al., 2013; James, Page, & Sprague; 2016). Historically, discipline specific education has led to barriers to collaboration through a lack of role clarity between team members, and the belief that individuals rather than teams assume responsibility for outcomes (Mitchell, Parker, Giles, & White, 2010; Thom et al.,
2016; VanKuiken, Schaefer, Hall, & Browne, 2016; Xyrichis & Lowton, 2007).

More recently, knowledge on the benefits of interprofessional education has led to a desire for multidisciplinary HCPs to work and collaborate within teams and share their expertise in patient-centered care plan development (Canadian Interprofessional Health Collaborative [CIHC], 2010). In Canada, interprofessional education is now being introduced to health professional programs in an intentional way at multiple universities (McGill University, 2017; Memorial University, 2017; Queens University, 2017; University of British Columbia, 2017). Despite this initiative, there are still many professionals who attend schools that have not yet incorporated interprofessional education in their programs. An example is the nursing program at the University of Northern British Columbia (2017), through which the majority of nurses working at BCCA Centre for North receive their education.

Interprofessional collaboration has been internationally recognized and recommended as an important framework to increase patient-centered care and system efficiencies (Canadian Interprofessional Health Collaboration [CIHC], 2010; Canadian Nurses Association [CNA], 2017; Interprofessional Education Collaborative [IEC], 2011; World Health Organization [WHO], 2010). These organizations promote that a move towards interprofessional education and collaboration has advantages for patients and HCPs, and provides a foundation to both strengthen and hold healthcare systems accountable. The importance of collaborative care has also been emphasized through the review of safety events. Reports from The Joint Commission, a large healthcare accrediting organization in the United States, identified that a lack of interprofessional communication has led to numerous adverse events, including death (The Joint Commission, 2004; 2008; 2017). In response to these events, recommendations to reduce risk were put forward calling for increased interprofessional practice through improved communication and collaboration, and revised orientation and education. Similarly, the Canadian Patient Safety Institute has developed safety competencies (Frank & Brien, 2009). Of the six safety competency domains, domain two is specific to interprofessional teamwork and outlines the necessary interprofessional components to enhance safety outcomes.

The CIHC (2010) has described interprofessional collaboration as the process of building relationships between HCPs, patients, and communities to improve the outcome for individuals and populations. Interprofessional education, according to the World Health Organization (2010) involves the process of learning the roles and perspectives of

other professionals, and creating new knowledge through learning together. The interprofessional education component is essential for relationship building, and contributes to interprofessional collaboration. Evidence on interprofessional teamwork has indicated that this collaboration improves patient-centered care through a reduction of errors and care fragmentation (Buscemi, Steglitz, & Spring, 2012; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013; Thom et al., 2016; Zwarenstein, Goldman, & Reeves, 2009).

It is important to note that HCPs often think that they are engaging in interprofessional practice when they are working in multidisciplinary teams. True interprofessional collaboration, however, occurs when the sharing of responsibility and knowledge between HCPs create new knowledge or a new way of providing patient care that did not previously exist (WHO, 2010). Even though evidence has suggested that interprofessional collaboration can maximize efficiencies and deliver comprehensive care; there remain challenges to both implementation and rigorous evaluation of interprofessional models of care (Lee, Fitzgerald, Downey, & Moore, 2012; Mitchell et al., 2010; Virani, 2012).

Background

Cancer is a leading cause of morbidity and mortality with approximately two out of five Canadians predicted to develop cancer (Canadian Cancer Statistics, 2016). On a global scale, cancer is also a priority concern due to the aging population and lifestyle factors such as, smoking and sedentary living with a projected 70% increase in incidence by 2035 (Jemal et al., 2011; Torre et al., 2015). For the year 2017, the projected number

of new cancer cases in the province of British Columbia (BC) is 27,776; an increase from 24,757 in 2013 (BCCA, 2014). Ambulatory cancer services for adult patients on active treatment in BC are provided through the BC Cancer Agency (BCCA). The BCCA is a large provincial organization comprised of six regional centers strategically located throughout the province to deliver radiation and systemic therapy to people within their geographical region. Newly hired HCPs, though extensively trained in their discipline, frequently have minimal to no oncology or interdisciplinary education. This is not surprising for nursing, as oncology nursing is a specialty and requires additional training that is not part of an undergraduate curriculum (Canadian Association of Nurses in Oncology [CANO/ACIO], 2015; Such Lockhart et al., 2013). Information collected on nursing orientation surveys at the BCCA indicate that approximately 80% of Registered Nurses (RNs), when employed, have no previous oncology experience (BCCA, 2013).

Despite limited exposure to oncology curriculum in undergraduate nursing education, the practice and competency standards of the Canadian Association of Nurses in Oncology (CANO/ACIO, 2006) consider RNs with an oncology focus as specialists. In response to the high number of newly employed RNs with no oncology experience, and to align with national standards, Professional Practice Nursing at the BCCA developed and implemented a standardized nursing orientation in 2011. The orientation developed on a framework of adult learning theory, in part provides information related to supporting people with cancer, and cancer biology and treatment principles. Yearly program evaluation has been completed by the Professional Practice Nursing Team. This evaluation included two post-surveys completed by RNs who attend orientation and

occur immediately and one month following the orientation program respectively. All orientation surveys were distributed electronically, and did not include personal identifiers. The provincial nursing orientation evaluation report in 2013, which occurred two years following implementation, also included a clinical nurse leader survey. The 2013 evaluation of the program indicated that RNs completing the orientation had acquired baseline oncology knowledge and were more prepared upon entering the clinical area (BCCA, 2013). Although yearly evaluations continue to reflect these positive findings, it has not led to other professions developing similar programs.

Clinical and administrative leaders at the BCCA have identified that the lack of a structured orientation program is a gap in educational support for HCPs entering oncology practice at this organization. A nurse-led interprofessional oncology orientation was requested by the leaders, so that other professions could benefit from the nursing educators expertise in both oncology knowledge and orientation facilitation skills. The concept and timing of a nurse-led interprofessional oncology orientation is important because the BCCA is currently undergoing organizational restructuring. To establish a structure that is responsive to improving the patient experience in outpatient cancer care, nursing and allied health professionals have been situated within the portfolio of Patient Experience and Interprofessional Practice.

This new alignment towards a patient-centered and interprofessional reporting structure is consistent with current recommendations to expand interprofessional collaboration in healthcare settings (CIHC, 2010; IEC, 2011; WHO, 2010). The new structure, was established at the BCCA following the results of two provincial outpatient

oncology patient experience surveys that were completed by greater than 6,000 respondents per survey (Black, Mooney, & Peterson, 2014; Watson, Mooney, & Peterson, 2007). The survey respondents were adults living in British Columbia who either had cancer or were a family member of someone with cancer. Analysis of both surveys brought forth information regarding perceived gaps in supportive care. Examples where patient experience could be enhanced were in communication, care coordination and education, and psychosocial support. Increased interprofessional collaboration could address these gaps; however, HCPs have not been provided any additional education or resources to support interprofessional practice. It can therefore be argued that an interprofessional oncology orientation would be strategically placed to provide interprofessional collaborative practice education and support to new BCCA employees in the context of oncology practice. This is an essential first step as HCPs must have the opportunity to acquire interprofessional knowledge through education and application in order to integrate it into clinical practice (WHO, 2010).

According to Palaganas, Epps, and Raemer (2014), when orientation is provided in an interprofessional setting, the resulting collaborative teamwork can potentially enhance outcomes. An interprofessional oncology orientation would therefore, provide an opportunity to introduce common knowledge and determine mutual goals (Xyrichis & Lowton, 2007). A nurse-led interprofessional oncology orientation would align with the BCCA's commitment to an interprofessional practice setting, and increase nursing leadership at both direct care and organizational levels. The aim of this integrative literature review was the following: (a) to identify and present the themes from the

literature that relate to interprofessional collaboration and education, and (b) to present relevant theory and frameworks that can provide a foundation to the nurse-led interprofessional oncology orientation.

Review Framework and Literature Retrieval Process

The framework for integrated reviews introduced by Whittemore and Knafl (2005) was followed to add rigour to the integrative literature review and establish a consistent approach. The literature review framework directed an orderly progression of "a problem formulation stage, a literature search stage, a data evaluation stage, a data analysis stage, and a presentation stage" (Whittemore & Knafl, 2005, p. 548). The broad question that initially guided the review was: What is known about interprofessional collaboration and education in the context of healthcare? The systematic literature search was conducted in the following databases: CINAHL, PubMed, ProQuest, and Cochrane databases. The initial search terms combined interprofessional with practice, education, teamwork, care, and collaboration. These were also searched in an oncology and healthcare context. The eligibility criteria for study inclusion were: peer reviewed English articles between the years 2010 to present. Substantial reviews that were greater than five years, such as, those retrieved from the Cochrane database, were also included in the review.

After the initial results, the search terms were expanded to include collaborative teamwork, team-based collaboration, team-based learning, and team-based care. Screening for article inclusion occurred through a scan of results for appropriate titles. The next screening step was a review of the abstracts for relevant content, followed by appraisal and critique of the study and methods. The literature search stage was an

iterative process. During this process further articles were retrieved through relevant articles referenced in reviewed studies and searches in the *Journal of Interprofessional Care* and the *Journal of Interprofessional Practice and Education*. The 21 studies included in the review were five quantitative studies, six mixed methods, eight qualitative studies, and two reviews from the Cochrane data base. The quantitative study appraisal was guided by the Public Health Agency of Canada's Infection Prevention and Control Guidelines: Critical Appraisal Tool Kit (Public Health Agency of Canada [PHAC], 2014). The qualitative study appraisal was guided by the critical appraisal skills programme (CASP) (Critical Appraisal Skills Programme, 2013). Detailed information on individual study appraisal has been included in a summary table located in the appendix.

Collaborative Practice

Current research on interprofessional collaboration has revealed both benefits and existing barriers to collaborative practice (Bilodeau, Dubois, & Pepin, 2015; Hepp et al., 2016; Jacobs, Beyer, & Carter, 2017; Lee et al., 2012; San Martin-Rodriguez, D'Amour, & Leduc, 2008; Reeves et al., 2013; Weaver, Callaghan, Cooper, Brandman, & O'Leary, 2015; Zwarenstein et al., 2009). An understanding of the benefits and barriers help to provide insight on how these could influence the development of interprofessional education, or impede program facilitation.

Collaborative Practice Benefits

Interprofessional collaboration in a clinical setting has been associated with direct patient benefits. Among these are increased satisfaction with care and services, increased

care coordination, a more consistent approach, and improved symptom management and outcomes (Lee et al., 2012; San Martin-Rodriguez et al.,, 2008; Reeves et al., 2013; Zwarenstein et al., 2009). Interprofessional collaboration has also shown benefits for HCPs. Evidence on interprofessional teams that function collaboratively has shown improvements in practitioner knowledge, skill and confidence, and HCP delivery of patient centered education (Jacobs et al., 2017; Reeves et al., 2013). These benefits are consistent with the rationale within the *Framework for Action on Interprofessional Education and Collaborative Practice* (2010) based on five decades of research (WHO, 2010).

Although reduced length of hospital stay was reported as a benefit, this was not supported in a Cochrane systemic review of randomized controlled trials (RCTs) in interdisciplinary care (Zwarenstein et al., 2009). In the review, Zwarenstein et al. (2009) determined that the evidence was weak due to faults in study size and design. Two additional sources that were reviewed also did not support the finding (San Martin-Rodriguez et al., 2008; Reeves et al., 2013). The study conducted by San Martin-Rodriguez (2008) was a descriptive cross-sectional study that included four physicians, three residents, 27 nurses, and 312 patients. One of the study objectives was to identify if interprofessional collaboration had an effect on length of hospital stay. Strengths of this study included a theoretical base, along with a rigorous design and strong internal validity. The results of the analysis revealed no statistical significance in length of stay in relation to interprofessional collaboration ($p= 0.217$). An important limitation was the study revealed subsets among patients, and that interprofessional collaboration had a

greater impact on the subset of very ill patients. The study however, was not large enough for statistical analysis within these subsets. Similarly, in the systemic review conducted by Reeves et al. (2013), the authors assessed analytic studies comparing the impact of an interprofessional education intervention to single profession education interventions or no interventions. Fifteen studies met the eligibility criteria and were assessed independently. The authors were not able to determine statistical significance in length of hospital stay, but reported that a major limitation was small study sizes. A reasonable conclusion is that the research studies to date have been of inadequate size to evaluate the effect of interprofessional collaboration on the length of hospital stay.

Although studies on interprofessional collaboration have demonstrated increased patient satisfaction, a finding by San Martin-Rodriguez et al. (2008) revealed a variation in increased satisfaction within different demographic subgroups. These authors reported a statistically significant increase in satisfaction in two patient subgroups; those with a university education ($p< 0.001$) and those who self-rated their health as fair, poor, or very poor ($p< 0.001$). A reasonable conclusion is that those with higher education have higher expectations of their care and also have the ability to recognize advantages of interprofessional care. For patients who self-rated their health as less than good, more complex needs often trigger multiple consults (Hepp et al., 2016; Lee et al., 2012); thus potentially exposing this subgroup to increased interprofessional collaboration and improved outcomes. This finding warrants further study with larger sample sizes and qualitative investigation to gain an understanding of the experiences of the subgroups. Overall, further analysis and defining of improved patient outcomes would be important

to guide metrics for evaluation of the impact of interprofessional practice at BCCA.

Collaborative Practice Barriers

While there were several benefits, there were also barriers to interprofessional collaboration present in the literature. Interprofessional collaboration is founded on a patient-centered approach (CIHC, 2010; WHO, 2010). Although patient-centered care is best practice, it can be challenging to achieve due to healthcare system structures and competing priorities. Barriers revealed were patient complexity, physical space, late consultation, negative attitudes, a lack of leadership, and team member availability for collaboration (Bilodeau et al., 2015; Weaver et al., 2015). These barriers are all relevant to teamwork in an ambulatory care setting, and can result in limiting interprofessional collaboration.

It is also important to recognize and address HCP and role specific barriers to interprofessional collaboration. In a secondary analysis of qualitative data by Hepp et al. (2015), the barriers resulted from a lack of role clarity, the evolving HCPs scope of practice, and time constraints (Hepp et al., 2015). The authors examined previously collected data of six acute care units from three large healthcare facilities in Alberta, Canada to identify themes related to the CIHC framework and recommend strategies to improve interprofessional collaboration. The number of participants interviewed during the primary study was 113. The study was large for a qualitative study, however, it included 10-15 diverse HCPs from each unit. Strategies to reduce barriers suggested by these authors included staff empowerment, shared responsibility, and clear guidelines. Therefore, in order to achieve the reduction of barriers, HCPs must be able to understand

and articulate their role in supporting patients to other team members.

An additional barrier to teamwork and interprofessional collaboration that was repeatedly recognized by HCPs was hierarchies within organizations and between professionals groups (Azur et al., 2016; Bilodeau et al., 2015; Hepp et al., 2015; Weaver et al., 2015). A cross-sectional study conducted by Weaver et al. (2015) set in a large teaching hospital in the United States was of moderate strength with 126 participants completing the questionnaires. The identified contributors to hierarchy barriers were a lack of hierarchy awareness from physicians, and difficult communication between physicians and other team members. Though the study had good internal validity, limitations identified were all female participants and an uneven professional distribution of participants. This in isolation would limit the generalizability of the findings; however, the study is strengthened through the similarity of findings with other studies (Azur et al., 2016; Bilodeau et al., 2015; Hepp et al., 2015).

The hierarchy barrier is an important finding for BCCA as hierarchies currently exist in this organization. Organizational leadership and care delivery systems at BCCA historically have been designed to support medical governance and a medical model of care. Though there is a current shift towards an interprofessional reporting structure for the supportive care disciplines, medical governance at BCCA remains. The residing President is a Medical Oncologist, and the leadership dyads at each of the six centres are comprised of a Regional Medical Director role held by a Radiation or Medical Oncologist, and a Senior Director of Clinical Operations which is held by varying HCP disciplines throughout the six centres. For interprofessional collaboration to occur,

hierarchies must be reduced in the organization. An upstream approach where organizational leadership takes responsibility to communicate direction, set expectations through supportive policies and guidelines, and create space and opportunity for collaboration to occur is a necessary step (Chatalalsingh & Reeves, 2014; WHO, 2010). Data from qualitative studies identified that purposeful reflection at all levels- organizational, relationships, and processes; is necessary to help create engagement, mutual respect, and relationship formation (Shaw, Howard, Etz, Hudson, & Crabtree, 2012). Having a commitment to interprofessional practice that starts with organizational leadership and engages all HCPs, will assist in removing organizational and HCP hierarchies and replace them with interprofessional collaborative processes.

Interprofessional Education

True interprofessional practice requires a culture change (WHO, 2010). Education is a necessary component for HCPs to develop an understanding of interprofessional collaboration, and provide the catalyst for culture change to occur. Educational strategies assist the process by influencing and changing HCPs perspectives and creating a new way of working together (WHO, 2010). Current evidence on interprofessional education will be used to inform the development of a nurse-led interprofessional oncology orientation. This section will present the interprofessional education themes that were identified in the literature review.

Education Setting

Research on HCP interprofessional education was available in both the academic and clinical settings. Current recommendations are for interprofessional education to be

initiated in undergraduate and graduate education (IEC, 2011; WHO, 2010).The intention is for HCPs to be skilled in interprofessional competencies when entering the workforce and thus, positively impact patients and care delivery systems (IEC, 2011). Despite this recommendation, there were positive aspects and drawbacks to interprofessional education in academic and clinical settings.

Findings from the analysis of interprofessional education in the academic setting have revealed that the sessions were effective for student perceived increased knowledge, and confidence in skill development and future clinical use (Black, Blue, Davidson, & McCormack, 2016; Chou, Ainsworth, & O'Brien, 2016; Head et al., 2016; Konrad, Cavanaugh, Rodriguez, Hall, & Pardue, 2017). Although the results of receiving interprofessional education in an academic setting were positive, there was a lack of strong analytic studies; with a noted gap in evaluation of the long term effects of knowledge acquisition and retention. Interprofessional education sessions were often evaluated with uncontrolled before and after surveys or session content tests which indicated improvements immediately following a session (Black et al., 2016; Head et al., 2016; Konrad et al., 2017). Even though learners rated high confidence in skill development for future application, it was not demonstrated that this would translate to retention and successful skill application as a practicing professional in a clinical setting. It must also be taken into account that the evaluations of improvement were often self-reported. Self-reports can carry a response bias which could decrease the validity of the results (Polit & Beck, 2012).

Evaluation of interprofessional education completed by professionals practicing in

a clinical setting also showed positive findings (Heath et al., 2015; Jacobs et al., 2017; Martins & Lairamore, 2016; McLeod, Curran, Dumont, White & Charles, 2013). Results from these studies revealed that interprofessional education and knowledge exchange increased self-confidence and confidence between disciplines, provided role clarification, and generated mutual respect (Jacobs et al., 2017; McLeod et al., 2013). As discussed by Heath et al. (2015), it is important to consider that interprofessional education when provided for practicing HCPs supported relationship building within teams that work together. In addition, interprofessional education provided in the clinical setting, allowed for immediate application of new skills and the development of relationships within a workplace interprofessional team.

In a RCT with 319 participants from six different professions, Martins and Lairamore (2016) randomized participants into two groups. Both groups received identical education and instruction with the only difference being the addition of a concept mapping activity for one group. Validated questionnaires were used to collect data on adaptability and interprofessional education perception. Using multiple regression analysis, adaptability was calculated in the first step and showed a significant change in result of the interprofessional education perception scale ($p < 0.01$). The second step calculated both adaptability and the amount of post-secondary education which also resulted in a significant change in score ($p < 0.01$). The results of the analysis identified that roughly 24% of score variation was attributed to adaptability and 29% to adaptability and amount of post-secondary education. This study supports providing interprofessional education in the clinical area as practicing HCPs have numerous years of post-secondary

education, and work in an environment where adaptability is common.

Messaging and Engagement

The literature on interprofessional education showed that the messaging communicated to HCPs was important for engagement in interprofessional collaboration. Creating a context in which interprofessional education is seen to add value to both patient care and a HCPs current role is an important aspect to consider (Black et al., 2016; Derbyshire, Machin, & Crozier, 2015; McLeod et al., 2013) when developing interprofessional education programs. This in part, should occur through the organizations vision, leadership, and messaging. The IEC (2011) discussed the importance of strategically creating engagement between education and practice as a necessary component for interprofessional education programs to be successful in influencing culture and lasting change. Therefore, it can be argued that clear and transparent communication around vision and goals will help towards establishing the engagement needed for the success of the nurse-led interprofessional oncology orientation program's success.

Facilitator Characteristics

For nurse educators at BCCA to deliver interprofessional education they must be skilled facilitators, oncology knowledge content experts, and have an understanding of interprofessional competencies. This requires more than just advanced class preparation. The facilitator has to be able to integrate the interprofessional competencies into information exchange in the education sessions (Derbyshire et al., 2015; McLeod et al., 2013). The facilitator must also be adaptable to allow this information exchange to occur

through the HCPs sharing expertise (Carlson, Pilhammar, & Wann-Hansson, 2011; Derbyshire et al., 2015; Johnson et al., 2015). These findings support the process of interprofessional education occurring through the interaction between professionals as they learn from and teach each other. It is also presented in the literature that facilitators of interprofessional education need to create the interprofessional practice connection between the differing HCP groups through removing barriers and developing common understanding (Carlson et al., 2011; Johnson et al., 2015).

Facilitators of interprofessional education are responsible for capitalizing on critical moments where HCPs can bring forward their own knowledge to assist with role clarification and the creation of shared knowledge. This will assist with working towards common patient-centered goals, while setting the tone for respect and session expectations (Black et al., 2016; Carlson et al., 2011; Johnson et al., 2015; McLeod et al., 2013). The facilitators are essential in forging early relationships which help to reduce hierarchal positioning (Carlson et al., 2011; McLeod, 2013). In addition, facilitators must act as role models to create and sustain group culture (Carlson et al., 2011; Derbyshire et al., 2015; Johnson et al., 2015; McLeod et al., 2013). This will be an essential component at BCCA, since there is a desire to transform to an interprofessional culture.

It has been requested that nurse educators at BCCA facilitate the interprofessional oncology orientation. In support of this, there were two studies in the literature where nurses successfully facilitated interprofessional education (Carlson et al., 2011; Johnson et al., 2015). In addition, other studies on interprofessional collaboration and education have identified nurses as having the expertise and leadership skills that are compatible

with interprofessional collaboration and education (Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014; Derbyshire et al., 2015).

Education Strategies

Research on interprofessional education provided examples of effective education strategies that were similar in both the academic and clinical settings (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw et al., 2012). Activities that involved critical thinking and knowledge application were prominent. Examples of these activities were problem-based case studies, reflective journaling, and practice simulation (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw et al., 2012). In a mixed methods study conducted by Jacobs et al. (2017), 49 Occupational Therapy and Nursing students attended an education session that involved working together in a simulated experience. Though a small study, the quantitative analysis of the pre/post surveys revealed a statistical improvement in the perception of the other profession by both nurses ($p= 0.02$) and occupational therapists ($p= 0.00$) (Jacobs et al., 2017). Qualitative data from the same study revealed that participants reported increased confidence and skill. Educational strategies assist in creating the atmosphere for developing interprofessional communication and relationships, while maintaining patient-centred outcomes. It is important that the educational strategies include group work and interaction to encourage knowledge sharing and relationship development (Azur et al., 2016; Head et al., 2016: Jacobs et al., 2017).

An interesting finding from a RCT conducted by Martens and Lairamore (2016) is that the concept mapping was not found to have statistical significance between groups.

Though the study used validated tools, the survey response rate of the evaluation component was only 50%. This potentially affected the power to determine statistical significance and would warrant further examination. In addition to the individual learning strategies discussed, there is the potential to include creatively designed blended learning methods when developing interprofessional education. An example of this was in the mixed method study conducted by Head et al. (2016). In this study, 373 participants attended a multi-modal education session which delivered content through independent study via online modules and was shown to be effective in combination with interactive group activities (Head et al., 2016).

Program Analysis

Due to a lack of strong analytical studies, the literature review did not reveal robust data on long term interprofessional education program impacts. Recommendations from many of these studies were for more analytic evaluation studies and long term analysis to determine program effectiveness (Black et al., 2016; Reeves et al., 2013). In a review on interprofessional education, Reeves et al. (2013) noted that much of the analytic research lacked rigour and recommended an increase in large well designed RCTs to develop the interprofessional education knowledge base. At present, well designed RCTs on interprofessional practice remain limited. These recommendations are important to consider when planning an interprofessional orientation program, and will help to inform evaluation strategies that are beneficial to both the BCCA and to increase knowledge generation on interprofessional education and practice.

Interprofessional Leadership

Interprofessional leadership was a recurring theme throughout the literature on interprofessional collaboration and education. Organizational leadership was discussed by Lee et al. (2012) as necessary to identify and communicate a transparent vision for interprofessional practice. The purpose was to promote staff engagement and to work towards a culture shift. In this mixed methods study, there were several limitations related to a focus on cost efficiencies and hierarchies. This bias may have influenced the organizational recommendation to have an interprofessional model of care. Data revealed inconsistencies from organizational leaders who requested an interprofessional model of care, even though the majority of leaders advocated for a physician-nurse dyad in which physicians defined nursing roles regardless of nursing guidelines (Lee et al., 2012). This emphasized the need for organizational leaders to develop policies and guidelines to support HCPs within an interprofessional team (Chatalalsingh & Reeves, 2014).

Leadership characteristics are also needed for the facilitation of interprofessional education and interprofessional practice by direct care staff. Facilitators of interprofessional education are responsible for modeling interprofessional values and behaviour, must be knowledgeable in their clinical specialty area, and skilled in transformative leadership qualities (Carlson et al., 2011; Derbyshire et al., 2015; Johnson et al., 2015). To ensure educators are supported, organizational leaders are required to provide facilitators of interprofessional education with leadership development opportunities. When determining the responsibilities in clinical practice, there were examples available in the literature that emphasized the importance of leadership characteristics in HCPs who are engaging in interprofessional practice (Azur et al., 2016;

Bilodeau, 2015; Chatalalsingh & Reeves, 2014). HCPs providing direct care need to champion interprofessional competencies for their team members. In addition, clinical frontline leadership support is necessary for continued interprofessional learning and relationship development.

Available evidence has identified leadership qualities in nurses that are necessary to support interprofessional collaboration and reduce barriers (Azur et al., 2016; Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014; Johnson et al., 2015). The findings from three separate studies indicated that nurses were valued as leaders by interdisciplinary team members and had the skill set necessary to communicate, organize, lead, and participate in interprofessional teamwork (Azur et al., 2016; Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014). In a well-designed ethnographic study conducted by Chatalalsingh and Reeves (2014), 35 interprofessional participants were observed over nine months. Data collected from the observation and interviews totalled 550 hours. Findings from the study revealed that situational leadership qualities were essential and emerged in both formal and informal leaders, indicating the need for adapting to situation and team member needs as they arise. These qualities were considered necessary to provide mentoring and support of interprofessional competencies at the level of direct patient care.

Orientation Framework

A nurse-led interprofessional oncology orientation at the BCCA will be a critical step towards transforming practice and aligning with the organizations strategic direction. It is a complex endeavour that must take into consideration educational content informed by the needs of the oncology population, interprofessional competencies, and adult

learning principles. Development of the content will be guided by: (a) the National Interprofessional Competency Framework (CIHC, 2010), (b) Fitch's (2008) Supportive Care Framework, and (c) Knowles' Theory of Andragogy (1984).

Interprofessional Competencies

The purpose of implementing a nurse-led interprofessional oncology orientation is to provide an entry point into the BCCA that integrates a patient-centered collaborative approach to oncology practice. The National Interprofessional Competency Framework (CIHC, 2010), lists the six competencies as:

- interprofessional communication,
- patient/client/family/community-centered care,
- role clarification,
- team functioning,
- collaborative leadership, and
- interprofessional conflict resolution.

The integrative literature review supports introduction of interprofessional education at the clinical level (Jacobs et al., 2017; McLeod et al., 2013) but more importantly, has provided evidence that how the learning occurs is the most valuable consideration for fostering collaborative teamwork (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw et al., 2012). Integration of the six interprofessional competencies into group interaction and learning activities will provide the opportunity for all HCPs to learn about their roles from one another. It will also provide an opportunity to have problem based group work that involves critical thinking, contributions from individual disciplines, and

knowledge application.

Supportive Care Framework

The focus of a nurse-led interprofessional oncology orientation will be to incorporate interprofessional competencies into a program that fosters team and relationship building while engaging in a curriculum that provides knowledge and understanding of the specific needs of the oncology population. Consideration must therefore be given to the following: (a) incorporating appropriate oncology information and (b) developing the education program based on principles of adult learning. A foundational model for the BCCA Nursing Orientation is Fitch's (2008) Supportive Care Framework. This framework has informed cancer education, models of care, and supportive care guidelines both nationally and internationally (Busolo, & Woodgate, 2016; Canadian Association of Psychosocial Oncology [CAPO], 2020; Cancer Australia, 2017; Cancer control Alberta, 2016; Cancer Journey Portfolio, 2012). First developed as a model to inform cancer care education programs, it identifies seven need categories of people with cancer which include: physical, informational, social, spiritual, psychological, social and practical. The supportive care framework is an appropriate model to deliver interprofessional competencies through an oncology population knowledge base within a relationship based philosophy.

Theory of Andragogy

Consideration to applying the appropriate education theory must also be taken into account when developing education for adult learners. It can be anticipated that HCPs starting employment at the BCCA will have already acquired knowledge and educational

experiences, as well as have preferential ways of learning. A theory that is well suited for professional adults is Knowles' Theory of Andragogy (1984). Knowles (1984) based the theory of adult education on the assumptions that learning in adults is:

- self-directed,
- builds on previous knowledge and experience,
- problem-based learning set in a real life context,
- connected to a readiness to learn, and
- intrinsically motivated.

In the context of interprofessional education, the goal of participants learning from each other, and the recommended problem based interactive learning activities align with these assumptions.

In addition to the assumptions, Knowles (1984) also presented principles of adult learning. The first principle requires that learners be included in the education planning. In the development of the nurse-led oncology orientation, key stakeholders will be consulted to gather information. Though the consultations are an indirect involvement, information from the consultations will help to inform the program. Direct involvement in planning will be taken into consideration for the interactive education session. An example will be the inclusion of shared class learning principles. Similar to ground rules, shared learning principles are a set of guidelines and boundaries for respectful learning that are developed and agreed upon by the learners at the beginning of the session.

The second principle set by Knowles (1984), is for learning activities to be based on experience or gaining experience. Creating a safe environment where learners can

make and learn from mistakes is an essential component of this principle. Previous and new experience will occur in the context of learning with and from each other as participants share their professional knowledge, and define their role for others, in the context of case based oncology supportive care scenarios. The provision of education that is relevant to their work is the third principle put forth by Knowles (1984). This principle will be met as the orientation program will be aimed at increasing skill in interprofessional collaboration and provide knowledge on the supportive care needs of the oncology population for new employees.

The final principles to consider are centered on problem-based learning and a need to understand the reasons why they are learning (Knowles, 1984). This is connected to the knowledge being relevant and practical. In the setting of interprofessional education, it emphasizes the need to demonstrate how the competencies apply to the oncology setting and their relevance to safe patient care and enhanced outcomes.

Conclusion

Interprofessional collaboration is a recommended direction for healthcare on a national and international level (Canadian Interprofessional Health Collaboration [CIHC], 2010; Canadian Nurses Association [CNA], 2017; Interprofessional Education Collaborative [IEC], 2011; World Health Organization [WHO], 2010). Organizational restructuring at the BCCA has placed an emphasis on interprofessional collaboration through the implementation of a new reporting structure for nurses and allied health professionals titled Patient Experience and Interprofessional Practice. A review of the literature revealed benefits and barriers to current interprofessional collaboration. Also

revealed were themes related to collaboration, education and leadership. Although there are strong recommendations for interprofessional collaboration and education, the literature revealed gaps in program evaluation. A recommendation from multiple reports in the literature was for future studies to increase the size and rigor of RCTs and long term evaluation of interprofessional education programs in healthcare.

Through taking the lead in the development of a nurse-led interprofessional oncology orientation at BCCA, there is an opportunity to increase nursing leadership within the organization at both organizational and direct care levels. Frameworks and theory that have been presented to support the nurse-led interprofessional oncology orientation program are: (1) The National Interprofessional Competency Framework (CIHC, 2010), (2) the Supportive Care Framework (Fitch, 2008), and (3) the Principles of Adult Learning (Knowles, 1984). Interprofessional competencies will be informed by the National Interprofessional Competency Framework, (CIHC, 2010) and incorporated into the course curriculum and interactive learning activities. The increasing complexity of cancer care makes interprofessional collaboration a priority for the oncology population. This move towards increased interprofessional collaboration in cancer care will directly impact oncology nursing practice. It is therefore important that theoretically based interprofessional education programs within an oncology focus be developed. Evaluation of these programs would be beneficial in generating new nursing knowledge within the context of interprofessional oncology practice.

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Appendix A1: Literature Summary Table

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
1. Author: San Martin-Rodriguez et al., **Date:** 2008 **doi:** 10.1097/01.NCC.0000305701.99411.ac **Objective:** To identify effect of interprofessional (IP) collaboration on (1) patient satisfaction (2) amount of uncertainty with info received, (3) pain management, (4) length of admission.	Quantitative/Descriptive Cross-sectional study -Setting: Spanish teaching/tertiary care 450 bed hospital -Professionals and patients sampled from four oncology sites -Sample: o n=4 physicians o n=3 residents o n=27 nurses o n=312 patients -Inclusion: receiving oncology treatment, Spanish speaking/ able to answer questionnaires -Ethics approval from University and Hospital review boards	-Tested and validated questionnaires: o Intensity of Interprofessional Collaboration Questionnaire o Press Ganey In-patient Survey Questionnaire o Mischel Uncertainty in illness scale for adults questionnaire o Pain Management Index -Admission sociodemographics questionnaires, patient health record and hospital database also used	**Increased interprofessional collaboration promotes:** -increased satisfaction with very ill and educated patients -decreased uncertainty & inconsistency -increased coordinated education -Improved pain management -No significant difference in length of hospital stay	**Moderate: High quality Strengths** -Theory based -Oncology based -Statistical analysis sound with narrow CI and demonstrated tables and graphs **Limitations** -Study subsets not large enough to determine if interprofessional collaboration could impact hospital length of stay -Limited to one care facility -Cultural and language limitations -Authors state results can be generalized in other settings. May not be accurate and replication in other settings is

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
				recommended.
2. Author: Lee et al., **Date:** 2012 **Journal:** http://www.nursingeconomics.net/cgi-bin/WebObjects/NECJournal.woa **Objective:** To identify appropriate models of ambulatory cancer care	-Mixed Methods; Literature review and Qualitative semi-structured interviews -Search in CINAHL & EMBASE, limits english1998-2011, grey literature searched on GOOGLE and Cancer Centre web site. Interprofessional and multidisciplinary among key words. Review =24 articles -Study participants were international senior administrators of cancer centres. N=10	-Literature search results: o two independent reviewers o Inclusion: model of care intervention included in detailed review o Literature evaluated on pre-set criteria, empirical tests models of care, & feasible in ambulatory oncology setting -Interviews: o 40 min. in length o Recorded then analysed for content o Results verified by second researcher	-No conclusive empirical evidence to recommend specific models of care -Key Themes to include in Model of care: o Patient centred o Interprofessional/ collaborative -Both positively impacted patient satisfaction, care coordination, clinical outcomes, & efficiency -Leaders unaware of how models translate to care. -QI initiatives driven by clinical situation (workload complex care etc.)	**Moderate: Medium quality** **Strengths** -Picture of clinical reality -Large review -Strong search method **Limitations** -Focus on efficiencies for cost savings -Lack of consistency in evaluation of care outcomes in models of care decreased validity of recommendations -Failed to recognize bias - Does not provide the background of senior leaders **Recommendations:** research on interprofessional collaboration and quality of care a priority
3. Author: McLeod et al., **Date:** 2014	-Mixed Methods: UCBA and qualitative analysis	-All participants invited to complete pre/post online surveys	**IP Messaging Essentials:** -Important to patient-	**Moderate: Medium quality** **Strengths**

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
doi: 10.3109/13561820.2013.863181 **Objective :** To evaluate: (a) how a web based IP course influence knowledge, attitudes & beliefs re: IP care (b) which attributes of the course are most effective	-Two groups of learners in course. o Graduate students n=73. (nurses and social workers) Mean age 34.1 yrs. o HCPs n= 137 mainly nurses. Mean age 42.7 yrs.-Timeframe 2008-2010 • Ethical approval obtained	-47% response rate -Statistical comparison of pre/post course knowledge & attitudes -Validated IP questionnaire -Analysis of narrative answers to questions	centered care -Mutual respect -IP practice takes work -IP practice important to HCP wellbeing **Facilitator characteristics:** - Recognize HCPs differences-similarities -Develop vision via role modeling -Develop skills via dialogue/ collegiality **IP Practice requires:** -Expert knowledge -IP competencies (promote role clarity, mutual respect, trust, collaboration) -Role flexibility -Patient-centered care	-Results support other studies on IP practice -Theory based study -Qualitative component allowed for facilitator and IP practice themes to emerge **Limitations** -Study showed one point in time increase in knowledge -Not clinical application -Learning was in teams that would work together -Low survey response rate -Self-report measures and potential positive bias
4. Author: Derbyshire et al., **Date:** 2015 **doi:** 10.1016/j.nedt.2014.05.001**Objecti**	Qualitative Grounded theory -Theoretical sampling -N=9 (nursing, physiotherapy, OT, social work &	-Email invitation sent to 30 faculty members with questionnaire to provide sampling information -Participant one was chosen as gatekeeper (for	**Four categories:** -Readiness for IP facilitation -Role modelling an IP approach -Drawing on past	**Strong: High quality** **Strengths:** -Theory based study -Rigorous methods -Well defined and demonstrated

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
ve: To identify how educators in a IP learning environment determine knowledge & skills for facilitator role	midwifery) -Physicians excluded -Informed consent & ethics approval	expert knowledge) -Semi-structured individual interviews -45 mins. In private location. Audio recorded -Constant comparative analysis of data until data saturation -Recordings transcribed verbatim and coding through analysis -thematic coding as knowledge built through consecutive interviews	experiences -Creating and sustaining group culture through transformational leadership (core category for theory formation) Leadership development needed for IP facilitator role	-Reached data saturation -Produced viable theory that can be tested in practice **Limitations:** -Produced theory however theory needs to be tested
5. Author: Black et al., **Date :** 2016 **doi:** http://dx.doi.org/10.1016/j.xjep.2016.09.002 **Objective:** Assess effectiveness of IP team based learning (TBL) in (1) knowledge acquisition (2)	-Prospective longitudinal study occurring over one yr. - three cohorts - total participants N=1896 (n1=639, n2=626, n3=631) -10 health disciplines - ethics approval -large American university with professional education structured	-Three- two hour learning sessions per cohort -Two pre- questionnaires given at each session to test (a) individual readiness (b) team-based readiness. -Post-questionnaire team competency based -100% completion rate -Statistical analysis to determine changes within each profession over time	-Significant improvement in individual readiness in nursing, medical, OT -All groups improved significantly on team based readiness -TBL effective to deliver content specific education in IP groups/settings - Important to Recognize individual	**Moderate: Medium quality** **Strengths:** -Large study involving 10 disciplines -100% completion rate for individual readiness and team based readiness scales -Correlates with previous evidence on TBL. -Concludes that TBL effective method for IP

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
team skill application (3) TBL skills to increase performance outcomes	by separate colleges		contributions -necessary to accept the value of different roles	education sessions **Limitations:** -Measurement tool has been used at various institutions but not rigorously validated -No control group or prior testing -Potential for group bias *An RCT would add strength
6. Author: Chou et al., **Date :** 2016 **doi:** 10.1016/j.xjep.2015.12.003 **Objective:** To assess learners (a)communication skills with patients and IP colleagues (b) conflict management with IP colleagues	Qualitative analysis of graduate level case-based simulation training. -Study length: two yrs. -Participants: N=13 (n=4 NP residents, n=9 internal medicine residents), -large US based medical centre	-two case IP simulated clinical examines of complex patients to evaluate interactions with clients and IP colleagues. -four additional professional situation cases within the two -All sessions 25 min -Sessions video and audio recorded -Transcribed and scored -Focus group follow up with all participants to determine authenticity of	-Interprofessional case based scenarios effective for providing practice and skill assessment for: -IP communication -IP relations -Maintaining focus on patient centred outcomes	**Moderate: Medium quality** **Strengths:** -participants prioritized patient needs over individual needs in situations of conflict. This correlates with IP competencies - high authenticity **Limitations:** -One institution -Study findings not generalizable

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
(c) to assess viability/fidelity of structured clinical exam		session and findings		**Future Recommendations:** -Need to replicate study in other clinical settings -Consider analysis with control groups
7. Author : Jacobs et al., **Date:** 2017 **doi:** http://dx.doi.org/10.1016/j.xjep.2016.12.002 **Objective:** To assess if IP education improves the safety knowledge and skill of nursing (BN) & occupational therapy (OT) students during patient transfers.	Prospective mixed methods. -Single education intervention: knowledge content, simulation & debrief -Anonymity maintained -Large US medical centre -N=49 (n=29 OT students, n=20 BN students) -Ethics board approved	- pre-post perception of skill rating questionnaires -During simulation interprofessional exchange of knowledge from BN students and OT students -Debriefing was documented for qualitative analysis and included • Benefits • Barriers • Changes in perception • Future recommendations -Open-ended questions uni-discipline pre/post on • Expectations • Role perceptions • Willingness towards working IP	**Qualitative:** -Expectations met or exceeded -Improved IP role understanding -Increased confidence/ comfort in skill -Increased confidence in self/ self-worth **Quantitative:** -Increased confidence, collaboration & respect in both groups -Statistical significant improvement in perception of how others view their profession (both groups- **validates qualitative finding of self-worth**)	**Moderate: Medium quality** **Strengths:** -Study question from clinical gap and request from OT students -Correlates with findings from studies that assess case based and simulation learning= interaction increases role understanding **Limitations:** - Skill specific - One organization - Not generalizable

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
		- Pre/post: validated inter-disciplinary education perception scale		
8. Author: Johnson et al., **Date:** 2015 **doi:** 10.1016/j.xjep.2015.07.068 **Objective:** To describe the IP competency learning process & what students need from facilitators	Qualitative study -N=6 participants (n=2 medical students, n=4 BN students) -One academic institution in the US -Nursing led study -ethics review board approval	-Template analysis from assignments -Students participated in an IP QA project. Included collaboration & feedback to develop questionnaire. -Were required to write reflection of process. -Content analysis completed individually by three separate researchers -Read through of entire assignment -Line by line analysis -Content coding as related to IP competencies -three researchers provided consensus -fourth reviewer validated	-Experiential IP learning occurs at critical junctures (CJ) -Facilitators are bridge between HCP groups -Facilitators must balance leading vs. group leading -Facilitators need to: • Identify & plan for predictable CJ • Create equal status in group • Set common goals • Create cooperation among team • Obtain/maintain organizational support	**Moderate: Medium quality** **Strengths:** -Theory based -Model development **Limitations:** -Study generated new ideas, did not test them -Were unable to triangulate findings through member checking
9. Author: Martens & Lairamore **Date:** 2016	Quantitative RCT -N=319 students from six disciplines (RN, dietetic, OT, physical	-Response rate 50% (N=160) -Interdisciplinary education perception scale	-No statistically significant finding to support use of concept mapping. Hypothesis	**Moderate**: **Medium quality** **Strengths:** -Validated tools

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
doi: 10.1016/j.xjep.2016.10.004 **Objective:** To assess if adaptability predicted positive changes re: IP collaboration and if concept mapping is an appropriate learning strategy	therapy, psychology, & Speech & Language Pathologist (SLP) -Random sampling: two groups for IP learning session. Case based learning/ problem solving activities -group one: facilitator & worksheet -group two: facilitator, worksheet & concept map. Instructions for concept map given. - validated tools: for pre/post testing	(validated for pre/post-test of interdisciplinary education) -Adaptability scale (validated) also used for pre/post education testing. -Pre-test administered directly prior to session. -Post-test measured within one week of session	rejected. -Higher levels of adaptability + yrs. of education predicted positive changes in attitude. Hypothesis accepted	appropriate for IP education -large study -even distribution of multi-professionals -randomization **Limitations:** -Low response rate may have affected power and ability of study to show significance
10. Author: Zwarenstein et al., **Date:** 2009 **doi:** 10.1002/14651858.CD000072.pub2 **Objective:** Compare practice	Systematic review of IP collaboration: practice based RCTs -Search of Cochrane, CINAHL, Medline & Journal of IP Practice -five studies eligible • RCT of practice	-two of three reviewers independently assessed eligibility -one reviewer extracted data and assessed bias -No meta-analysis of outcomes due to small number of studies	-Length of stay decreased with IP vs. traditional care -Non-recommended antidepressants decreased by 59% after 12 months of team meetings	**Moderate: Low quality** **Strengths:** -Large search and clear selection criteria -Rigorous review **Limitations:** -Study sample sizes were small

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
interventions designed to change IP collaboration compared to no or alternate intervention in relation to: (a) patient satisfaction (b) effective care (c) degree of IP collaboration	based IP collaborative interventions • Objectively measured or self-report outcomes (client/ health status/ health care process or measures of IP collaboration)	-Narrative summary	-IP care may improve outcomes. *Recommendation limited due to small sample size	-Not generalizable -Not enough qualifying studies to make broad recommendations **Future recommendations:** -More RCTs: larger sample size -Integrate communication training to improve IP collaboration -Increase in policies to make care more collaborative -Ensure that interventions have been in place for appropriate period of time prior to evaluation
11. Author: Weaver, et al., **Date :** 2015 **doi:** 10.1200/JOP.2014.001536 **Objective:** To identify	Quantitative Cross-sectional -N=129 (67% completion rate) -Participants included female HCPs (n= 16 residents, n=nine hospitalists, n=15	-Validated questionnaire for data collection -Web-based delivery (link sent by email) -Statistical analysis of results and between group comparisons -Demographics captured	Significant differences between professional perceptions: - Teamwork rating between groups. • Nurses rated collaboration with physicians low	**Moderate: High quality** **Strengths:** -Correlates with existing evidence and therefore increased ability to generalize findings -Study supports IP education to:

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
characteristics of oncology ward teamwork and existing barriers	oncologists & n=89 nurses) -Large US based teaching hospital (852 beds) -Ethics approval	sex, race and years of experience.	• physicians rated collaboration with all teams high • Communication between HCPs negatively impacted Barriers: Nurses: • Perceived negative attitudes re: importance of communication Hospitalists: • Difficulty reaching other providers Physicians: • No perceived barriers: supports a lack of hierarchy awareness	• decrease hierarchy barrier • improve communication/ decrease errors **Limitations:** -Mostly Caucasian participants -All female -Single site -limited professionals surveyed (no pharmacists, social work etc.)
12. Author: Reeves et al., **Date:** 2013 **doi:** 10.1002/1465185	Systematic review of IPE based interventions (RCTs, CBA, & ITS)	-two of three reviewers assessed eligibility -one reviewer extracted data and assessed bias -All studies measured IPE	**Positive findings:** -improvement in: clinic outcomes, QI goals, patient-centered communication,	**Moderate: Medium quality** **Strengths:** -Increase in number of analytic IPE studies

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
8.CD002213.pub3 **Objective:** To assess effectiveness of interprofessional education (IPE) interventions against single profession interventions or no intervention	-Search of Cochrane, CINAHL, Medline and Journal of IP Practice -15 studies eligible -Analytic studies of practice based IPE interventions: eight RCTs, five CBAs, two ITS -Objectively measured or self-report outcomes (client/ health status/ health care process or measures of IPE)	interventions compared to no intervention -No meta-analysis of outcomes D/T heterogeneity of study design & outcome measures -Narrative summary	collaborative team behaviour, error reduction, improved HCP competencies, improved team behaviour, improved information sharing -ITS showed improvements sustained over time **Negative/neutral findings:** -No significant difference in length of stay	-Mainly positive trends that correlate with findings **Limitations:** -no comparison to other interventions or singular discipline interventions **Future Recommendations:** -further IPE introduction & evaluation with improved randomization, larger study sizes, and evaluation over longer time periods using validated measurement tools *Supports idea of orientation re: continual IPE development over time with early introduction being an investment in the future.
13. Author: Bilodeau et al., **Date:** 2015	Qualitative: Multiple case study -One Canadian	-Interview & observation data transcribed - Content analysis for data:	**Current IPPC:** -Patient-centered discourse/ HCP-	**Strong: High quality** **Strengths:** -Detailed description of

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
doi: 10.3109/13561820.2014.942838 **Objective:** To describe IP patient-centered practice (IPPC) throughout cancer care. To add patient perspective to what is known re: HCPs & systems evidence on IPPC	teaching hospital -Two IP teams -male & female adults with cancer -Each team included: patients on care trajectory, families & HCP -Target stages in cancer care continuum were: diagnosis, treatment, recurrence, follow-up. -N= 31 participants (n=eight patients, n=three family, n=20 HCP: RN, OT, physicians, dieticians, psychologist, social worker, & pharmacist -One yr. data collection -Teams studied independently & in sequence -28 individual semi-	reduction, display & conclusion, & verification -For increased rigour: persistent observation, data triangulation & inter-judge validation -Log book to document experience/ methodology	centred practice -Complexity triggers collaboration **IPPC influenced by:** **1) Team functioning:** -Nurse team core -HCPs late consults -Limited space -Physicians are not as interested in IPPC as other professionals **2) Patients Perception:** - Good IPPC=Visual HCP communication -No IPPC when patient excluded -Compassionate info sharing= ↑ IPPC **3) HCP view:** -Team leader ↑ IPPC -Communication/HCP availability essential -Need Patients engaged **Desired IPPC:** -Aligns patient	phenomena obtained. -validates several of the IPC competencies re: inclusion of patient, & communication **Limitations:** -IPPC was a new concept to patients therefore may not have fully understood and could have impacted results -not generalizable -observation may have positively impacted care given to patients

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
	structured interviews (one hr) -57.6 hrs observation - Ethical Approval		experience/ engagement - HCP not impose values & goals -Consistent team collaboration	
14. Author: Shaw et al., **Date:** 2012 **doi:** 10.1097/QMH.0b013e31824d4984 **Objective:** To identify how reflection affects team processes and QI implementation	Qualitative - four practices included - Reflective Adaptive Process meetings - Total participants N=27 (n1=7, n2=5, n3=6, n4=9) -Informed consent -Anonymity -Multiple review board approval	-Ethics approval obtained -Data analysis by 2 primary researchers -Process meetings were audio-recorded (26 hrs) and field notes taken for data collection - participants were members of reflective adaptive process (RAP) teams at each site -transcribed only important elements of recording -100 pages text then coded -good rigour for coding process -Data saturation obtained by third practice -immersion technique used for theme identification	**Organizational Reflection promotes:** -Team buy-in -Motivation -Feelings of inspiration (more holistic view of organization & HCPs role in vision) **Process reflection promotes:** -Enhanced problem solving -Change management (understanding/ ownership of how others are feeling) **Relational Reflection promotes:** -Enhanced discussion of relational dynamics	**Moderate: Medium quality** **Strengths:** -Follow up to large scale theory based RCT for in-depth examination of team-based reflective practice -Provides insight into multiple reflective processes -Supports use of case study learning during orientation to facilitate team based reflection **Limitations:** -Small sample limits generalizability -Did not relate to clinical outcomes

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
			& taken assumptions -Creates openness re: relationship & tensions impact on change/QI	
15. Author: Azar et al. **Date:** 2016 **doi:** 10.1080/13561820.2016.1248815 **Objective:** To measure teamwork & relationship of teamwork to patient perceptions of care.	**Quantitative: descriptive** Case study design -12 medical oncology teams: N=63 participants -Three-10 members each team -Interdisciplinary participants = medical oncologists n=30 (one-five per team, nurse coordinators n=21 (one-three per team), clinical secretaries n=12 (one-four per team) -Randomly selected patients answer surveys N= 1713 -Ethical approval obtained	-Five surveys sent out & required completion for inclusion -Validated surveys measuring relational coordination and patient perception of care -Data analysis for statistical significance	-Oncologists rated low & negative= they could benefit from training in relational & team based care -Nurse coordinators rated highest for effective within teams: perception of care by patients -Higher ratings from patients re: communication and clear info sharing = teamwork and perception of care	**Moderate: Medium quality** **Strengths:** -Correlates with other study results re: physicians need for interprofessional education -Gives perspective from within teams along with patients **Limitations:** -Study not generalizable -Small study size

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
16. Author: Head et al., **Date:** 2016 **doi:** 10.1007/s13187-015-0799-y **Objective:** To evaluate an interdisciplinary education program integrating team based palliative care into oncology practice	Mixed methods: UCBA program with qualitative analysis of narrative questions -N=373 students -Participants included: medicine, nursing, social work, chaplaincy -Focus interviews for qualitative feedback -Ethics approval obtained	-Validated survey's -Pre-test evaluation -Multimodal education delivery that included: online education module, hands on team-based practice, reflective journaling and sharing to deepen learning of self and others -Post-test evaluation -Focus interviews	-Significant improvement scores on post evaluation -Focus interviews revealed that : Hands on practice, case study scenarios that included team analysis and reflective writing were most effective for integrating team-based learning -Highest rating given to hands on sessions -Online module effective for content	**Moderate: Medium quality** **Strengths:** -Oncology team focus -Correlates with other studies re: effective teaching strategies **Limitations:** -75% female -No comparison group -Unable to determine retention -Unequal representation among disciplines
17. Author: Konrad et al., **Date:** 2017 **doi:** 10.1016/j.xjep.2016.12.007 **Objective:** To evaluate the effectiveness of an IP immersion program & apply	Mixed Methods: pre/ post program evaluation surveys with inductive analysis of narrative survey questions -N=42 with 71% pre-survey completion rate and 76% post-survey completion -HCPs included: OT,	-Data collected via electronic surveys -Pre-survey sent out two weeks pre-program -Post-survey on last day to one week of program end -Validated questionnaires -Thematic coding of qualitative narrative questions -Rapid evaluation included	-Increased knowledge of other professions -Team skill development & confidence -Base knowledge & tools for future clinical collaborative work -Statistical significant improvement in competency and	**Weak-: Low quality** **Strengths:** -Easy to replicate -Correlates with other studies re: effective teaching strategies -Even distribution of multiple professions **Limitations:** -Does not have a comparison group

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
QI to program through rapid cycle feedback evaluation	social work, nursing, pharmacy, physician assistants, MD, dental hygienists, dental medicine -One academic centre -Graduate and undergraduate participants	narrative questions for each day of program -Program consisted of 90 min. sequential lunch time sessions. Case simulation included: difficult conversation; complicated medical scenario; psychosocial; social determinants of health	autonomy -Increased knowledge of role functioning and overlap -Role overlap led to frustration and increased effort when collaborating -Positive for small group interactive learning as effective learning strategy (team building exercises, case based learning & simulation)	-potential selection bias as not random but high academics to qualify entry -Unable to determine retention of learning and behaviour -Difficult to determine if statistical power met -Self-rated
18. Author: Carlson et al., **Date:** 2011 **doi:** 10.1016/j.nepr.2011.02.002 **Objective:** To describe how nurses act when facilitating IP student teams at a clinical training	Qualitative: Ethnography - Study setting was a clinical training ward in a large teaching hospital in Sweden -Participants were N=8 nurse facilitator (NF) - Swedish law on health professional privacy followed and	- Primary investigator observed interactions (six month) between nurse facilitator & students: included medical, nursing, OT, physiotherapy -Observational session length activity dependent/ could last 90 minutes to 5hrs -Field notes included : events, actors, length and	-Nurses are most often IPE facilitators -NF facilitate nursing & IPE education -NF role= team builder **4 Themes** 1) Supporting team work (student centred, create opportunities) 2) Facilitate HCP understanding: direct HCP specific question	**Strong: High quality** **Strengths:** -Clear research question -Well explained methods -Rigorous approach with high trustworthiness -Data saturation was reached therefore size of study appropriate **Limitations:** -Only nurse facilitators so unknown if findings

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
ward.	ethics approval obtained -Data collection through participant observation and interviews.	reflective analysis - Field notes transcribed to neat copy post-session to guide future sessions -Interviews audio-recorded -Individual interviews of NF (one hr per) -One opening question for individual interviews -One end focus interview of NF group (2hr) -Focus group used to expand themes -Immersion in data to find meaning units, then coding, then categorized -Constant comparison -Three investigators reviewed and agreed with findings	not answer, role model 3) Breaking down barriers: hierarchical barriers removed through making visible knowledge domains. role responsibility, patient-centered focus for team decisions 3) Using a reflective approach: reflective learning applied to all teaching strategies, shared responsibility for all to lead learning	would be same/different if facilitators from other professions included
19. Author: Chatalalsingh & Reeves **Date:** 2014 **doi:** 10.3109/13561820.2014.900001	Qualitative-Ethnography -Participants were from two experienced nephrology teams N= 35 -One large teaching	-Researcher role of participant observer -Data collection: interviews, observation and documents -Observation sessions three-four hrs long over	**Situational Leadership Qualities:** - Directs task learning - Coach team learning, relationships, & tasks -Supporting team learning relationships	**Strong: High Quality** **Strengths:** -Demonstrates that team leadership is situational and adapts to change= against hierarchy **Limitations:**

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
Objective: to understand the importance of the leaders' role in the daily clinical activities of IP teams	hospital -Team members included: nurses, nephrologists, social workers, dietitians, medical lab techs, pharmacists, & chiropodist -Team members together for two yrs.	nine months. Field notes taken. Notes elaborated on immediately post session -Team members nominated "leaders" out of the group to be interviewed. N=12 interviewed -90 min interviews. Audio-recorded then transcribed. -Open ended questions -Inductive thematic analysis followed	- Delegating task & relationship learning	-Stability of the teams not necessarily representative of many healthcare teams that experience large turn over (however may function and retain staff due to supportive team leadership qualities) -Provides leaders perspectives -Not generalizable
20. Author: Hepp et al., **Date:** 2015 **doi:** 10.3109/13561820.2014.955910 **Objective:** (1) Describe the current state of collaborative practice on six acute care units using the CIHC	Review. Secondary data analysis of qualitative evidence -Primary data collected from six acute care units from three hospitals in Alberta. N=113 staff members. (15-20 per unit): n= 44 nurses, n= 8 care aids, n=4 managers, n=10 unit clerk, n=30 mix (OT, PT, pharmacy, SLP	-Primary data was obtained through semi-structured interviews that focused on: model of care, scope of practice, collaboration, patient-centered care, communication, recruitment/ retention, and leadership -First author extracted all data related to ICP frameworks -All seven authors reviewed, validated &	**IP competencies strengths in practice:** -Patient-centered care -Communication **Barriers:** -Lack of role clarity within/ between HCPs -Evolving scopes of practice -Time constraints ↓ patient-centered care -Hierarchy negatively impacts team functioning	**Strong: Medium quality Strengths:** -Canadian Based Study -Authors were involved in original data collection -Authors confident that conclusions are accurate & corroborate with existing evidence/ anecdotal experience -Primary and secondary data related to CIHC competency framework -Extracted statements

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
competency framework (2) Identify gaps in collaborative practice (3) Identify strategies for each competency domain to improve collaborative practice.	etc.), n= 2 dx imaging and lab, n= 7 MD, n= 5 support staff, n=3 unidentified. -Ethics approval not sought as ethics approval obtained for initial research	analysed data -Themes emerged from data and presented with strategies for future recommendations	-HCP access (i.e. weekends, evenings) -Workload -Lack of respect between HCPs **Facilitators:** -Verbal over written communication -Having clear goals -HCPs understanding & working to full scope of practice **Strategies:** -Nursing team model: empowered staff, shared responsibility, & point person -Leader has decision making authority -Established guidelines and discharge process	directly related to the six competencies **Limitations:** -Data not originally collected and intended for specific question -Some competencies supported with less information than others -Extracting data for secondary analysis can be difficult
21. Author: Heath et al., **Date:** 2015 **doi :** 10.1007/s13187-015-0799-y	Sequential Mixed-Methods. -Purposive sampling -Recruited by community HCP leaders	-Email invitation from community leaders to professionals thought to benefit from the IP sessions. -Provided a tested Rural	**Quantitative Results:** -Attitudes toward IP mental healthcare showed statistical significance (p=0.00) -Perception of IP	**Moderate: Medium quality** **Strengths:** -Able to use matched pre/post as a comparison for other participants.

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
Objective: To describe the impact of an interprofessional (IP) training program on knowledge, attitudes, perceptions and practice in a rural primary care setting.	- N=125 participants attended at least one session -pre-survey completion n=103 -post-survey completion 66-pre/post matched surveys of 49 participants -8 focus groups. Included (n=2 RN, n=4 NP, n=6 Social Worker, n= 1 community Development Specialist, n=1 youth coordinator, n=1 school counsellor, n=1 police officer, n=1 OT, n=1 dietician -n=12 in-depth interviews. All professions and 1 physician represented -6 rural communities	mental health IP training program. -multiple sessions over 20 week period -No expectation to attend all sessions -pre-post validated surveys -data from focus groups and interviews transcribed, identifiers removed -data from focus and in-depth interviews analyzed together with qualitative data program	collaboration failed to show a significant improvement (p=0.11) **Qualitative Results:** Two main themes -Already proponents of IP care -Broadening scope of IP mental health practice	-Good representation of professionals. -Adds to knowledge of continuing IP education in practice. **Limitations:** -Professionals were not required to attend all sessions - Those who attended multiple sessions more likely to complete pre/post surveys. Potential positive response bias. Decreased generalizability -Purposive sampling increases potential for positive response bias -less than 50% completion rate of total N=103 -lack of control group *Physicians did not participate in focus groups. Though not

Author, date, doi, objective	Study design, size, setting, characteristics, groups	Measurement and procedure	Key findings/Themes	Study Rating/ Strengths/ Limitations
	in Newfoundland -9 professions included, some outside of healthcare -Ethics approval obtained			reported as a hierarchy or barrier, questionable why they chose to not participate.

Appendix B

Consultation Report

Memorial University of Newfoundland
School of Nursing
Master of Nursing Program

PRACTICUM: REPORT ON CONSULTATION WITH COLLEAGUES

Student's Name: Ava Hatcher

Course Names and Numbers: Nursing 6660- MN Practicum 1

Supervisor: Professor Mary Bursey

Title: Development of a Nurse-Led Interprofessional Oncology Orientation

Date: April 19th, 2017

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1. Brief overview of the project

Interprofessional collaborative practice (ICP) is recommended in Canada and internationally to improve patient-centered care, and increase efficiency in service delivery (Canadian Interprofessional Health Collaboration [CIHC], 2010; Canadian Nurses Association [CNA], 2017; Interprofessional Education Collaborative [IEC], 2011; World Health Organization [WHO], 2010). ICP has been described as the process of building relationships between HCPs and patients to optimize individual and population outcomes (CIHC, 2010). In essence, ICP collaboration occurs through individuals from differing professional backgrounds applying a known set of interprofessional competencies to a complex clinical or patient problem, in order to achieve a common goal (CIHC, 2010; WHO, 2010). An argument can be made that the supportive care

needs of people with cancer (Fitch, 2008), and the increasing complexity of cancer treatments (Chen, Cheung, Spinelli, & Kennecke, 2016; Clauser, Wagner, Bowles, Tuzzio, & Green, 2011; Sumpio, Knobf, & Jeon, 2016), make ICP a priority for this population. The purpose of developing a nurse-led interprofessional oncology orientation for the BC Cancer Agency (BCCA) is to foster interprofessional team collaboration and provide a resource on the supportive care needs of the oncology population for health care professionals (HCPs) when entering oncology practice.

Education Resource Nurses (ERNs) working at the BCCA, have been involved in working groups that develop, implement and evaluate education programs for oncology nurses throughout British Columbia. Clinical leaders in nursing and other health care disciplines at BCCA consider ERNs to be expert oncology educators, as they have extensive knowledge in oncology practice and facilitation of oncology education programs. One of these programs, the Professional Practice Nursing Orientation, has been instrumental in the successful introduction of Registered Nurses (RNs) to oncology practice at BCCA. Orientation to oncology practice for other HCPs either does not occur, or does not meet the same standard as the nursing orientation.

The BCCA is currently undergoing organizational restructuring, in which nursing has been situated within the portfolio of Patient Experience and Interprofessional Practice. These changes provide new responsibilities and opportunities for ERNs who are now required to provide support and facilitate education for all HCPs on the interprofessional team. Drawing on my previous experience facilitating the Provincial Nursing Orientation Program, and a personal commitment to align with BCCA's new

organizational direction, the development of a nurse-led interprofessional oncology orientation is a relevant choice for a practicum project. Once developed, the short term goal is to pilot the orientation at BCCA Centre for the North. If the pilot project evaluation is positive, the long term goal will be implementation of the orientation in all six BCCA Centres.

2. Specific objective(s) for the consultation

The overall goal of the consultation was to both augment and determine how the evidence from the literature would best translate to a nurse-led interprofessional oncology orientation, and identify any relevant information that was not discovered in the literature. Interview questions were developed to guide the consultations with key interprofessional stakeholders at BCCA and clinical leaders in two provincial cancer agencies outside of British Columbia. The objectives of the consultations were:

1. To identify benefits and barriers to effective interprofessional collaboration experienced by stakeholders in the clinical setting.
2. To obtain information related to perceived gaps for HCPs new to oncology practice.
3. To gather information on orientation programs/resources from:
    a. BCCA professional groups
    b. Alberta Health Services
    c. Eastern Health Authority
4. To compile and compare data from interviews with key stakeholders.

5. To identify relevant themes from the stakeholder interview data.
6. To utilize the consultation themes to assist in translating evidence from the literature review to clinical practice.
7. To determine implications/recommendations for the nurse-led interprofessional oncology orientation.

3. Setting and Sample

The BCCA is a provincial organization consisting of six centres which provide a full range of services to adults receiving active cancer treatment. These centres, along with their locations are: (1) Vancouver Island Centre (VIC) -Victoria; (2) Vancouver Centre (VC) - Vancouver; (3) Fraser Valley Centre (FVC) - Surrey; (4) Abbotsford Centre (AC) - Abbotsford, (5) Sindi Ahluwalia Hawkins Centre for the Southern Interior (CSI) - Kelowna, and (6) Centre for the North (CN) - Prince George. HCPs were invited to participate based on their subject matter expertise. These stakeholders from the six BCCA centres were sent an invitation for an interview. To accommodate busy work schedules, the interviews occurred over the two week period of March 23rd to April 6th, 2017. The interviews were conducted in-person with participants from BCCA Centre for the North and by telephone with participants at the other BCCA centres. Selection from BCCA included professionals from the following areas:

1. Nursing:

- A Clinical Nurse Coordinator. Clinical Nurse Coordinators are experienced nursing leaders that supervise and support direct care RNs. A Clinical Nurse Coordinator was chosen to provide a nursing leader perspective of both RN readiness for oncology

practice and the current state of ICP. Clinical Nurse Coordinators also have a strong presence in ICP as they help in the navigation of complex patients. The Clinical Nurse Coordinator interviewed was located at Centre for the Southern Interior.

2. Education and Management

- An Education Resource Nurse. Education Resource Nurses are experienced oncology educators who currently facilitate nursing orientation at BCCA. An Education Resource Nurse was chosen to include an educator's perspective. The Education Resource Nurse who was interviewed was located at Abbotsford Centre and has an extensive background in oncology education development and facilitation for nurses at the BCCA.
- A Manager of Clinical Services. The Manager of Clinical Services interviewed was located at Centre for the North and has a background in nursing and leadership. Responsibilities of the Manager of Clinical Services include supervision and support to multiple professional groups.

3. Pharmacy:

- A Pharmacy Professional Practice Leader. Professional Practice Leaders in Pharmacy provide leadership and supervision to the pharmacy team. In addition to their staff leadership responsibilities, the Professional Practice Leader also provides direct care to patients. The Professional Practice Leader interviewed was located at Centre for the North.

4. Patient and Family Counsellor:

- A Patient and Family Counsellor Professional Practice Leader located at Centre

for the North was interviewed. In addition to the staff leadership responsibilities of this role, the Professional Practice Leader is involved in collaborative practice through provision of direct care to patients, and provided a perspective on current orientation resources and counselor readiness for practice in an oncology setting.

5. Radiation Therapist:

- A Radiation Therapy-Treatment Module Leader located at BCCA Centre for the North. The Radiation Therapy- Treatment Module Leader organizes orientation for Radiation Therapists new to BCCA and provided a leadership perspective on how prepared Radiation Therapists are for ICP practice in an oncology setting.

6. Dietician:

- A Dietician located at BCCA Centre for the North. Dieticians working at the BCCA have automatic referral criteria for patients. In addition, the dieticians will triage at-risk patient referrals from members of the interprofessional team. ICP is essential to ensure that their referral process captures patients who need their services and for supporting patients who are accepted into the caseload.

7. Physicians:

- A General Practitioner in Oncology. Though physicians are not positioned in the portfolio of Patient Experience and Interprofessional Practice at BCCA, the literature revealed that a hierarchical structure and behavior contribute to interprofessional collaboration and communication breakdown (Azur et al., 2016; Bilodeau, Dubois, & Pepin, 2015; Hepp et al., 2015; Weaver, Callaghan, Cooper,

Brandman, & O'Leary, 2015). Physicians could potentially benefit from attending interprofessional education and were therefore included in the consultations to assist in the development of the orientation module.

Consultations also occurred with stakeholders working in leadership positions from two cancer organizations outside of British Columbia. These were: Cancer Control Alberta-Alberta Health Services, and the Dr. H. Bliss Murphy Cancer Centre- Eastern Health Authority in Newfoundland. The stakeholders from the external organizations were selected through networking with personal contacts from Canadian Association of Nurses in Oncology [CANO/ACIO]. These stakeholders were asked to participate based on their role in supervising multiple professional disciplines, participation in ICP, and providing educational support to HCPs during orientation to oncology practice.
The consultants from external organizations were:

- A Clinical Educator for Oncology at the Dr. H. Bliss Murphy Cancer Centre in St. John's Newfoundland. The Clinical Educator has a nursing background, and although responsible for nursing specific programs, other responsibilities include organizing and facilitating interprofessional education opportunities within the cancer centre.
- A Director for Professional Practice and Education for Cancer Control Alberta with Alberta Health Services. In this role, there is a current focus on developing and supporting a collaborative approach to oncology practice throughout the province of Alberta. The Director has a background in oncology and palliative nursing with the last 12 years focused on professional practice and leadership.

4. Invitation to Key Stakeholder Interview

To minimize any undue pressure to participate, all participants were sent an e-mail introduction outlining the purpose of the interviews. A response agreeing to participate, that was received within the specified time frame was considered consent for the interview. Acceptance of the interview invitation was followed with a second e-mail to schedule the interview and obtain telephone contact information.

5. Data Collection

Data were collected through telephone and in-person interviews using interview questions informed from the literature review (see Appendix B1). Notes were taken and reviewed for similar trends and themes. These notes were transcribed onto an excel spreadsheet for categorizing the data and capturing important themes and concepts from the interviews.

6. Data Management and Analysis

Information was entered into an excel spreadsheet which contained no personal identifiers. The original handwritten notes were shredded in a locked container approved for disposal of medical information. The excel spread sheet was stored on a personal file on the writer's private work computer. This provided double security of employee password protected access and an additional personal restricted electronic folder. Content analysis occurred following the completion of interviews to group the data into categories and themes. Common and unique themes between the professional groups were noted and compared to themes identified in the literature review. The consultation findings and

conclusions written in this Consultation Report were reviewed by my Practicum Supervisor whose feedback was incorporated into the final report.

7. Ethical Considerations

The Health Research Ethics Authority Screening Tool was completed as required (see Appendix B2). The score indicated that a Health Research Ethics Review Board (REB) approval was not necessary for the consultations planned for this proposed practicum project. Individuals selected for consultation were contacted by e-mail. The e-mail was a letter of introduction, a basic overview of the proposed project and a request for a 30 minute interview (see Appendix B3). All 10 e-mails were returned, with the colleague consultants consenting to be interviewed. Mutually agreed upon times for the interviews were determined and telephone or in-person interviews were conducted according to the consultant's location.

Measures to maintain confidentiality were undertaken in handling the data obtained from the interviews as described in Section 5: Data Management and Analysis. In addition, e-mails were sent through the BCCA e-mail server, which is a secure platform. To ensure that the same level of protection was obtained for those working outside of the BCCA; the e-mail introductions were sent to work e-mail addresses that were all managed by the consultant's provincial Health Authority. The final ethical consideration to maintain privacy and confidentiality was the exclusion of names and personal identifiers from the data and consultation report. Even with these precautions, it cannot be guaranteed that those interviewed will not be known to peers due to the small number of participants. This was disclosed to the consultants prior to conducting the

interviews. Though no questions were of a personal nature, consultants were counselled that they could choose not to answer questions and that they were able to terminate the interview at any time.

8. Consultation Process

A total of 10 healthcare professionals (HCPs) from a variety of disciplines were selected as key stakeholders to give an overview of their clinical and organizational experience with ICP. To obtain information on their perspective, a onetime interview was requested by email invitation. All stakeholders gave consent for the interview. The interviews, depending on the location of the consultant, were conducted either in-person or by telephone and lasted between 20 to 30 minutes. To accommodate for individual work schedules, the interviews occurred over a two week period.

During the interviews, the stakeholders were asked eight pre-determined open and closed-ended questions (see Appendix B1). The closed-ended questions established the length of time that stakeholders had been practicing in their current role and the overall time working in an oncology setting. The open-ended questions were informed by the literature review with the intent to elicit information on the perceptions of these key stakeholders in relation to their experience in ICP within an oncology setting. Data from the interviews were then reviewed to identify interprofessional practice benefits, barriers and themes, and compare these with findings from the literature review. This was considered an important step for translating evidence from the literature review into practice, as evidence best informs practice when combined with professional expertise and consideration of the practice environment (Gonzales, Handley, Ackerman, &

O'Sullivan, 2012).

The six interviews that were conducted at BCCA Centre for the North were in-person, and occurred in the offices of the stakeholders. The remaining four stakeholder interviews occurred by telephone using the private office telephone number provided by each stakeholder. All in-person and telephone interviews were private and uninterrupted. Strategies that were used to ensure the stakeholder had time to provide a complete response to the questions were purposeful pauses and attention to body language and signals that indicated the stakeholder was finished answering. The telephone interviews were a little more complex as there was no ability to watch for visual cues from the stakeholder. For the telephone interviews, it was sometimes necessary to ask if the stakeholder had completed their answer. To ensure data collection accuracy in all interviews, the responses were paraphrased for stakeholder verification. In addition, clarification questions were asked when necessary before proceeding to the next question.

9. Consultation Results

Oncology Experience

All of the stakeholders interviewed had varying clinical and leadership experience. Time working in their current roles ranged between 10 months and 14 years. In addition to this, the amount of time spent working in an oncology setting was important and ranged from 6 to 30 years. Although the stakeholders currently hold a variety of leadership positions, they have all held direct care oncology roles prior to obtaining their current roles.

Interview Data Review

The integrated literature review revealed benefits, barriers and themes related to interprofessional practice. To gain an understanding of the relevancy of this information to current clinical practice in the BCCA and other Canadian cancer organizations, the interview data were first reviewed to identify concepts relevant to all stakeholders. Once these were identified, the information was compared with the literature review findings to look for relationships.

Interprofessional Practice Benefits

A review of the stakeholder interview data revealed interprofessional practice benefits to patients, HCPs, and organizations. These benefits are relevant to the practice setting at BCCA, and important to consider in the planning of interprofessional resources.

Patient Benefits. Interprofessional collaboration within oncology teams was thought to benefit patients through more comprehensive care delivery and increased satisfaction. Stakeholders described ICP as being well suited to provide more comprehensive patient care because the increased input from diverse groups provided a holistic point of view. Many stakeholders discussed that patient satisfaction with their care, and trust towards HCPs, improved with ICP. They described this as a collaboration displayed by team cohesiveness and communication which reduced repetition of information from HCPs and patients. This theme was reinforced with descriptions of decreased patient satisfaction occurring through having to repeat their story multiple times to HCPs. Similarly, stakeholders felt that patients were reassured when it was apparent that the HCPs caring for them had communicated to one another. This supports the findings from the literature review where patients gave higher care ratings when their

information was known by multiple team members; perceiving this to be an indicator of better interprofessional co-ordination and teamwork (Azur et al., 2016; Bilodeau, Dubois, & Pepin, 2015).

Stakeholders reported a reduced occurrence of errors as a benefit for patients and HCPs. One stakeholder who previously worked in isolation explained that more errors were made when there was no team for collaboration in clinical practice. The increased errors were a safety concern for patients and a source of stress and decreased job satisfaction for the HCPs. Evidence from a review by Reeves, Perrier, Goldman, Freeth, and Zwarenstein (2013) also indicated in the findings that error reduction was a benefit of collaborative practice.

HCP Benefits. Improvements cited for HCPs were streamlining of services, shared responsibility and a broadened perspective and knowledge base. A common theme reported by multiple stakeholders was that a broadened perspective occurred through having questions answered and learning from one another. One stakeholder explained that a broadened perspective was created through learning the points of view provided by different disciplines. It is through this sharing of discipline specific knowledge that perspective is broadened and patient care is enhanced. Stakeholders also discussed that ICP often increases competency and professionalism which in turn created a feeling of security for patients. This was discussed by stakeholders to benefit HCPs through increased job satisfaction.

Organizational Benefits. Organizational cohesiveness was perceived by the stakeholders to be a benefit of ICP. This was described as a reflection of an

organizational commitment to patient-centered care, and occurred when the organizing of broad systems and high level policies created a positive impact on interprofessional care delivery. Several stakeholders discussed that well formulated and communicated policies and systems supported teamwork through providing a work environment that valued and created space for interprofessional practice. Examples given were interprofessional working groups and multidisciplinary rounds that were developed at an organizational level, and provided time for interprofessional colleagues to work together.

Interprofessional Practice Barriers

Similar to the benefits of interprofessional practice, the stakeholders also discussed barriers that were common across disciplines and throughout BCCA and the two Canadian cancer organizations. These barriers were time, system structures, and individual and group engagement.

Time. The most prevalent barrier to interprofessional practice that the stakeholders discussed was time. More specifically, the barrier was the additional time that interprofessional practice required. Time as a barrier was acknowledged through discussion on the extra effort to practice collaboratively. The stakeholders felt that collaboration was not always possible due to the urgency in which patient care has to be addressed, and the busy work environments which do not allow for the extra time to connect with other disciplines. Even though the stakeholders acknowledged that interprofessional collaboration is valuable, they reported that sometimes it is not obvious which HCP is needed for collaboration. In these circumstances it required extra time to determine who to collaborate with, which resulted in multiple phone calls or waiting for

responses. The collaboration itself was also considered a timely process; with discussion of patient concerns requiring extra time that is unscheduled or is difficult to coordinate. Although time was not a direct barrier listed in the literature review, a lack of time was considered a factor that decreased patient-centered care (Hepp et al., 2015), and barriers related to time were late consultations and availability of team members (Bilodeau et al., 2015; Hepp et al., 2015; Weaver, Callaghan, Cooper, Brandman, & O'Leary, 2015).

System Structures. System structures were identified as ICP barriers from the interview data. Common system structures described were physical space and hierarchies. Physical space included both a lack of work space in patient clinic areas, and the segregation of services such as counselling offices being removed from the clinic area. These space concerns were thought to create barriers through silos and decreased relationship building. Hierarchies, or hierarchical behavior, also inhibit relationship formation which is an essential component of ICP. The stakeholders discussed hierarchies as a system structure within organizations in relation to how work flow, processes and policies have been developed to create a power differential between professional groups. A comment from one stakeholder was that hierarchies create a communication barrier. This theme was also particularly strong in the literature review with recommendations for organizations to reduce hierarchies through the development and implementation of supportive policy, and to create opportunities for interprofessional engagement and collaboration (Chatalalsingh & Reeves, 2014; Shaw, Howard, Etz, Hudson, & Crabtree, 2012; WHO, 2010). Along similar lines, participants also discussed that reporting structures could create barriers. Examples given were that barriers occurred

when reporting structures prevented direct lines of communication to other professional groups; resulting in limited collaboration.

The final system structure discussed as a barrier was a current gap in translating high level policy on ICP to the clinical areas. Stakeholders who are currently in leadership positions discussed that both BCCA and out of province organizations have developed vision statements and policies to support ICP. This barrier is complex as stakeholders perceived that direct care staff were either unaware of these initiatives or were not supported with incorporating them into practice. A lack of educational resources and opportunities to collaborate in a meaningful and timely manner were suggested as a gap that needed to be addressed to move towards a policy-to-practice connection.

HCP Engagement. A lack of engagement or buy-in from individual and groups of HCPs was also brought forward by the stakeholders as a barrier. An interesting comment by one stakeholder was that although many HCPs see the benefits of ICP, there are individuals that will not engage in collaboration. Similarly, another stakeholder discussed that sometimes team members did not have buy-in to ICP because disciplines are protective of their own scope of practice and do not want to share responsibility with other team members. Stakeholders linked this with a bigger concern of a system barrier through academic socialization. This was described as discipline specific training and mentoring. An example given to illustrate was nursing students being mentored by nursing preceptors. Although the students have multidiscipline exposure, they do not necessarily have interprofessional responsibilities and competencies to meet, or a requirement to learn about the other team member's role. It was also discussed that single

discipline advocating from associations and regulatory bodies contribute to single discipline socialization. It could therefore be argued that an interprofessional orientation program would provide support and context for newly hired HCPs.

Interprofessional Practice Themes

Role Clarity. A necessary component of ICP is role clarity, in which HCPs need to understand their own scope of practice in addition to the role of each discipline on their team (Canadian Interprofessional Health Collaboration [CIHC], 2010). The theme of role clarity came through as a relevant consideration from the stakeholders. Specifically, it was perceived as important for team members to have an awareness of other disciplines scope of practice. Elements of role clarity as it related to scope of practice included acknowledgement, respect, and value. During several of the interviews, information was given around the stakeholders desire to increase awareness of their discipline specific knowledge within their interprofessional team. Several stakeholders reported on the amount of education acquired through their undergraduate programs. This discipline specific education, in addition to their experience, was stated to have provided them with a robust knowledge base to provide supportive care to oncology patients. For practical reasons, role clarity was considered necessary for the team to know when to make appropriate consultations. One stakeholder reported wanting interprofessional colleagues to be aware of how they could contribute to the team. An example given regarding the Radiation Therapist (RT) role was that they have a wide range of patient assessment skills. Often these professionals are seen as technicians, however, they are skilled at assessing the side effects of radiation treatment. In addition to this, they see patients daily

and are perfectly positioned to monitor changing health status. The stakeholder's perception was that the RTs collaborative role was currently undervalued by other team members. Stakeholders reported that when knowledge of roles and practice scope was shared, interdisciplinary communication increased in amount and frequency which led to a sense of a unified approach to care.

Ensuring that team members have knowledge of specific professional roles was discussed by the stakeholders as a continuous need due to staff turnover. A statement related to this was that a gap was created when newly hired staff replaced more experienced ones. A similar comment from a different stakeholder described the need for novice practitioners to learn about the differing roles on the team, as it was felt that this was important to collaboration occurring. When clinical or patient related questions arise, you can then find the right team member for collaboration. This information supports the need for ongoing orientation of new staff to provide education and sharing of role descriptions and scope of practice.

Supporting Colleagues. Supporting other members of the interprofessional team was a consistent theme throughout the interviews. All stakeholders wanted team members to know what they could offer, and when they could assist with supporting patients. Leaders spoke of being able to assist interdisciplinary staff through creating supportive policy and moving interprofessional agendas forward. Educators were interested in providing support to staff, especially in areas of interprofessional practice where there were few resources. Stakeholders from several disciplines spoke of being experts in a narrower scope, but that their knowledge could be used to enhance and support that of the

interdisciplinary team. In addition to wanting team members to know about their scope, stakeholders also spoke of a desire to know how this best fit with what was needed by other disciplines. This was revealed through stakeholders expressing the need to identify what other disciplines wanted from them so that they could be of the most support.

Patient-Centered Care. The ability to enhance patient care and experience was also a common theme of ICP in the interviews. All stakeholders, regardless of their discipline or level of leadership, spoke of the importance of their role being patient focused. This applied to direct care issues as well as developing policies and interagency agreements. ICP was considered essential to make seamless care transitions for patients. Related elements, such as cohesiveness and streamlining care, were all considered important to improve the patient experience. The stakeholders gave examples of care complexity and clinical questions being a catalyst to initiate ICP which in turn led to patients being well supported. It was perceived by the stakeholders that the complexity of most cancer patients brought forth a need for collaboration among professional disciplines; as this complexity often generated questions that were not fully addressed by one professional group. These clinical questions were described as creating interprofessional dialogue through which the HCPs formed a more complete picture and broadened their knowledge. It was thought that the sharing of ideas and perspectives through the discussion of clinical questions enhanced patient care.

Policy-to-Practice Disconnection. All stakeholders discussed that there were committees and groups where ICP occurred at both the direct care and organization policy development levels. However, stakeholders described a disconnection between

these two levels. The policy development groups participated in interprofessional committees that worked towards moving organizational policy and agendas forward. Stakeholders perceived that information did not always filter down to those who were delivering services to patients; thus creating a gap in support. In addition, stakeholders expressed concern that there was a lack of opportunity for those in direct care to participate and bring forward practical information to inform high level decisions on ICP. Many of the ICP opportunities for direct care staff involved multi-disciplinary patient and tumour group rounds. This was acknowledged as valuable, and a forum to share ideas and gain knowledge. The opportunity to influence policy at the direct care level, however, was considered to be discipline specific. Examples given were of programs operating separately from one another and attending discipline specific practice committees.

Interprofessional Resources

The stakeholders reported that ICP resources in the form of education and practice supports were either not available, or not known to them. An interesting discovery however, was that the ICP resource identified and considered most valuable by stakeholders was their interprofessional colleagues. The stakeholders described the ability to meet with and bring forward questions for discussion with team members as an important asset. It was therefore emphasized that forums and opportunities to develop interprofessional relationships were essential. When these opportunities occurred, it was described as feeling unified. Factors that influence the ability for colleagues to use each other as resources were the size of the organization and professional's interpretation of their role. Participants expressed that smaller organizational size led to more

collaboration as it was easier to meet and develop relationships. Educators and leaders especially considered that they were the resource for other professionals, using words such as mediator, liaison and connector to describe their role in ICP.

Orientation Components

When considering what orientation components were necessary to support people with cancer and ICP, the stakeholders described the need for a formalized orientation. It was reported that an orientation should utilize resources developed in other organizations, contain a variety of information and learning methods, increase the awareness of local resources, and connect HCPs to ongoing mentorships. Stakeholders also gave advice on ensuring that an orientation provides flexible components to tailor to individual needs or group dynamics. In addition, the importance of including practical introductory knowledge related to supporting people with cancer was identified as important. Overwhelmingly however, stakeholders requested that there be opportunities within the orientation to observe or pair HCPs with different disciplines in the clinical setting, in order to learn about their role on the team. This was similar to studies suggesting that group work and interactive education sessions were important for building knowledge and relationships (Azur et al., 2016; Head et al., 2016; Jacobs, Beyer, & Carter, 2017).

10. Conclusion and Future Implications

The data from the interviews suggests that ICP was valued by the stakeholders. Stakeholders were able to identify benefits to patients, HCPs, and organizations; as well as discuss barriers to ICP. A commitment from organizations and leadership will be needed to address and overcome barriers such as time to practice collaboratively, system

structures, and HCP engagement. Themes from the data revealed that ICP was viewed positively by the stakeholders, with importance placed on supporting your colleagues and enhancing patient-centered care. Although interprofessional colleagues were considered a strong support for ICP, there was a gap in education resources for staff. This gap, along with barriers and a perceived disconnection between high level interprofessional policy and direct care support, requires action to create meaningful change in organizations such as the BCCA.

Future implications include advocating for opportunities to involve direct care staff in interprofessional policy development, developing education resources to support ICP, and providing an opportunity to develop interprofessional relationships and practice collaboratively. Considering these implications, a nurse-led interprofessional oncology orientation would be an appropriate recommendation. Along with being a response to the resource gap, an orientation would be appropriately placed to promote a culture of ICP and foster relationship building for newly hired HCPs at BCCA.

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Appendix B1

Interview Questions

1. How long have you been working in your current role?
2. How long have you worked in an oncology setting?
3. What do you believe is most important for professionals working in other disciplines to understand about your role?
4. How do you currently collaborate with other HCPs to provide supportive care to cancer patients?
5. What are some of the benefits to interprofessional practice in your role/organization?
6. What are some of the barriers to interprofessional practice in your role/organization?
7. Is there anything that you know now that would have been helpful to have learned during orientation in relation to:
    a. Supporting people with cancer
    b. Working within an interprofessional team
8. What resources are available to support Healthcare professional's interprofessional practice?

Appendix B2

Health Research Ethics Authority Screening Tool

	Question	Yes	No
1.	Is the project funded by, or being submitted to, a research funding agency for a research grant or award that requires research ethics review	❒	☒
2.	Are there any local policies which require this project to undergo review by a Research Ethics Board?	❒	☒
	IF YES to either of the above, the project should be submitted to a Research Ethics Board. **IF NO** to both questions, continue to complete the checklist.	❒	❒
3.	Is the primary purpose of the project to contribute to the growing body of knowledge regarding health and/or health systems that are generally accessible through academic literature?	❒	☒
4.	Is the project designed to answer a specific research question or to test an explicit hypothesis?	❒	☒
5.	Does the project involve a comparison of multiple sites, control sites, and/or control groups?	❒	☒
6.	Is the project design and methodology adequate to support generalizations that go beyond the particular population the sample is being drawn from?	❒	☒
7.	Does the project impose any additional burdens on participants beyond what would be expected through a typically expected course of care or role expectations?	❒	☒
LINE A: SUBTOTAL Questions 3 through 7 = (Count the # of Yes responses)		**0**	
8.	Are many of the participants in the project also likely to be among those who might potentially benefit from the result of the project as it proceeds?	☒	❒
9.	Is the project intended to define a best practice within your organization or practice?	❒	☒
10.	Would the project still be done at your site, even if there were no opportunity to publish the results or if the results might not be applicable anywhere else?	☒	❒
11.	Does the statement of purpose of the project refer explicitly to the features of a particular program, Organization, or region, rather than using more general terminology such as rural vs. urban populations?	❒	☒
12.	Is the current project part of a continuous process of gathering or monitoring data within an organization?	❒	☒
LINE B: SUBTOTAL Questions 8 through 12 = (Count the # of Yes responses)		**2**	

	SUMMARY: Project does not need ethics approval		

Interpretation:

- If the sum of Line A is greater than Line B, the most probable purpose is **research**. The project should be submitted to an REB.
- If the sum of Line B is greater than Line A, the most probable purpose is **quality/evaluation**. Proceed with locally relevant process for ethics review (may not necessarily involve an REB).
- If the sums are equal, seek a second opinion to further explore whether the project should be classified as Research or as Quality and Evaluation.

These guidelines are used at Memorial University of Newfoundland and were adapted from ALBERTA RESEARCH ETHICS COMMUNITY CONSENSUS INITIATIVE (ARECCI). Further information can be found at: http://www.hrea.ca/Ethics-Review-Required.aspx.

Appendix B3

Interview Introduction E-mail

Dear (Health professional's name):

My name is Ava Hatcher and I am a Clinical Nurse Coordinator working at BC Cancer Agency- Centre for the North in Prince George, British Columbia. I am currently a graduate student completing a Master of Nursing degree from Memorial University of Newfoundland and Labrador. As a partial requirement for my degree, I will be completing a practicum project. I am sending you this email to request permission to interview you by telephone or in-person to discuss your experience with orientation to oncology practice and interprofessional collaborative practice and communication. This information will be used to inform a practicum project related to the development of a nurse-led interprofessional oncology practice for health care professionals entering practice at the BC Cancer Agency.

The interview will take approximately 30 minutes. There will be no personal information attached to the information. Due to the small size of the project, total anonymity cannot be guaranteed as your peers may determine that you were involved in the project. You may choose not to answer questions or terminate the interview at any time. If you agree to be interviewed or would like more information, please respond to this email by March 28th, 2017. My contact information is:

Email: Ava.Hatcher@bccancer.bc.ca Phone: 1-250-645-7300 ext. 687497

Thank you in advance for considering this request.

Kind regards,
Ava Hatcher RN BN CON(c)

Appendix C: National Interprofessional Competency Framework

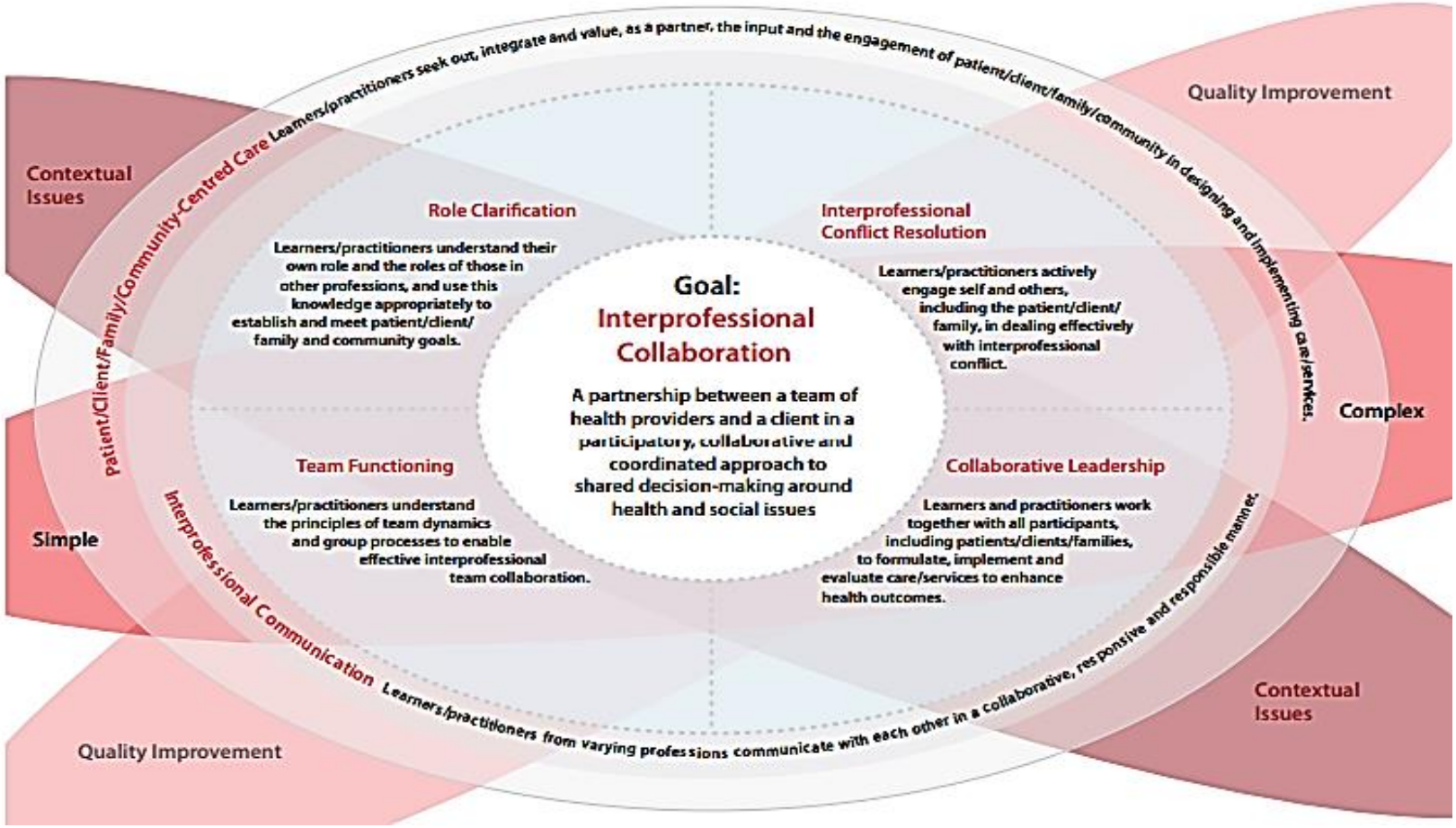


Figure 1. Canadian Interprofessional Health Collaborative. (2010). National Interprofessional Competency Framework. Retrieved from http://www.cihc.ca/

Appendix D

Permission to Use Supportive Care Framework

From: Marg Fitch [mailto:marg.i.fitch@gmail.com]
Sent: Wednesday, June 21, 2017 5:35 PM
To: Hatcher, Ava
Subject: Re: Permission to use Supportive Care Framework

Dear Ava
I am delighted that you want to make use of the supportive care framework. Please consider this email correspondence my permission for you to use it as you have described. There is no cost for using the framework. The only thing I would ask is to let me know how things proceed and how they would out!
My colleagues and I did publish a book which contains descriptions about how others have used the framework. If would be helpful for you I could organize sending copies ($35 apiece plus mailing). We sometimes have given them to participants and made use of them ourselves as guides.
Regards, Margaret Fitch

On Wed, Jun 21, 2017 at 3:01 PM, Hatcher, Ava <AHatcher2@bccancer.bc.ca> wrote:

Dear Dr. Fitch:

My name is Ava Hatcher and I am in the role of Manager, Clinical Services and Regional Nursing Lead at the BC Cancer Agency, Centre for the North. I am currently completing a Master of Nursing program through Memorial University of Newfoundland. I am contacting you to request permission to use the Supportive Care Framework for Cancer Care in the development of a Nurse-led Interprofessional Oncology Orientation. The goal upon completion of the project is for a pilot orientation with newly hired interprofessional staff to occur at Centre for the North.

The work will be used in the following manner: The seven needs categories of the Supportive Care Framework will be reviewed with healthcare professionals (HCPs) attending the in-person orientation. Further to this, HCPs will learn about interprofessional competencies and their individual and team roles in supporting patients through commonly experienced symptoms and side effects of cancer treatments. With your permission, works that will be referred to are:

- Fitch, M. (1994). Providing supportive care for individuals living with cancer (Task Force Report). Toronto: Ontario Cancer Treatment and Research Foundation.
- Fitch, M. (2008). Supportive care framework. Canadian Oncology Nursing Journal, 18(1), 6-14. doi:10.5737/1181912x181614

Thank you in advance for considering this request. If approval is granted, please let me know if there is a fee for using your work in this manner.

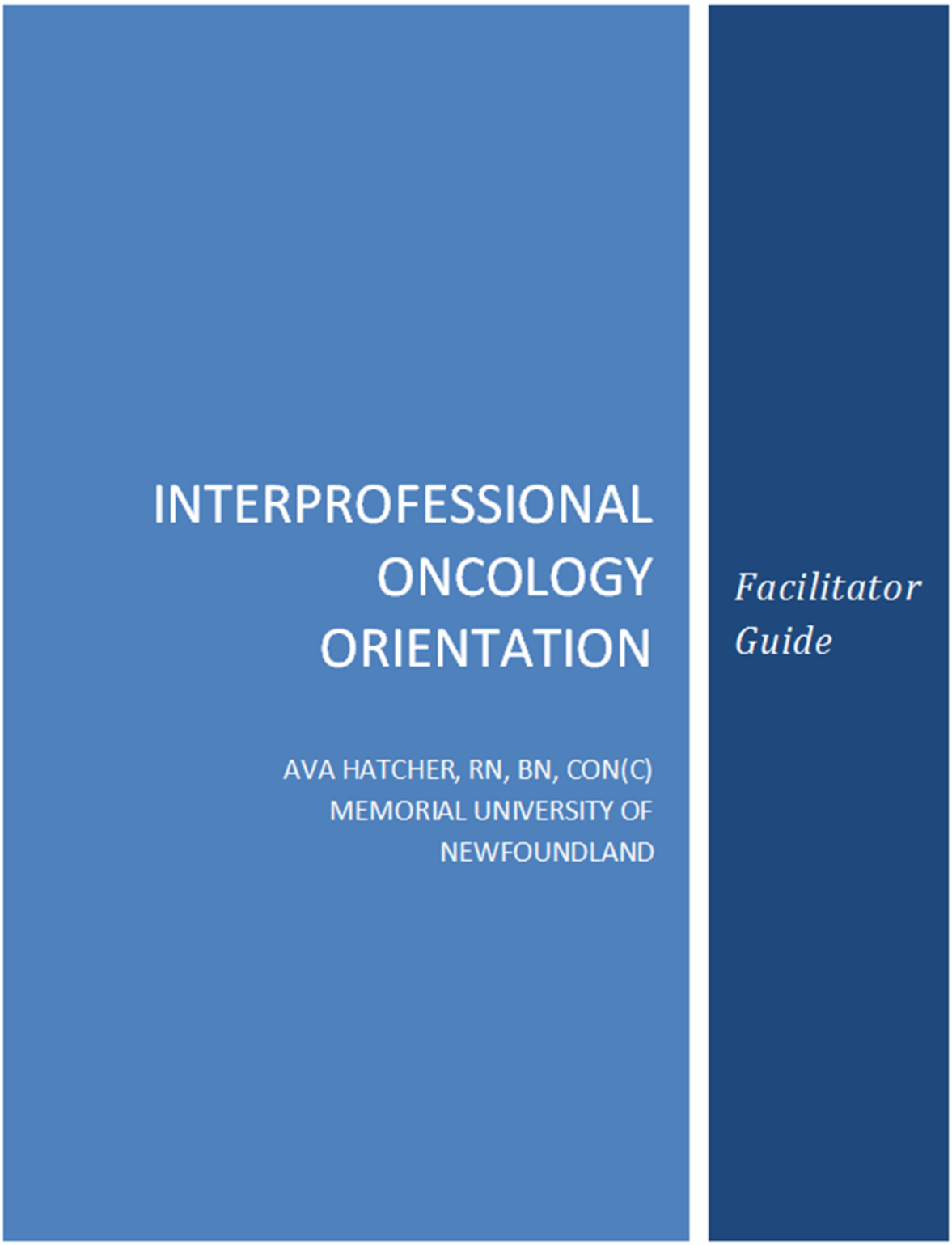
Sincerely,

Ava Hatcher

Ava Hatcher RN BN CON(c)
Manager, Clinical Services and Regional Nursing Lead
BC Cancer Agency, Centre for the North
1215 Lethbridge St., V2M 7E9
250-645-7300 ext. 687497
Ava.Hatcher@bccancer.bc.ca

Appendix E

Nurse-led Interprofessional Oncology Orientation: Toolkit


INTERPROFESSIONAL
ONCOLOGY
ORIENTATION
AVA HATCHER, RN, BN, CON(C)
MEMORIAL UNIVERSITY OF
NEWFOUNDLAND
Facilitator
Guide

INDEX

INTRODUCTION

The purpose of a nurse-led interprofessional oncology orientation at the BC Cancer Agency (BCCA) is to foster team collaboration. It will also provide a resource that is focused on supporting the needs of people with cancer within an interprofessional practice context. The orientation was informed by:

- Evidence from current literature
- Interprofessional colleague consultations within BC Cancer Agency, along with one consultant each from Alberta Health Services and Eastern Health Authority in Newfoundland
- Supportive Care Framework for Cancer Care (Fitch, 2008)
- The National Interprofessional Competency Framework (Canadian Interprofessional Health Collaborative [CIHC], 2010), and
- Knowles' Theory of Andragogy (1984)

The nurse-led interprofessional oncology orientation at the BCCA is an important step towards transforming practice and aligning with the organizations strategic direction towards interprofessional care. The main purpose of the orientation is to provide an entry point into the BCCA that integrates a patient-centered collaborative approach to oncology practice. An integrative literature review was completed which provided information from several recent studies that supported the introduction of interprofessional education at the clinical level (Jacobs, Beyer, & Carter, 2017; McLeod, Curran, Dumont, White, & Charles, 2013) and provided evidence that it can assist in fostering collaborative teamwork (Chou, Ainsworth, & O'Brien, 2016; Head et al., 2016; Jacobs et al., 2017; Shaw, Howard, Etz, Hudson, & Crabtree, 2012).

Integration of the six interprofessional competencies through group interaction and learning activities will provide an opportunity for healthcare professionals (HCPs) to learn about interprofessional collaboration and provide information about their roles to one another. It will also provide an opportunity to have problem based group work that involves critical thinking, contributions from professionals from different disciplines, and knowledge application. The focus of this orientation is to integrate interprofessional competencies into group work in a step like process. Reasons include to promote role clarity and relationship building, while engaging in a curriculum that provides knowledge and understanding of common side effects of cancer treatment and the supportive care needs of the oncology population.

FACILITATOR GOALS and OBJECTIVES

1. To familiarize learners with the Supportive Care Framework.
2. To identify common symptoms associated with cancer and cancer treatment.
3. To create a forum for discussion on an interprofessional approach to managing symptoms within the context of the Supportive Care Framework.
4. To facilitate discussion of interprofessional competencies in relation to teamwork in an oncology setting.
5. To support the application of orientation content and skill building through learning activities in a team environment.

ORIENTATION PROCESS

Care has been taken in the development of this program to include education strategies that align with the literature review. Research on interprofessional education provided examples of effective education strategies (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw et al., 2012). Activities that involved critical thinking and knowledge application were prominent. Examples of these activities were problem-based case studies, reflective journaling, and practice simulation (Chou et al., 2016; Head et al., 2016; Jacobs et al., 2017; Shaw et al., 2012). Educational strategies can assist with creating an opportunity for interprofessional communication and collaboration, while focusing on patient-centered activities and outcomes. Available evidence also demonstrated that it is important for educational strategies to involve group work and interaction to encourage sharing knowledge and to foster relationship development (Azur et al., 2016; Head et al., 2016: Jacobs et al., 2017).

ORIENTATION OUTLINE

DURATION AND SEQUENCE: Orientation content to be delivered over 7.5 hours

Introduction Session (50 minutes)

The introduction session should be used to provide a facilitator introduction, welcome the participants, and create a safe learning environment. An overview of key messages relating to Interprofessional Practice, the connection to oncology practice, and role clarity will be initiated in this session.

Approximate Timeframes

- Settling in and facilitator introduction (10 minutes)
- An overview of orientation objectives and key messages (10 minutes)
- Collaborative Learning Guidelines (10 minutes)
- Ice Breaker Activity (20 minutes)

Resources and Supplies

- PowerPoint: Interprofessional Oncology Orientation-Introduction
- Instructions for Interprofessional Activities and Activity Handouts
  - Introduction Session Activity: Introduce your Partner
- Collaborative Learning Guidelines supplies:
  - One sheet of Post-It easel size paper
  - Marker
- Ice Breaker Activity
  - Paper and pen to take notes as necessary

Supportive Care Framework Session (60 minutes)

This session will introduce the Supportive Care Framework and provide an overview of the seven domains of supportive care needs: (physical, social, psychological, emotional, informational, practical, and spiritual

Approximate Timeframes

- PowerPoint: Interprofessional Oncology Orientation- Supportive Care for Oncology Patients (30 minutes)
- Supportive Care Framework Session Activity: Supportive Care Carousel (30 minutes)

Resources and Supplies

- PowerPoint: Interprofessional Oncology Orientation- Supportive Care for Oncology Patients
- Seven Post-It easel size papers. Prepared in advance with a separate Supportive Care Domain heading on each paper
- Coloured markers
- Instructions for Interprofessional Activities and Activity Handouts
  - Supportive Care Framework Session Activity: Supportive Care Carousel

Common Symptoms and Side Effects of Cancer Treatment (110 minutes)

This session will provide information on the 16 most common side effects of cancer and cancer treatment. The learners will be encouraged to connect what they have learned from this session in relation to supporting patients' symptoms with supportive care needs and HCP role clarity from their colleagues input.

Approximate Timeframes

- PowerPoint: Interprofessional Oncology Orientation- Managing Common Symptoms and Side effects of Cancer Treatments (60 minutes)
- Symptom Management Session Activity: Creating a Mind Map (50 minutes)

Resources and Supplies

- PowerPoint: Interprofessional Oncology Orientation- Managing Common Symptoms and Side effects of Cancer Treatments
- Post-it easel paper, one for each group
- Coloured markers
- Instructions for Interprofessional Activities and Activity Handouts
    - Symptom Management Session Activity: Creating a Mind Map

Interprofessional Competencies Session (85 minutes)

The Interprofessional Competencies Session will introduce National Interprofessional Competencies Framework (CIHC, 2010) and incorporate the six competencies into a group learning activity.

Approximate Timeframes

- PowerPoint: Interprofessional Oncology Orientation- Interprofessional Competencies (40 minutes)
- Interprofessional Competency Session Activity: Team Brainstorming (45 minutes)

Resources and Supplies

- PowerPoint: Interprofessional Oncology Orientation- Interprofessional Competencies
- Handouts for the National Interprofessional Competencies Quick Reference Guide (CIHC, 2010). Located at http://www.cihc.ca/files/CIHC_IPCompetenciesShort_Feb1210.pdf
- Instructions for Interprofessional Activities and Activity Handouts
    - Interprofessional Competency Session Activity: Team Brainstorming
- Two Sheets of Post-It Easel Size Paper per group. With Interprofessional Competency Heading written out in advance.
- Coloured Markers

Conclusion Case Study (110 minutes)

The Case Study will provide a review of key aspects of each orientation session in the context of a patient scenario.

Approximate Timeframes

The Case Study is written in sections which are followed by a question for group review. Each section and question should be completed prior to moving on to the next. He first five sections will take ten minutes each. Section six and seven will take approximately 30 minutes each. Total time approximately 110 minutes.

Resources and Supplies

- **Interprofessional Oncology Orientation: Final Case Study Facilitator Copy**
- **Interprofessional Oncology Orientation: Final Case Study for participants one copy per group**
- **Coloured A, B, C, D 5x7 inch poster board signs. One set for each group (optional)**

Observation shift assignments (20 minutes)

The observation shift will provide HCPs with an opportunity to observe the roles of other members of the interprofessional team, and how they collaborate to support people with cancer in a clinical setting.

- **In advance of the orientation, the facilitator will arrange for orientation participants to be paired with interdisciplinary mentors.**
- **Scheduling of the observation shifts will occur over a two week period to ensure the learning occurs in a timely manner, but does not overwhelm the capacity of experienced mentors and create crowding in clinic space.**
- **The Clinical Observation Day Guide should be reviewed with the Interprofessional Orientation participants so they are aware of the expectations of the learning activity; including review of the reflective questions and feedback from mentor.**

Approximate Timeframes

- **Description of observation shift and overview of assignments (20 minutes)**
- **Observation shift will consist of one 7.5 hour shift**

Resources and Supplies

- **Interprofessional Oncology Orientation: Clinical Observation Day Guide**

FACILITATOR RESOURCES

Benefits of Interprofessional Practice and Education

As an educator facilitating interprofessional education in a clinical setting, it is important to understand the benefits for HCPs. Evaluation of interprofessional education completed by HCPs practicing in a clinical setting showed positive findings (Heath et al., 2015; Jacobs et al., 2017; Martins & Lairamore, 2016; McLeod, et al., 2013). Results from these studies revealed that interprofessional education and knowledge exchange:

- increased self-confidence and confidence between disciplines,
- provided role clarification,
- generated mutual respect,
- supported relationship building within teams,
- allowed for immediate application of new skills, and
- fostered relationship development within a workplace interprofessional team.

The following resources have been included to increase awareness of the benefits of interprofessional practice.

1. Safety Competency Framework.
   Frank, J. R., & Brien, S. (Eds.). (2009). The Safety Competencies Steering Committee. The safety competencies: Enhancing patient safety across the health professions. Ottawa, ON: Canadian Patient Safety Institute. Retrieved from http://www.patientsafetyinstitute.ca/en/toolsResources/safetyCompetencies/Documents/Safety%20Competencies.pdf
2. Framework for Action on Interprofessional Education and Collaborative Practice.

World Health Organization. (2010). Framework for action on interprofessional education and collaborative practice. Retrieved from http://www.who.int/hrh/resources/framework_action/en/

3. Interprofessional Collaboration.

Canadian Nurses Association. (2017). Interprofessional collaboration. Retrieved from https://www.cna-aiic.ca/en/on-the-issues/better-care/interprofessional-collaboration

The following resources have been included to support integration of interprofessional competencies into education programs and professional development learning plans:

1. A National Interprofessional Competency Framework.

Canadian Interprofessional Health Collaborative. (2010). A National interprofessional competency framework. Retrieved from http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf

2. Education to Practice: Interprofessional toolkit

Michigan Health Council. (2017). Education to Practice: Interprofessional toolkit. Retrieved from http://education2practice.org/interprofessional-toolkit/

Resources for Facilitating Interprofessional Education

For nurse educators at BCCA to deliver interprofessional education they must be skilled facilitators who are able to integrate the interprofessional competencies into information exchange in the education sessions (Derbyshire, Machin, & Crozier, 2015; McLeod et al., 2013). The facilitator must also be adaptable to allow this information exchange to occur through the HCPs sharing their expertise (Carlson, Pilhammar, & Wann-Hansson, 2011; Derbyshire et al., 2015; Johnson, Lynch, Lockeman, & Dow, 2015). Ideally the process of interprofessional education should occur through the interaction between HCPs as they learn from, and teach each

other. The facilitator must therefore promote this independent knowledge exchange. For this to occur, it may be required that facilitators of interprofessional education create the interprofessional practice connection between the differing HCP groups through removing barriers and developing common understanding (Carlson et al., 2011; Johnson et al., 2015).

Facilitators of interprofessional education are responsible for capitalizing on critical moments where HCPs can bring forward their own knowledge to assist with role clarification and the creation of shared knowledge. This will assist with working towards common patient-centered goals, while setting the tone for respect and session expectations (Black, Blue, Davidson, & McCormack, 2016; Carlson et al., 2011; Johnson et al., 2015; McLeod et al., 2013). The facilitators are essential to forging early relationships which help to reduce hierarchal positioning (Carlson et al., 2011; McLeod et al., 2013). In addition, facilitators must act as role models to create and sustain group culture (Carlson et al., 2011; Derbyshire et al., 2015; Johnson et al., 2015; McLeod et al., 2013). This will be an essential component at BCCA, since there is a desire to transform to an interprofessional practice culture.

The following resources have been included to assist with facilitating interprofessional education.

1. Interprofessional Learning Facilitator Guide.
   University of British Columbia. (2014). Interprofessional facilitator learning guide. Retrieved from http://www.health.ubc.ca/interprofessional-education-resources/interprofessional-facilitator-guides/
2. Facilitating Through an Interprofessional Lens.
   University Health Network [UHN]. (2015). Interprofessional education and care: Interprofessional lens. Retrieved from

http://www.ipe.utoronto.ca/sites/default/files/Interprofessional%20Lens.pdf

3. Advancing Teamwork in Healthcare: A Guide and Toolkit for Building Capacity and Facilitating Interprofessional Collaborative Practice and Education.

   Practice BC Education. (2013). Advancing Teamwork in Healthcare: A Guide and Toolkit for Building Capacity and Facilitating Interprofessional Collaborative Practice and Education. Retrieved from http://chd2.sites.olt.ubc.ca/files/2017/01/BCAHC-IPE-Building-Guide-January-2013-1.pdf

4. Education Treasure Chest

   UBC Health. (n.d.) Interprofessional practice education treasure chest. Retrieved from http://www.health.ubc.ca/educators/interprofessional-practice-education/

Leadership Development

In addition to nurse educators developing skills to facilitate interprofessional education, it is worthwhile to note that there was much evidence in the literature to support that facilitators of interprofessional education undertake leadership development. Interprofessional leadership was a recurring theme throughout the literature on interprofessional collaboration and education. Facilitators of interprofessional education are responsible for modeling interprofessional values and behaviour, must be knowledgeable in their clinical specialty area, and skilled in transformative leadership qualities (Carlson et al., 2011; Derbyshire et al., 2015; Johnson et al., 2015).

To ensure educators are supported, organizational leaders are required to provide facilitators of interprofessional education with leadership development opportunities. Leadership qualities were identified

as important to successful interprofessional collaboration and reduce barriers (Azur et al., 2016; Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014; Johnson et al., 2015). The findings from three separate studies indicated that nurses had the skill set necessary to communicate, organize, lead, and participate in interprofessional teamwork and were considered leaders by interdisciplinary team members (Azur et al., 2016; Bilodeau et al., 2015; Chatalalsingh & Reeves, 2014).

ORIENTATION DEVELOPMENT RESOURCES

The following resources were used to inform the interprofessional oncology orientation. The three text books used in the development of this resource, Chai (2014); Langhorne, Fulton, & Otto (2007); and Yarbro, Wujcik, & Gobel (2018), are frequently recommended for education programs at the BC Cancer Agency and are the most current editions available. Langhorne et al., (2007) and Yarbro et al., (2018) are listed among the key resources for the Canadian Nurses Association Oncology Nursing certification exam. The following resources are available for HCPs who are interested in expanding their knowledge of the orientation content.

BC Cancer Agency. (2017). Symptom Management Guidelines. Retrieved from http://www.bccancer.bc.ca/health-professionals/professional-resources/nursing/symptom-management

Canadian Interprofessional Health Collaborative. (2010). A National interprofessional competency framework. Retrieved from http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf

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INTERPROFESSIONAL ONCOLOGY ORIENTATION

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Instructions for Interprofessional Activities and Activity Handouts

Interprofessional Activities

Interprofessional group activities have been developed for the interprofessional oncology orientation to: (a) reinforce the learning in each session, (b) promote role clarification, (c) foster teamwork and relationship building, and (d) integrate the interprofessional competencies into clinical oncology based patient scenarios.

The activities are provided in this booklet and include facilitator notes that provide instruction. In addition, the interprofessional activities are in order of the orientation sessions and can be identified by similar titles. There is an appendix included that has copies of the interprofessional activities with the facilitator notes omitted. These should be printed and distributed for participant reference prior to starting each activity.

Introduction Session Activity: Introduce your Partner

You will be paired with another person in the group. Take turns to interview your partner with the following four questions:

1. Name and profession.
2. A brief description of their role and last position.
3. How they feel they will contribute to the oncology team.
4. A hobby or personal fun fact.

You will be given five minutes for your interviews. Take notes so that you can accurately introduce your partner to the group. Upon completion of the interviews you will be asked to introduce your partner to the orientation group.

Arnold, E. C., & Boggs, K. U. (2011)

Facilitator notes:

- This activity should take approximately **20** minutes; **five** minutes each to complete their interview and **ten** minutes to provide the introductions to the large group.

- Start by providing handout titled *Introduction Session Activity: Introduce your Partner* (See Appendix) and describing the activity as written above.
- Divide participants into pairs by allowing them to pick a partner, or pair them with the person sitting next to them.
- Keep track of time and request a switch after five minutes.

Supportive Care Framework Session Activity: Supportive Care Carousel

To encourage group work and discussion on supportive care and symptom management for cancer patients, a carousel activity has been planned (Campbell & Daley, 2013; Grey, 2016). Easel paper will be placed around the room, each with one of the **seven** supportive care domains as a topic heading. The facilitator will divide you into groups of two or three. Each group will be instructed in relation to which heading will be their starting point. The activity will take place in rounds as follows:

Round one:

- Your group will be given **five** minutes to discuss and write down the supportive care symptoms or needs within that domain.
- When the time is up you will be asked to switch stations, moving clockwise to the next easel paper.

Round two:

- Read through the new heading, and needs that were written by the previous groups.
- Using a different colour marker, discuss and write down how these needs can be supported. For example, this can be any type of intervention, resource, or education.
- You will be given **five** minutes to complete this round. When the time is up you will be asked to switch stations, again moving clockwise to the next easel paper.

Round three:

- Read through the new heading, needs and interventions written by the previous groups.
- Using a different coloured marker, discuss and write down which discipline(s) would be able to assist/provide the supports that were recommended.
- You will be given **five** minutes to complete this round.

- When the time is up you will be requested to stay at this last station for the activity debriefing.

Facilitator notes:

- This activity should take approximately **30** minutes; **five** minutes to complete each round and 15 minutes for summary and large group debriefing.
- Start by providing handout titled *Supportive Care Framework Session Activity: Supportive Care Carousel* (See Appendix) and describing the activity as written above.
- Keep track of time and request a switch every 5 minutes.
- Debrief activity after the last switch as follows:
    - Each group will debrief by providing a summary of the domain, needs, interventions and disciplines suggested as being able to assist with support.
    - Follow this by larger group discussion. Reflective questions to consider:
        - What did you learn about the other professions during this activity?
        - What surprised you?
        - What confirmed what you already knew?

Symptom Management Session
Activity: Creating a Mind Map

A mind map is a way for groups to work collectively to create new ideas and connections to a central theme (Rosciano, 2015; Spencer, Anderson, & Ellis, 2013; Zipp, Maher, & D'Antoni, 2015). It allows the group to display a visual representation of their thoughts and ideas.

Mind Map:

- You will be divided into groups comprised of different professions by the facilitator.
- For this Map, the patient is the central concern.
- Each symptom/need that your group identifies will be attached to the patient with its own line.
- Once your group has decided on the symptoms, the next step is to identify what the supportive care needs are. The final step is to identify who (individual or team) could potentially provide the support.
- You will be provided with a large easel paper and coloured markers and given **20** minutes to create your mind map.
- This will be followed by a review with the large group

For this Mind Map the following information has been given:

Rose is 68 years old First Nations elder who has locally advanced squamous cell carcinoma of her right tonsil and a history of emphysema. Rose was placed on a treatment plan with a curative intent. The plan consists of daily radiation and high dose cisplatin every 21 days for three cycles. Rose belongs to the Nak'azdli Band near Fort St. James, and is starting cycle 2 of her chemotherapy treatment tomorrow. She will require hospital admission tonight for pre-hydration prior to cisplatin.

You receive a telephone call from Rose and she tells you that she is not sure what to do. She has been nauseated off and on, not eating, and losing weight since her last chemotherapy treatment. Today she has developed mouth pain and increased shortness of breath. She also tells you that she feels this is hopeless and does not understand why the doctors have ordered this treatment. Rose confides in you that she cannot go back to the hospital because she feels the staff treat her disrespectfully and do not let her go outside to perform her smudging ceremonies. Rose states that she is certain that the Western Medicine is doing her more harm than good, and

tells you that she would like to pursue a traditional healing path.

How can you help Rose?

Facilitator notes:

- This activity should take approximately **50** minutes.
- Start by providing handout titled *Symptom Management Session Activity: Creating a Mind Map* (see Appendix) and describing the activity and case vignette as written above.
- Plan for:
  - 5-10 min for instructions.
  - 20 min creating map.
  - 20 minutes for activity debrief.
- Debrief to include:
  - Groups to summarize map and discuss rationales for their choices.
  - Further discussion on how identifying support can naturally lead to interprofessional collaboration.
  - Look for opportunities to discuss role overlap, clarity, and interprofessional communication.

- Discussion on how to support cultural and complementary alternative treatments while on cancer treatment.

Interprofessional Competency Session Activity: Team Brainstorming

This activity will present a patient scenario that is best supported using an interprofessional approach. Brainstorming allows diverse groups to partner together to bring different knowledge, views, and experiences forward to combine ideas (Arnold & Boggs, 2011).

The facilitator will divide you into groups of two or three to write your brainstorming ideas on the Easel sized paper. Using the Competency/Competencies you have been assigned from the National Interprofessional Competency Framework (CIHC, 2010), work with your group to come up with ideas that would support the patient in the following scenario.

Patient Scenario

Bana is a 32 year old Syrian refugee whose family has come to Canada on a Government-Assisted Refugee Program. Bana's husband Sayid can speak some English, but is only home on the weekends because of an out of town construction job. Bana has been attending physician appointments with an interpreter for the last six months as she has not adjusted well to her family's immigration to Canada. She is also being treated and followed-up on symptoms of depression. She has started to develop trust with her physician, and has agreed to a physical exam. During the exam the physician notes an abnormal growth on her cervix.

Test results reveal that Bana has a Human Papilloma Virus (HPV) related stage III cervical squamous cell carcinoma. Bana has been referred to the BCCA where she will undergo external beam pelvic radiotherapy with concurrent chemotherapy.

Mia is the nurse assigned to support Bana for her first treatment appointment. Upon arrival, Mia notices that Bana is withdrawn, trembling, and does not make eye contact. The interpreter tells Mia that she is unsure if Bana

fully understands the diagnosis and treatment plan. In addition, the interpreter discloses that Bana is struggling to care for her three children under the age of five, and that her depression seems worse.

Mia reports that she feels overwhelmed, and does not think that she is able to proceed with Bana's treatment as planned. Mia brings her concerns to Bana's Medical Oncologist. The physician does not listen to Mia's full report and tells her that Bana understood and consented to treatment. Mia is instructed by the physician to initiate treatment. Mia is left feeling upset and frustrated, and decides to collaborate with other members of the team.

Note: Consider using Fitch's (2008) Supportive Care Framework to help identify what the issues/concerns are for Bana and her family. Also consider what issues are relevant for Mia and the interprofessional team in working out conflict and providing support to Bana. Please use the competencies you have been assigned to determine ways the interprofessional team can provide support and resolve this situation. Following this, the larger group will debrief and work together to develop a shared plan of care.

Facilitators notes:

- This activity should take approximately **45** minutes.
- Provide handouts (See Appendix) and review the activity.
- After reviewing the patient scenario, provide the groups with one or two of the interprofessional competencies to work through the scenario. These should be written on large post-it easel sized paper in advance.
- The groups will have **ten** minutes to brainstorm and write down their ideas to support Bana/ family and Mia related to the interprofessional competencies.
- When time is up, the groups will have **ten** minutes to report their information back to the larger group.
- After the report back, the larger will develop a shared care plan that combines the ideas brought forth from the interprofessional competency brainstorming groups.
- As time permits, allow **ten** minutes for questions, comments and feedback. Questions to consider:
    - What did you learn from this activity?
    - What are your thoughts on using the ICP framework in the practice environment?

- What would this look like?
- What might the benefits be?

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Appendix: Activity Handouts

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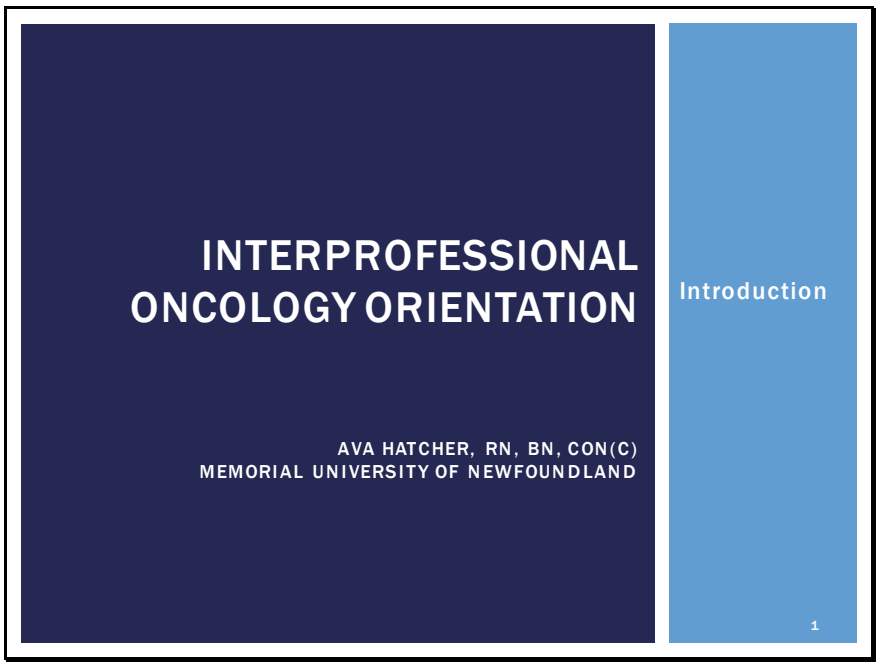
Interprofessional Oncology Orientation: Introduction



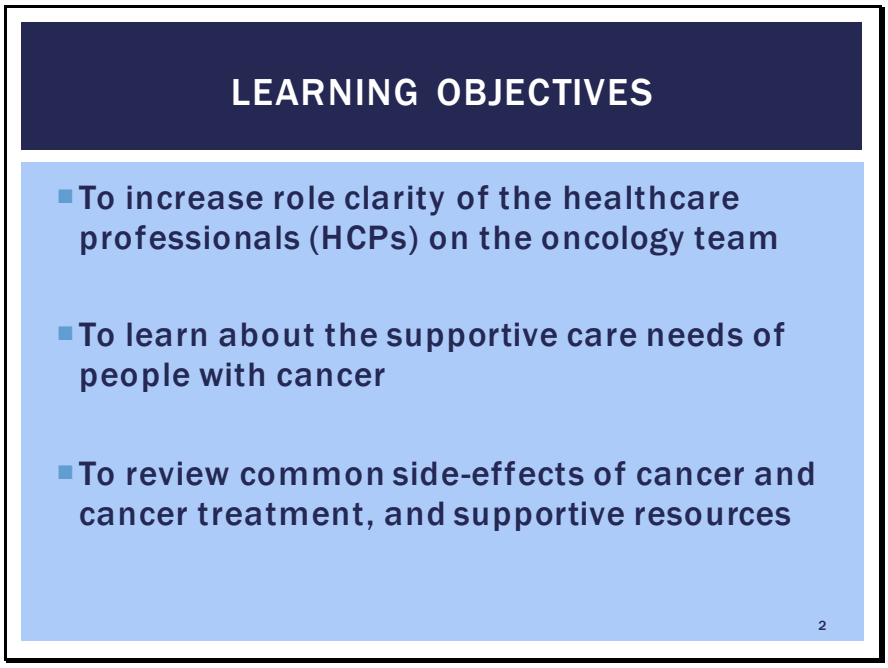
Facilitator Comments:

Welcome everyone to the orientation and introduce yourself to the class.

Provide background information on your:
- Role title, overview of your current position, and nursing background,
- Oncology experience, and
- A few opening thoughts on the importance of interprofessional practice in an oncology setting.

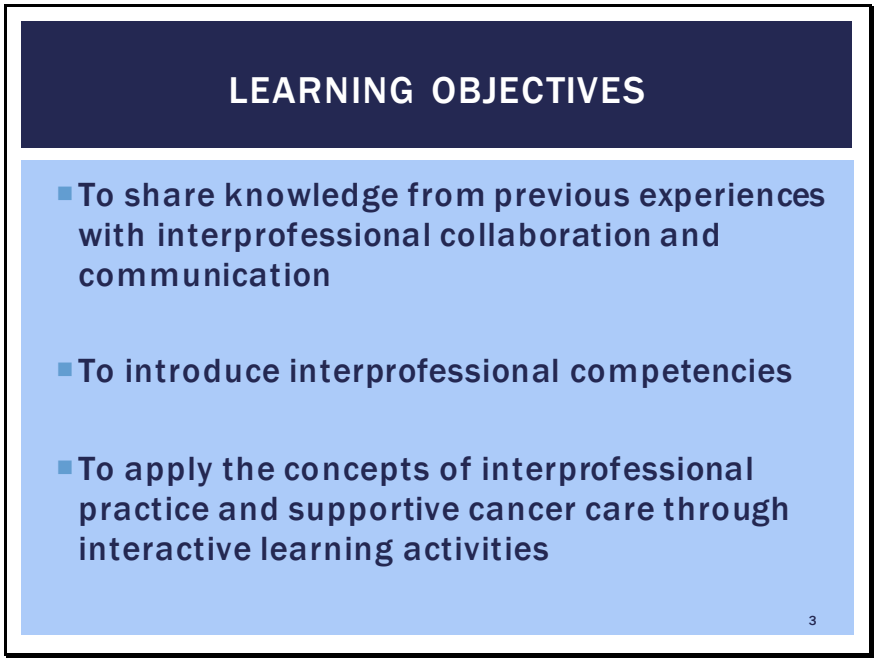
Interprofessional practice by way of supportive oncology care "seeks to improve and preserve the quality of life, autonomy and dignity of those living with, and affected by, the cancer. It is aimed toward empowerment and optimizing wellness" (Fitch, 2008, p. 11).

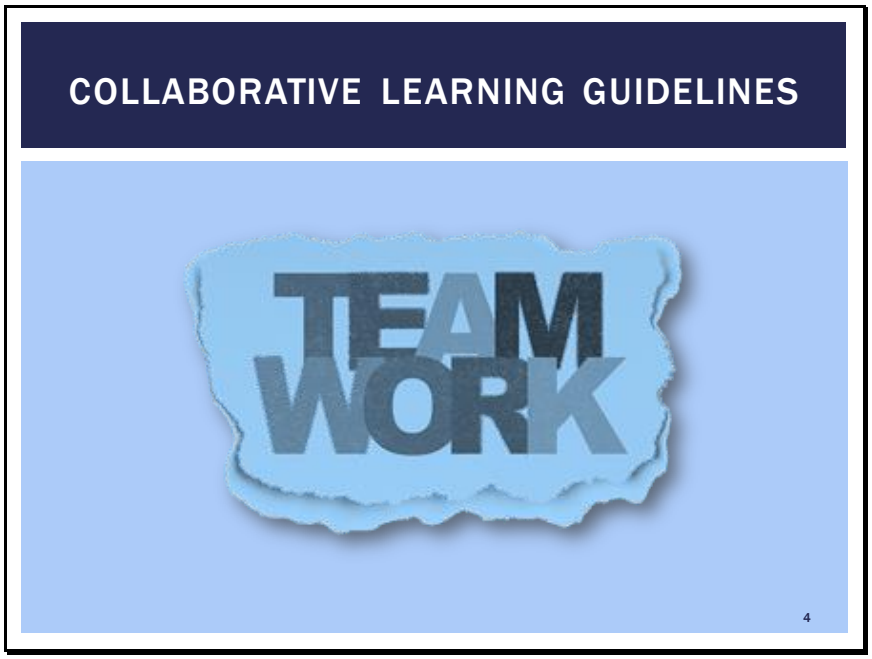
The advancement of cancer care and treatment has become highly specialized and complex, requiring healthcare professionals to communicate and share responsibilities (Bunnell et al., 2013; Clauser, Wagner, Bowles, Tuzzio, & Green, 2011; Chen, Cheung, Spinelli, & Kennecke, 2016; James, Page, & Sprague 2016; Sumpio, Knobf, & Jeon, 2016).



Facilitator Comments:

There are several learning objectives that we will be focusing on today as we work through the different sections of the orientation. These are: (read this slide and the next).





Facilitator Comments:

- Discuss setting guidelines around a safe learning environment.
- Guidelines are to be decided on by the class.
- Transcribe guidelines on easel paper and post for all to see.

To get started if people are not readily contributing, ask questions such as:

- What guidelines would you like around confidentiality or the learning environment (safety, conversations are confidential and not to be shared, etc.).
- What about having fun?
- Would you want to create any guidelines about contributing ideas or on respectful communication?

Facilitator Comments:

Start by asking the class a question or two to share what they may already know, or their interpretation of interprofessional practice.
Suggestions:

- What are some examples of interprofessional practice that you have been involved in that you can share with the class?
- How would you define interprofessional practice?

The World Health Organization (WHO, 2010) defines interprofessional practice as occurring when differing HCPs provide care for patients that brings forth new knowledge and that this can only occur when professionals are "provided with opportunities to learn about, from, and with each other" (p. 14).

Points to add to the discussion:
Interprofessional collaborative practice and education:

- Is necessary for a collaborative practice that can respond to system and individual needs,
- Strengthens healthcare systems and improves outcomes,
- Can increase safety,
- Can provide role clarity, ensuring that the patient receives the appropriate care giver for the appropriate reason,
- Decrease burnout, increase job satisfaction, and
- As stated earlier, it is essential in an oncology setting to ensure people with cancer have their supportive care needs met.

Facilitator Comments:

Before advancing slide, first discuss the following:

- Interprofessional practice is a collaborative approach to care that provides the HCPs with a chance to combine their profession specific knowledge to bring forward new knowledge and efficiencies that benefit patients and healthcare systems.
- Knowledge on the benefits of interprofessional education has led to a desire for multidisciplinary HCPs to work and collaborate within teams and share their expertise in patient-centered care plan development (Canadian Interprofessional Health Collaborative [CIHC], 2010).

…Advance slide to show bullets under patients

- Benefits for patients include:
    - Improved outcomes,
    - Increased satisfaction with care,
    - Increased care coordination,
    - Improved symptom management, and
    - A more consistent approach to care.

…Advance slide to show bullets under Healthcare Professionals

- Benefits for HCPs include:
    - Strengthens healthcare systems,
    - Moves systems from fragmentation to strength,
    - Team members optimize skills and share responsibility, and
    - Improved communication, skill and knowledge.

Facilitator Comments:

To develop strong teams, we need to first develop relationships with our interprofessional colleagues. In our group today, we are going to start by getting to know each other. (Introduce the activity below).

Facilitator directions:

Group class in pairs of two. Provide activity handout. Instruct the pairs to take turns to interview your partner with the following **four** questions and write their answers down or take notes so that you can accurately introduce your partner to the group:

- Name and profession
- A brief description of their role and last position
- How they feel they will contribute to the oncology team
- Hobby or fun fact

Give ten minutes for pairs to complete the interviews, five minutes each. Encourage that they take notes or write down the answers to the questions. After complete, the group will take turns introducing their partners to the group (Arnolds and Boggs, 2011).

Supplies: paper and pens to take notes.

NOTE: Further information can be found in the *Instructions for Interprofessional Activities and Activity Handouts*.

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10

INTERPROFESSIONAL ONCOLOGY ORIENTATION

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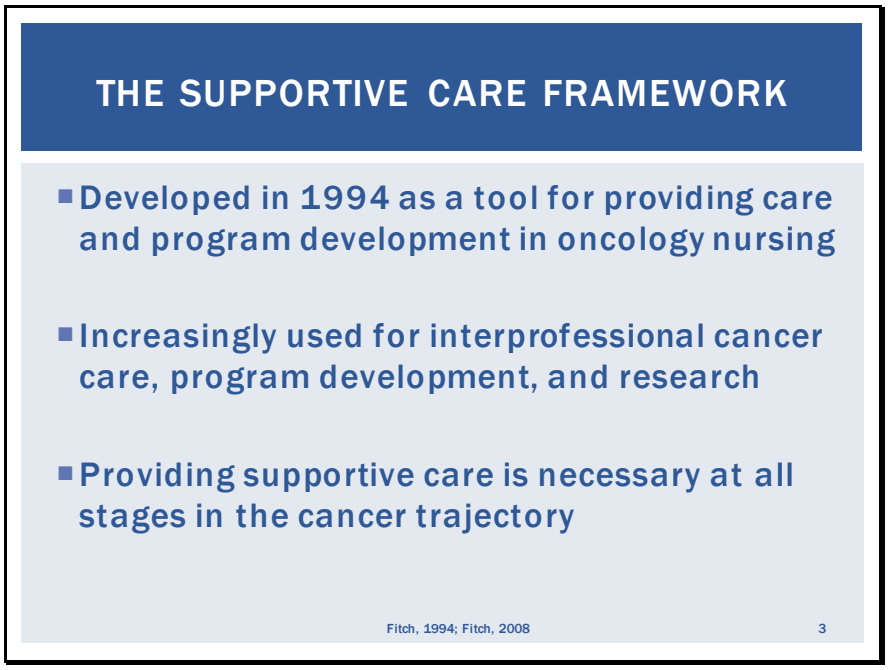
Supportive Care for Oncology Patients

1

LEARNING OBJECTIVES

- To review the seven supportive care need domains of people with cancer
- To introduce supportive care standards
- To apply concepts in a team learning activity

2

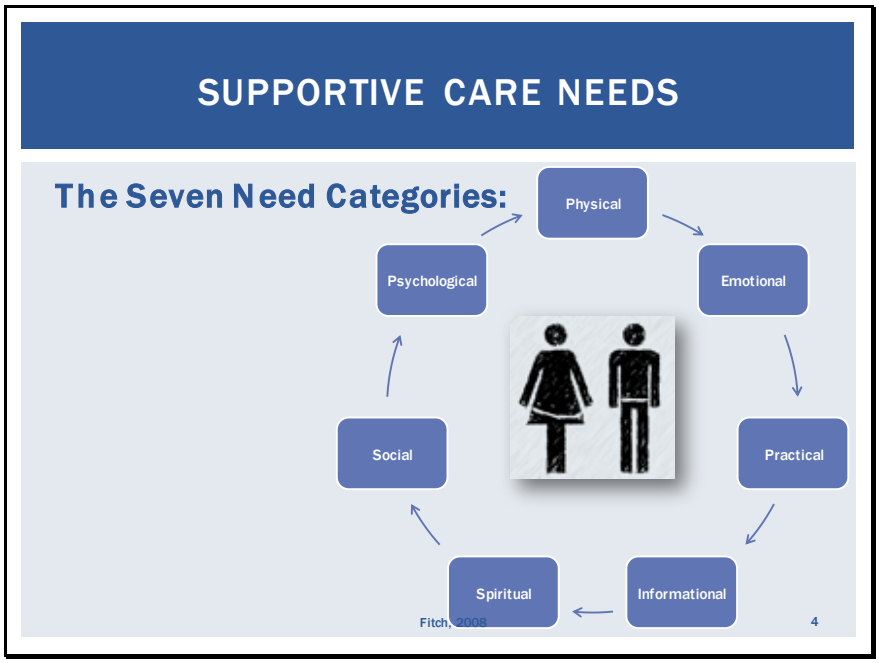


Facilitator Comments:

The Supportive Care Framework was first developed by Dr. Margaret Fitch in 1994. Though a nurse, Dr. Fitch developed this framework based on the experience of cancer patients and their families, as well as interprofessional team members working in oncology. Included were, nurses, social workers, and professionals in psychology, pharmacy, radiation and systemic oncology. The framework was developed to support and encourage oncology HCPs to conceptualize the care that cancer patients require when planning services and programs (Fitch, 2008).

The framework itself is based on "the constructs of human needs, cognitive appraisal, coping, and adaptation as a basis for conceptualizing how human beings experience and deal with cancer" (Fitch, 2008, p. 6).

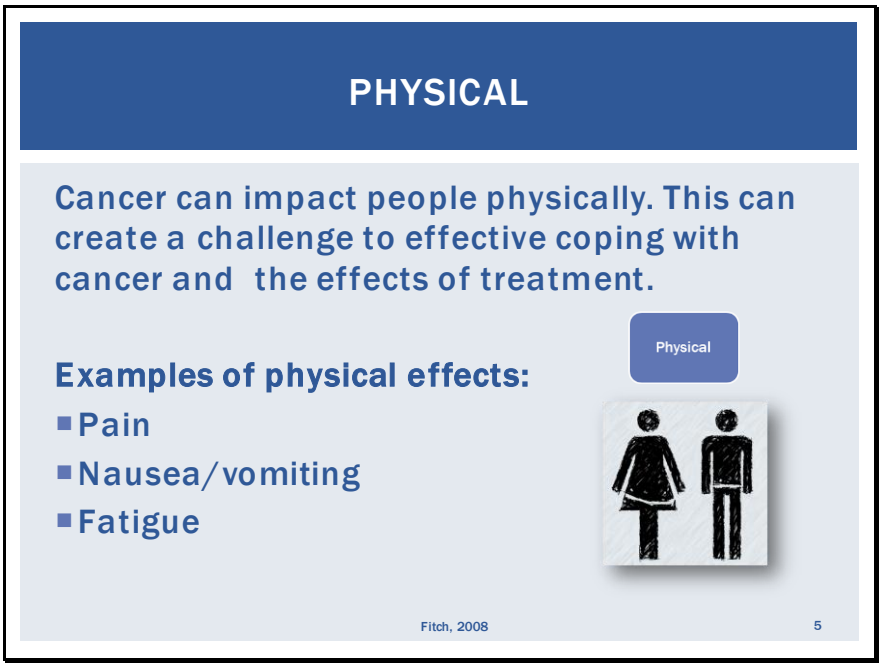
The use of the framework to support people with cancer has grown on an international scale both in nursing and with the interprofessional team.



Facilitator Comments:

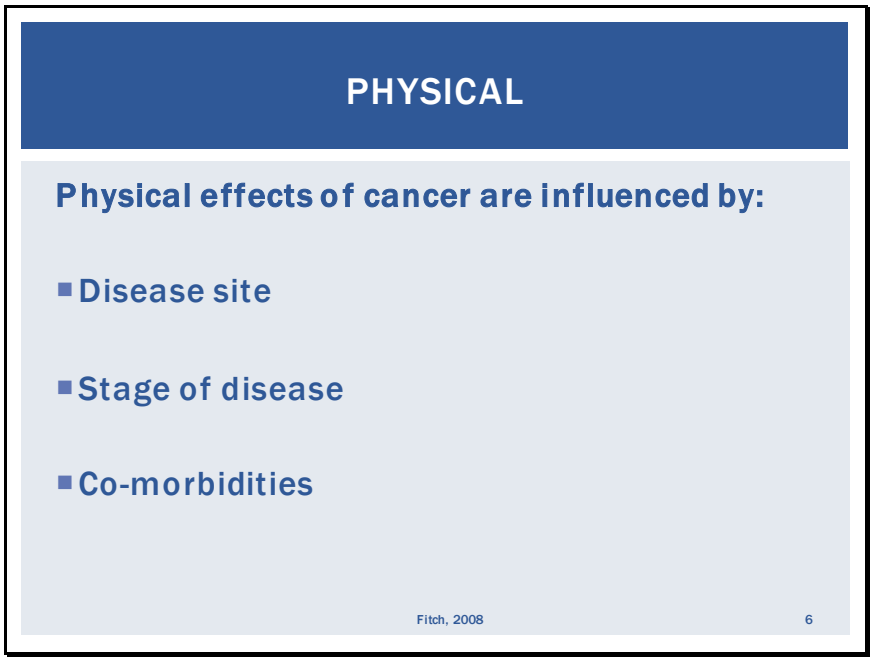
The effects of cancer are complex, and often compromise a person/families ability meet their own needs. These needs predominantly fall into seven categories or domains. These are (read slide). Cancer, and cancer treatments, create an extra burden which in turn increase the challenge in meeting needs from these different domains; adding to the difficulty of their illness and treatment. These needs are not stagnant, and as the person moves through the course of the illness their needs change accordingly.

For example:
•Upon receiving a cancer diagnosis and starting treatment, the informational need is high and will gradually decrease as HCPs provide support to the person/family to ensure this need is met. The need for information will increase again with transitions such as recurrence or treatment completion, and there is a need to acquire new information.
•Spiritual needs, depending on the person, may remain constant throughout all stages of illness. Physical needs such as symptom management may be episodic or build in intensity as the disease progresses.



Facilitator Comments:

- Physical effects can be caused by cancer itself or from treatment. It is important to maximize comfort and freedom from pain. Optimizing nutrition is important as high protein diets are necessary for cellular growth and recovery. This however, can be challenging in the face of nausea and vomiting.
- People undergoing cancer treatment need to maintain their ability to stay as active as possible to maintain their strength and independence. This can be a delicate balance between exercise and fatigue. It is, however, a necessary component for optimum wellness as it will lessen any decrease in function which could in turn cause treatment delays or reductions that would negatively impact outcomes.

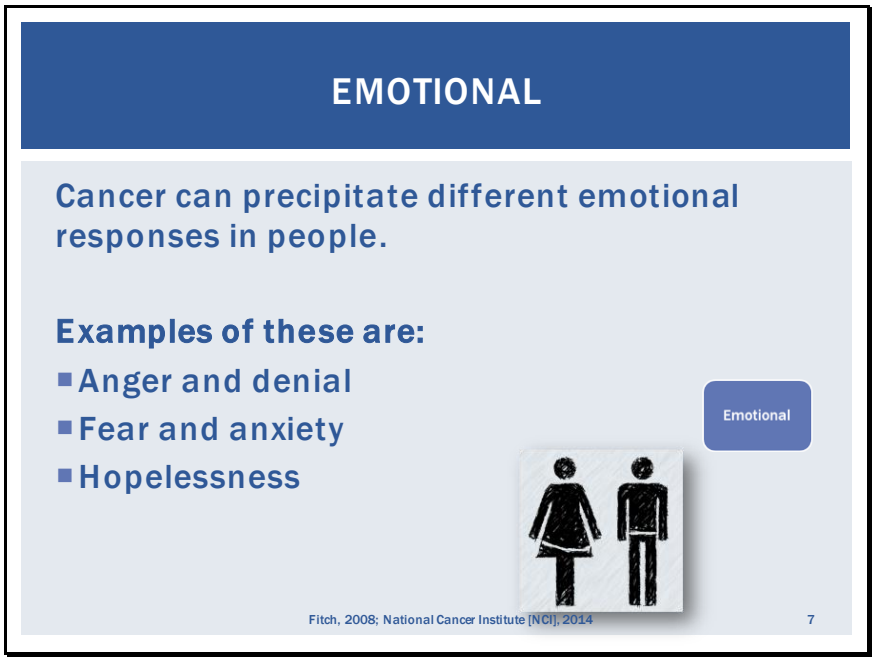


Facilitator Comments:

The most common physical effects are:
- Fatigue 28-40%,
- Pain 21-32%,
- Sleep disturbances 16-33%, and
- Nausea 19-31%.

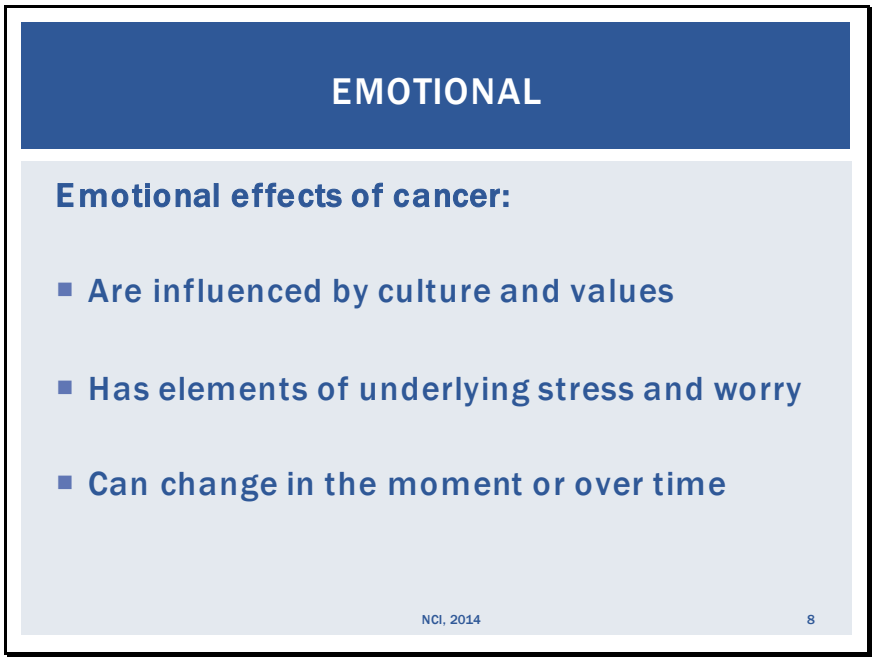
- Ensuring physical effects are diminished and the need for comfort is met can be a challenge when working with cancer patients. Physical symptoms often change from one treatment to the next, intensify, or are present in clusters.

- Evidence suggests that multiple symptoms, or symptom clusters, create greater distress at lower levels, so the HCP team need to be aware of this. For example a patient who describes having pain at 4/10, Fatigue at 3/10, and anxiety 3/10, requires urgent support at the same level as someone who is experiencing pain at 7/10 (Fiorentino, Rissling, Liu, & Ancoli-Israel, 2011; Lin, Chen, Yang, & Zhou, 2013).



Facilitator Comments: Emotional distress is a natural response when receiving a serious diagnosis. This distress is experienced by all cancer patients in varying degrees, and will escalate with unmet needs.

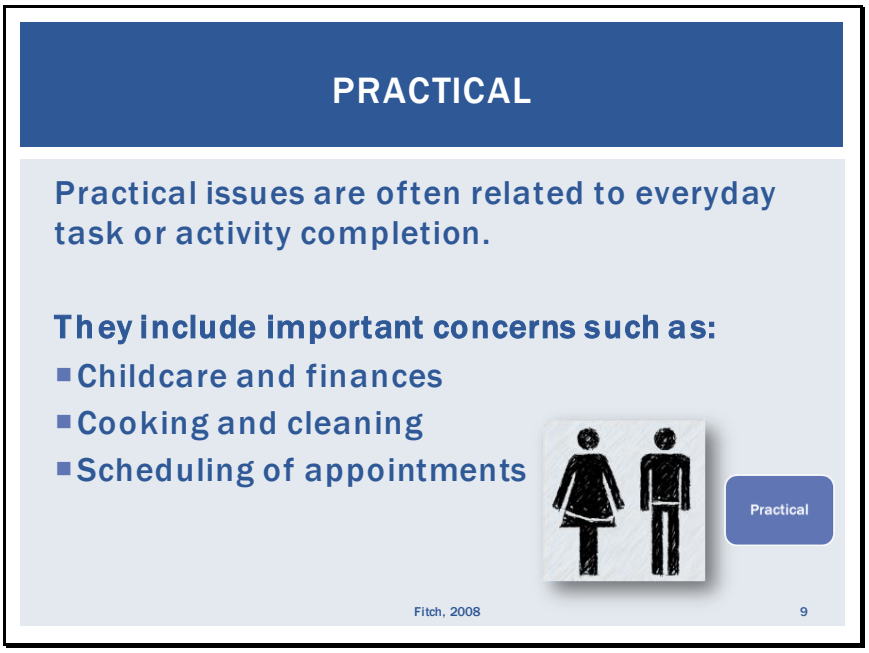
- In times of stress, people need a sense of comfort, belonging, understanding, and reassurance.



Facilitator Comments:

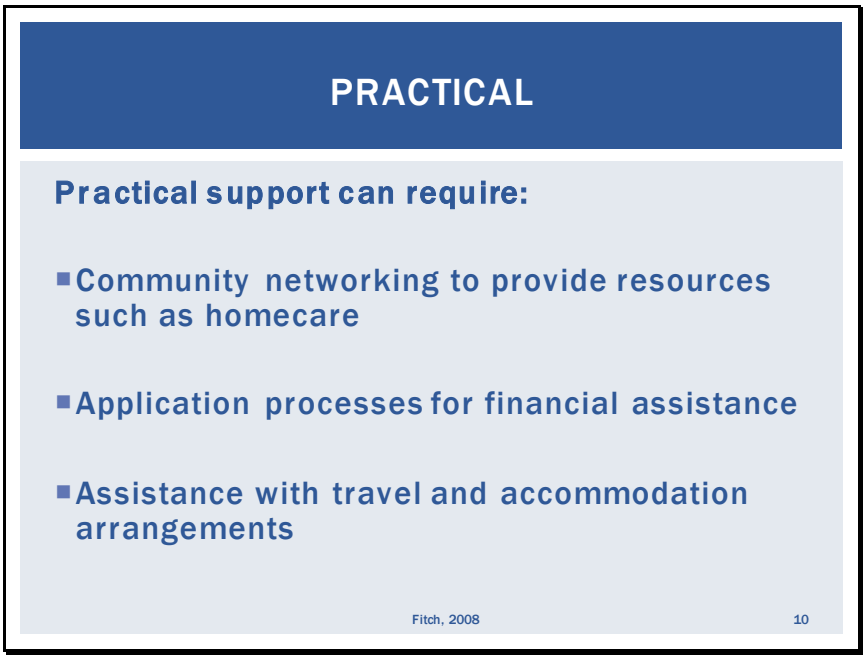
There are many things that individual and HCP teams can do to support the emotional needs of people with cancer. A few of these are:

- Assessing the patients emotional status,
- Determining local supports in your facility or community, and
- Collaborating with your interprofessional colleagues to develop an individualized care plan.



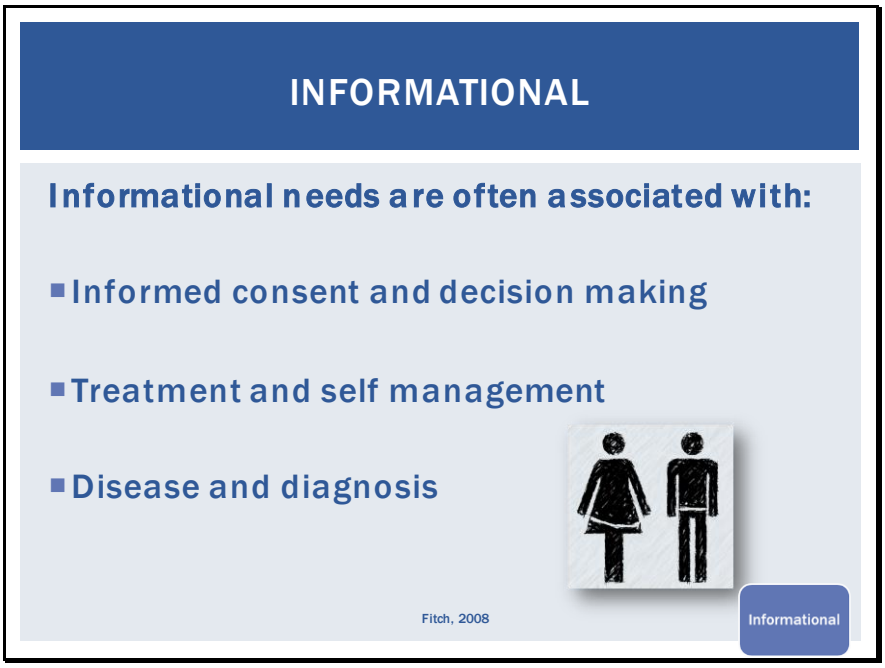
Facilitator Comments:

- Practical everyday issues are the most tangible things to help people with as they can present visible and immediate barriers to treatment.
- In a lot of ways, practical issues can be easier to deal with as they are they are more straight forward and more comfortable for HCPs.
- Though they are often straight forward, it is important that HCPs do not underestimate the impact that occurs when the practical needs are not met. These are often high priority for patients. In order for people to undertake the steps necessary for self-care when on cancer treatment, they first need to have their practical needs met.



Facilitator Comments:

- Practical needs often present similarly in relation to age and developmental stage.
- For example, a 30 year old patient with breast cancer may have concerns around childcare, and preparing meals for her family. Elderly patients on fixed incomes with no extended health plans may have financial needs to pay for their support medications and medically related travel.
- Determining eligibility for financial support and completing applications require assistance as this can consume a lot of focus and energy. Often patients cannot manage this without help and can be overwhelmed and burdened by the process, thus interfering with their ability to cope with treatment.

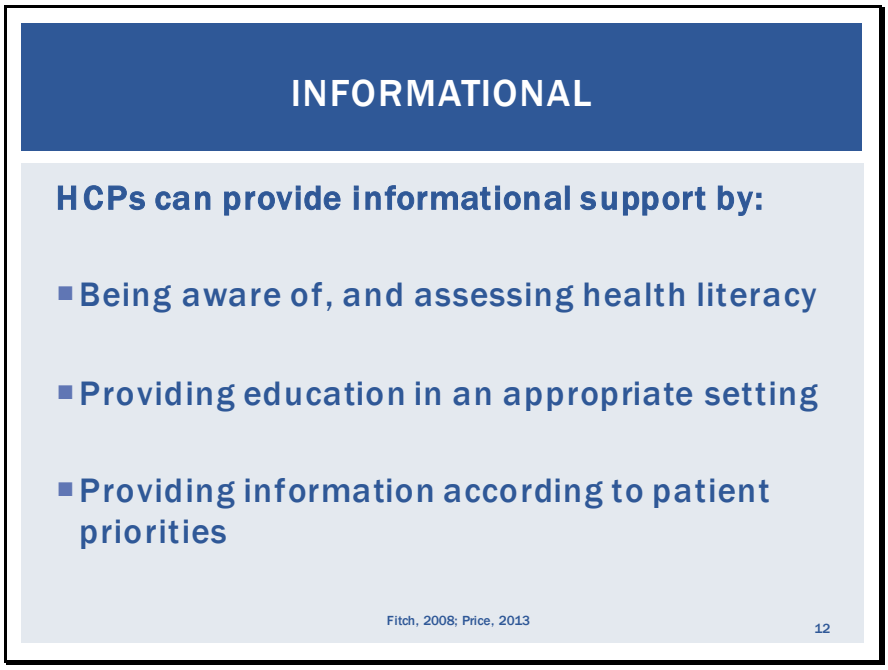


Facilitator Comments:

- Informational needs are important to reduce fear, anxiety and misinformation. Having appropriate information and understanding is essential for decision making autonomy and skill acquisition.

Cancer and treatment create challenges as people may have to adapt or modify the way that they previously learned. What is important to know about learning/relaying information in a cancer context is that it:

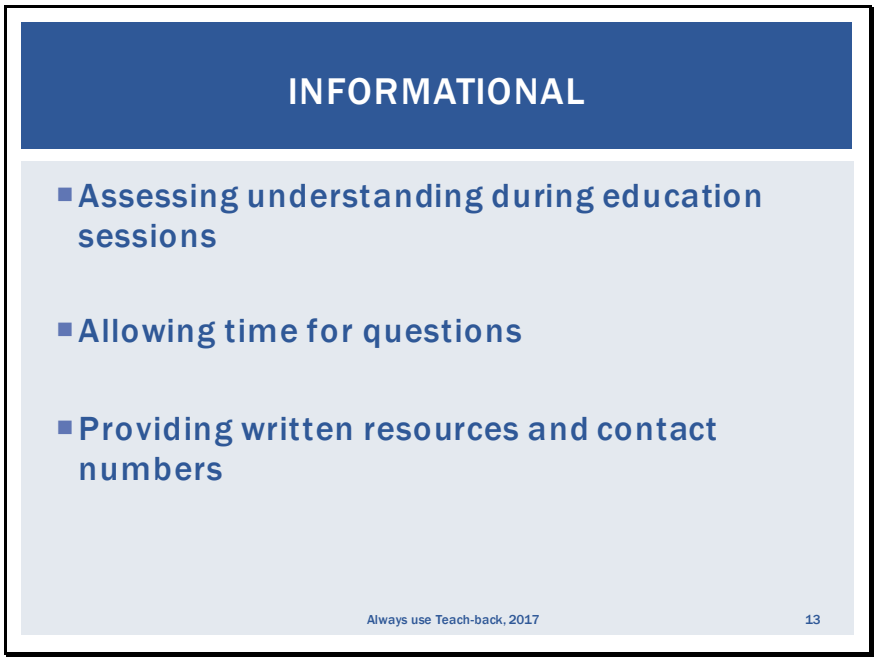
- Needs to focus on the individual patients experience,
- Is focused on emotions, knowledge and skill. All three of which create a challenge in this setting,
- Requires strategy but has to be flexible, and
- Involves collaboration (Price, 2013, p. 25).



Facilitator Comments:

*Read through the notes below, then read through each item on this slide and slide 13.

- Health literacy is a growing concern in oncology settings due to the aging population. There are resources available to support HCPs and patients in providing and receiving health literate information.
- Education should occur in a quiet nonthreatening environment.
- The HCP can initiate establishing a trusting relationship by introducing themselves and identifying the concerns and/or priorities of the patient.



Facilitator Comments:

- Assessment of understanding is essential. Often HCPs relay information to patients. It is necessary to assess that the information given has also reviewed. Assessing the patient's understanding unfortunately occurs less frequently.
- Adopting techniques in your practice to assess understanding such as "teach-back" will ensure that the valuable key messages that the patient needs to learn have been understood.
- Always make sure that the patient has written information to take home for reference.

Note: information on the teach-back method can be found at:
Always use Teach-back (2017):
www.teachbacktraining.com

Facilitator Comments:

Spiritual needs are often philosophical, and pose questions related to the meaning of life, or one's purpose. These can be based on religion, a higher spiritual meaning or a search for purpose.

- Patients spiritual needs may cause them to question their lifelong beliefs, seek out new beliefs, or cause distress.
- Unmet needs can interfere with coping or delay transitioning to end of life care.

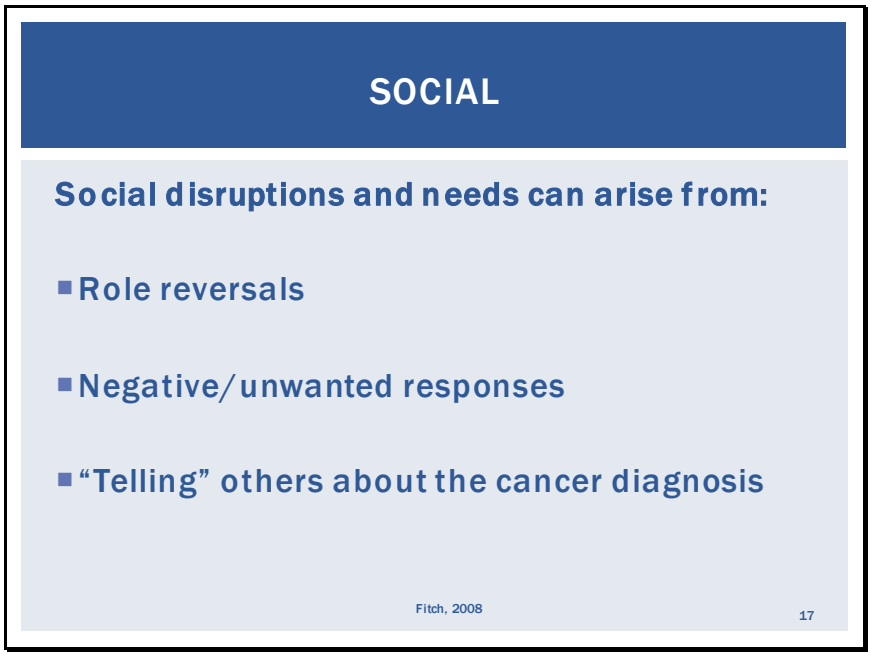
Facilitator Comments:

- Supporting a person's spiritual needs does not mean that you have to hold similar beliefs or views, or provide answers. Often in these situations, being fully present and actively listening are ways to show compassion, and can de-escalate spiritual distress.

- It is important to get to know who the spiritual care support people in your community are, and how to make referrals. This is a way to provide support to patients with unmet spiritual needs.

Facilitator Comments:

- Social needs are related both to the support needed from those in the patients social circle, and also to the disruptions that occur in their relationships related to their cancer.
- Patients may need help to share their news with friends and family, or to develop strategies to deal with well intentioned, but unsolicited advice.
-



Facilitator Comments:

- Difficult adjustments in the social order can occur in families when a person changes from being the caregiver to needing to be cared for.
- People often want to avoid talking about cancer as it can be uncomfortable. In contrast, conflict can arise with unsolicited advice.
- Revealing information about a cancer diagnosis can also create distress for people who may want to keep this private. Unfortunately cancer treatment can create some visible signs such as hair loss; increasing vulnerability for those who wish to keep their privacy.

PSYCHOLOGICAL

Psychological needs can include:

- Body-image
- Coping
- Sense of self and loss of control

Fitch, 2008 18

Facilitator Comments: Psychological needs involve the desire to regain control when in the face cancer and treatment. Maintaining positive self-esteem is often difficult.

PSYCHOLOGICAL

Psychological needs in cancer patients are frequently unmet:

- 20-30% of cancer patients experience psychosocial distress
- 10-20% of cancer patients have mental health disorders

Fitch, 2008, p. 10 19

Facilitator Comments: Spiritual, social, psychological and even emotional needs usually co-exist or overlap. Assessment and collaboration/referral with appropriate members of the interprofessional team is key to supporting the psychological needs of cancer patients.

Facilitator Comments:

Standards for meeting supportive care needs. All individuals need to (read slide).

- Increasing access and availability includes reducing barriers to referrals. Allowing for self-referral reduces barriers through decreasing the number of appointments a person has to attend and increasing autonomy and control of self-management.

*Note: Continue with four and five on the next slide.

Facilitator Comments:

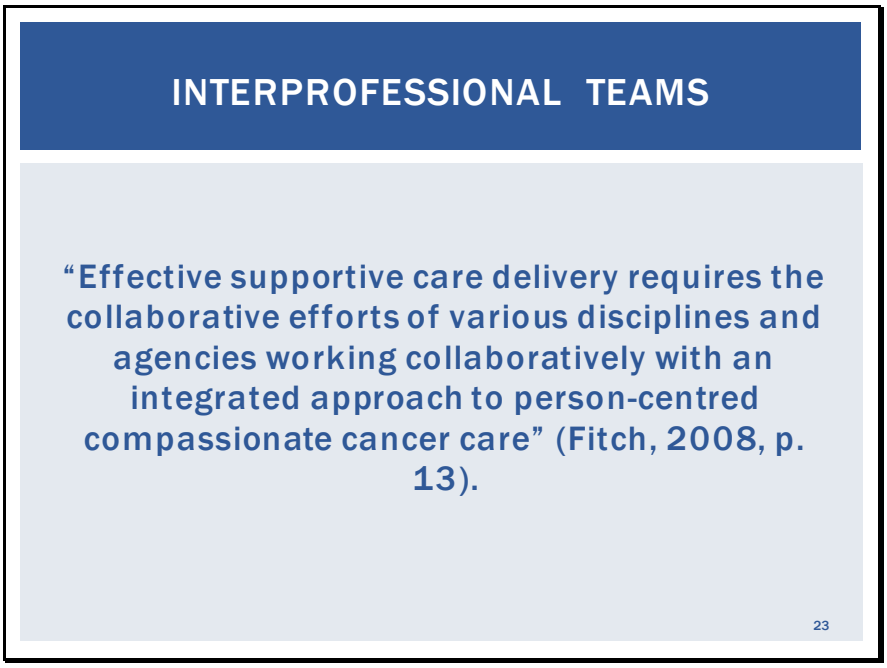
- HCPs have a responsibility to assess the supportive care needs of people with cancer.
- In addition to this, we must also assist them with developing plans that meet their goals of care and ensure that they are referred to the appropriate resources.
- All of this must be delivered in a format that is easy for the patient to understand, tailored to meet the individual's specific needs, and occur in combination with access to relevant information and resources.

Facilitator Instructions:
Prepare easel paper ahead of time with a heading for each of the domains.

- Place these on the walls around room and divide into groups.
    - Provide activity handout.
    - Round one: give group five minutes to discuss and write down supportive care symptoms or needs within that domain (five minutes).
    - Round two: call for a switch then give group another five minutes to discuss and write down interventions/education/support that HCPs can provide (five minutes).
    - Round three: call for a switch then give group members five minutes to discuss and write down which disciplines they believe would be able to assist/provide needed support (five minutes).
    - Request for groups to stay at their last station and have each group summarize and give an overview of what they learned from and about each other. (fifteen minutes).

Facilitator can ask reflective questions to encourage discussion on role clarity and how this fits with supportive care needs, and allow time for questions from the group.
*Note: Further information can be found in the Instructions for Interprofessional Activities and Activity Handouts as Supportive Care Framework Session Activity: Supportive Care Carousel.

- Following the activity, use next slide to summarize and connect back to interprofessional practice.



Facilitator Comments:

Interprofessional team work is essential in an oncology setting. According to Fitch (2008), (read slide)

- In reality each domain does not exist in isolation. Humans and their needs are complex, and to support these needs in an oncology setting requires collaborative

Refer back to the carousel activity. Ask the group to consider how the professionals would work together to meet the patients supportive care needs.

- Probe to bring out the interprofessional competencies:
    - Team functioning, (communication, referral, team rounds, cooperation with team members),
    - Patient and family centred (listening to clients and family, allowing for prioritization of care needs, working together to provide education),
    - Role clarification: knowing the skill set of your team members and how to consult with them,
    - Leadership: facilitating effective processes and decision making, and
    - Communication: relationship building, use of communication tools-direct, documentation, and IT.

*NOTE: it is not necessary to cover all of these. The purpose is to allow learners to share their past knowledge and start to learn together. This will lead them naturally towards the benefits of interprofessional practice.

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INTERPROFESSIONAL ONCOLOGY ORIENTATION

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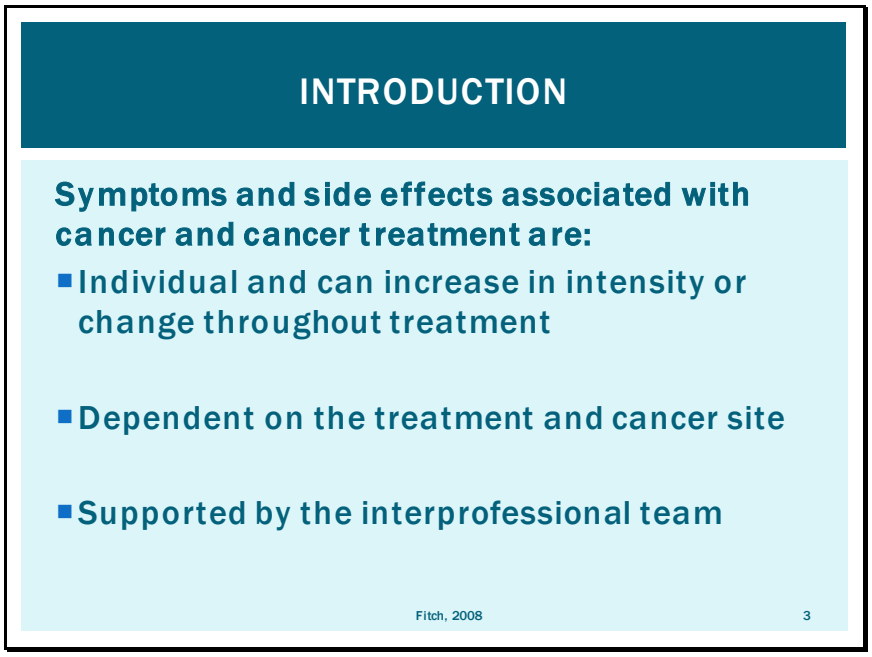
Managing Common Symptoms and Side effects of Cancer Treatments

1

OBJECTIVES

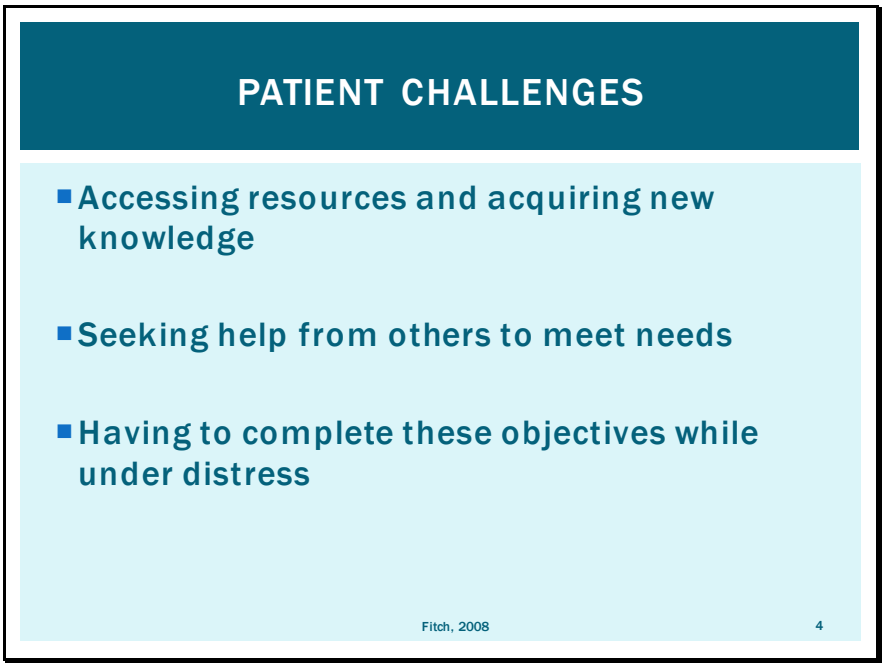
- To review the common symptoms and side effects of cancer treatment
- To discuss patient support and management of common symptoms and side effects
- To identify supportive care resources available at BCCA
- To apply concepts in a team learning activity

2



Facilitator Comments:

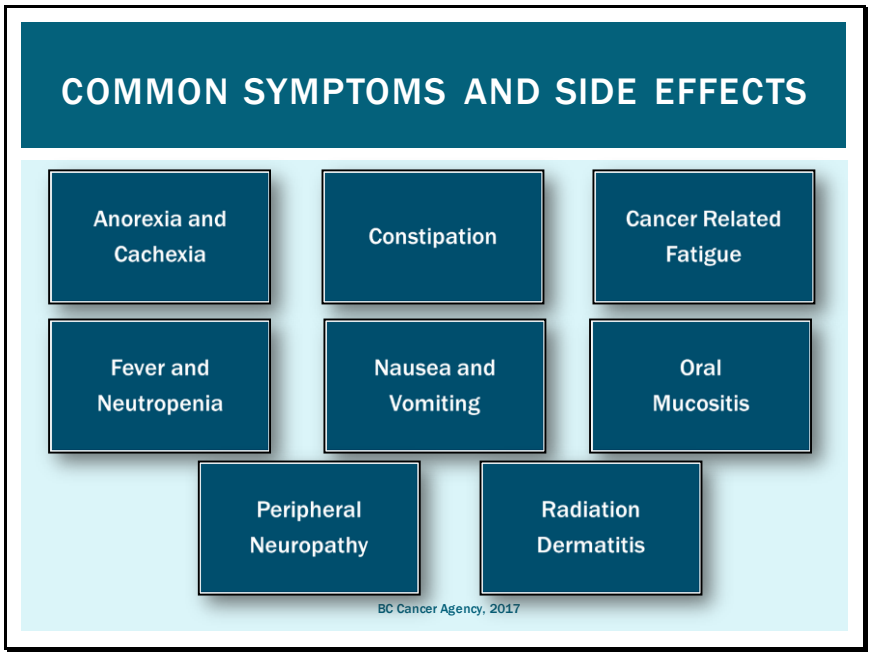
- As a team caring for people with cancer, we all need to be aware of how our role along with the roles of other team members, can support cancer patients and their families.
- An important goal is to prevent side effects when possible and if not possible, to provide support and interventions to minimize them.
- In the management of symptoms, it is important to determine what is normal for the patient; otherwise referred to as the baseline. The appropriate HCP must ensure an assessment is completed and determine if this is an expected side effect of their cancer treatment.
- Once this is done, determining how to collaborate with other team members according to their role and skill set is often the next step to optimizing care.



Facilitator Comments:

*Suggestion: introduce with the below statement then refer to/read slide.

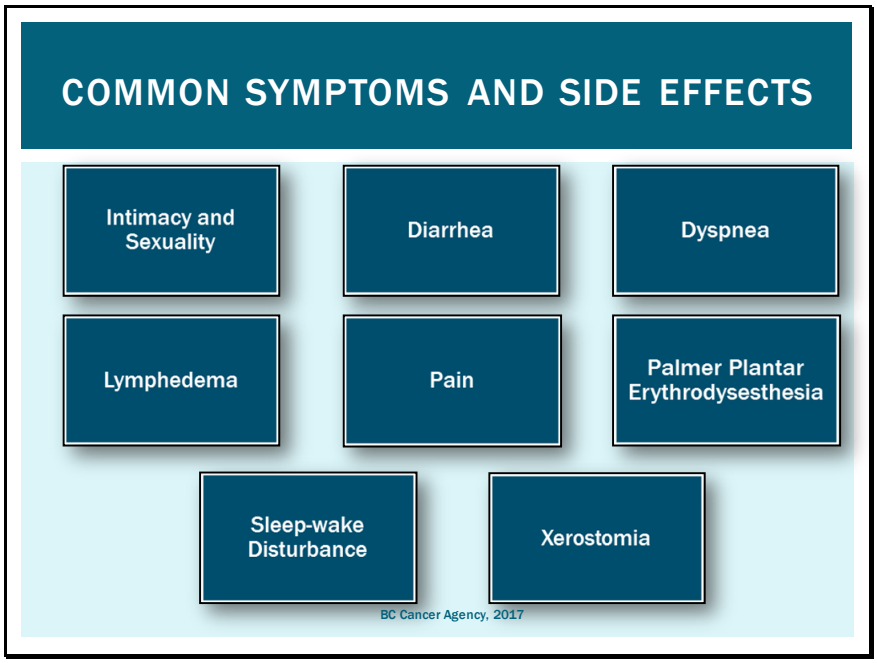
- A cancer diagnosis creates vulnerability due to uncertainty and loss of control. To cope with the effects of cancer and treatment and meet their supportive care needs, people and their families rely on the interprofessional team. Challenges occur when:

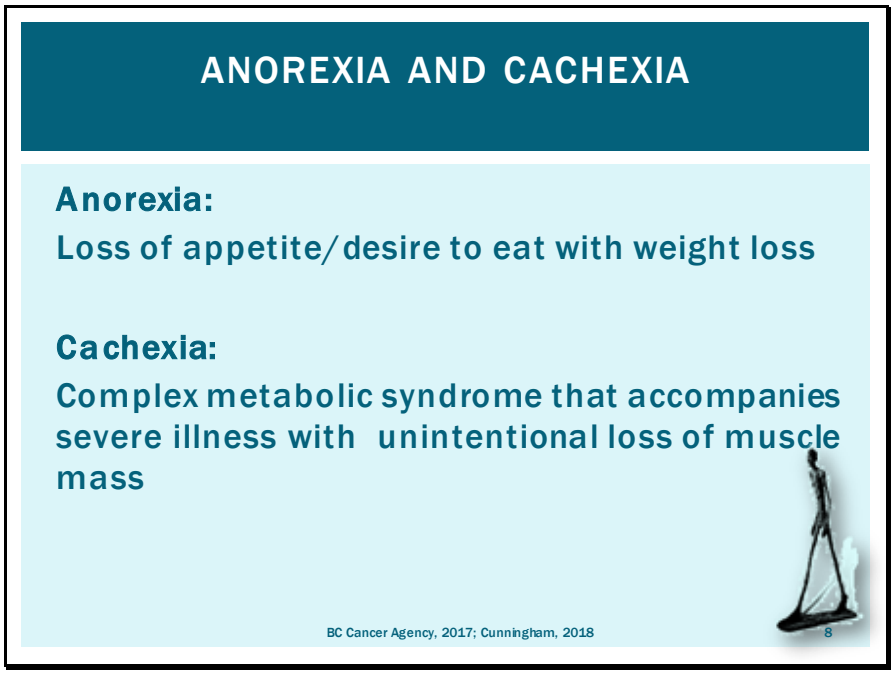


Facilitator Comments:

Although symptoms and side effects will not be limited to those listed here and on the next slide, these are the 16 most common side effects that can occur for cancer patients receiving active treatment.

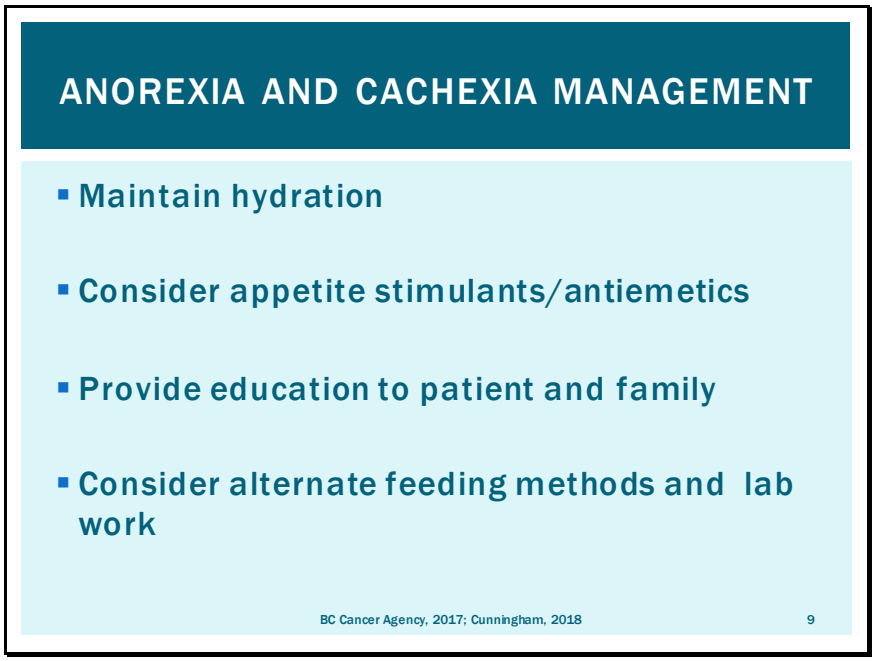
We will review 11 of these symptoms along with management considerations. The symptoms Peripheral Neuropathy, Radiation Dermatitis, Palmer Planter Erythrodysesthesia, Lymphedema, and Xerostomia are more focused and will not be covered today. If you are interested in learning more about these you can contact me following the orientation for resources.


COMMON SYMPTOMS AND SIDE EFFECTS
Intimacy and Sexuality
Diarrhea
Dyspnea
Lymphedema
Pain
Palmer Plantar Erythrodysesthesia
Sleep-wake Disturbance
Xerostomia
BC Cancer Agency, 2017



Facilitator Comments:

- Anorexia can be a result of the disease process or treatment. Nausea for example can lead to loss of appetite and weight loss. Treating underlying causes is important to maintain weight and health.
- Cachexia in cancer is serious and often a sign of advanced disease. Like anorexia, it is important to rule out any reversible causes. If appropriate, proactive measures to minimize nutritional deficits are important.

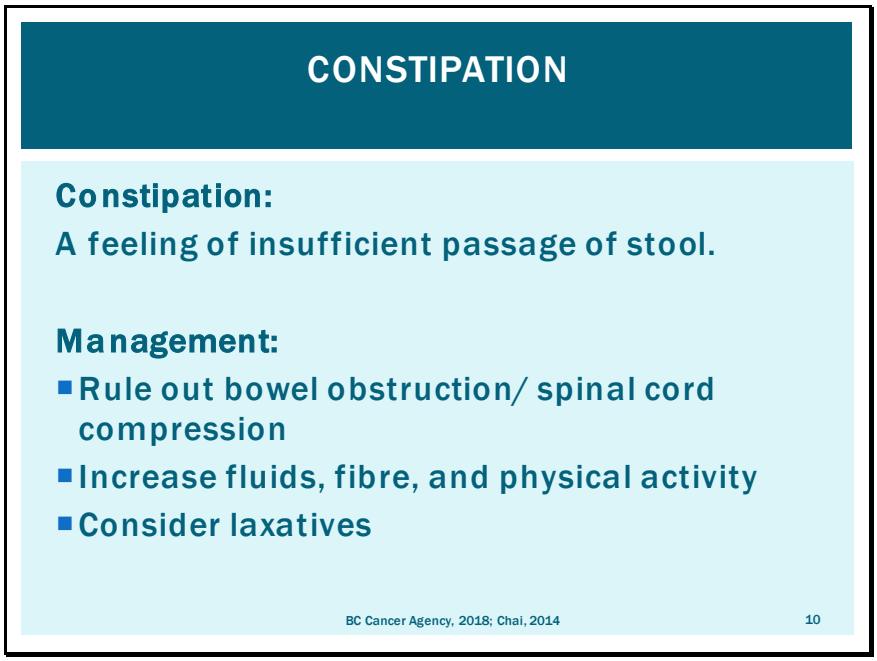


Facilitator Comments:

Supportive care:
•May sometimes involve educating the family about the natural processes occurring. This may help to mitigate cultural and caregiver need to ensure that the patient is eating (related to caregiver need to provide care through nutrition). It also can help to relieve stress for the patient who may feel guilt or obligation to eat to please family members.
•It always involves team members from different professions to ensure that the person is supported and the anorexia/cachexia is well managed. An example is involving pharmacy to review and follow up on appetite stimulant medications that are added to determine if there is benefit, while nursing may coordinate community support such as home care to provide IV fluid at home and a physician to assess and write orders.

•If asked, lab tests that may be ordered:
•CBC and differential, electrolytes, glucose, calcium, total protein, albumin, pre-albumin, LDH, creatinine, and liver function tests.

Ask:
•Who would be important to consult with in planning care? Examples: patient, family, dietician, nurse, physician, and pharmacist.
•What might you consider in your education to patient and family? Examples: diet modifications, medications, exercise if tolerated and dying/ disease process.
•What are some things to be aware of?
Examples are: Consider alternate routes of nutrition if appropriate, and re-feeding syndrome.



Facilitator Comments:

- Constipation can be described as causing discomfort or pain. The insufficient stool passage can be related to decreased frequency, hard stools, straining, etc.
- Constipation can be caused by, cancer and treatments, and some support medications. Ex. opioids are often used for cancer related pain and cause constipation.
- Education is an essential component of support and management of constipation. It is important to think proactively and try to prevent constipation when possible. There are bowel protocols and nutrition resources available for support. Successful management requires self-management so patients need to understand the information that is given/ reviewed. HCPs need to assess understanding of information and include follow-up.
- Supportive care may sometimes involve educating the patient and family regarding diet, exercise, and use of medication. This may assist with good bowel hygiene.

Ask:

- Who would be important to consult with in planning care? Examples: patient, family, nurse, physician, dietician, and pharmacist.
- What might you consider in your education to patient and family? Examples: medication teaching, diet modifications, and exercise if tolerable.
- What are some things to be aware of? Examples:
  - Signs and symptoms of bowel obstruction and spinal cord compression.
  - History of normal bowel routine for patient and medications.
  - The type of cancer and cancer treatment.
  - Follow-up plan to assess if constipation resolved, or if more intervention needed.

DYSPNEA

Dyspnea:

Difficulty breathing that can lead to hypoxia or the sensation of not getting enough air/oxygen. Dyspnea can cause a feeling of suffocation.

BC Cancer Agency, 2017; Gift & Hoffman, 2007 11

Facilitator Comments:

- Dyspnea can be both frightening and exhausting. HCPs need to support the patient and family with how to cope with this symptom at home.
- It is important to ensure that any clusters of symptoms are also managed. For example, pain and anxiety often accompany dyspnea. Managing all three is necessary to help to minimize dyspnea.
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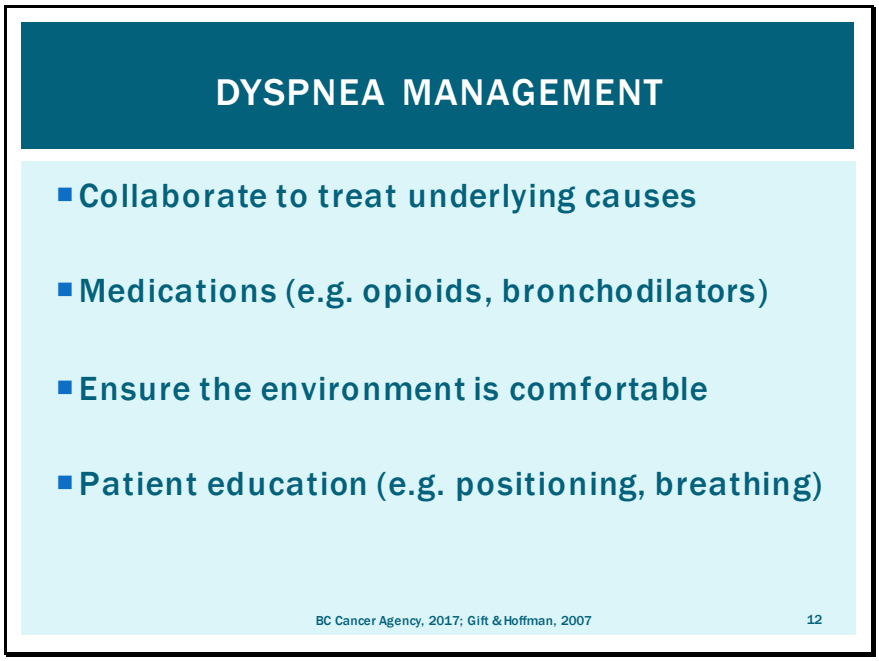


Facilitator Comments:

- Dyspnea is often a complex symptom with a need to investigate and treat/rule out any underlying causes or contributing factors. There are several oncologic emergencies that HCPs need to be aware of such as pulmonary embolism, Superior vena cava syndrome, and pericardial effusion. It is also important to be aware that conditions such as anemia can contribute to or increase dyspnea.
- Once these investigations are complete, and if dyspnea is not relieved or improved, the team would need to determine if the patient is a candidate for home O2 and what other community supports are necessary.

Questions to consider asking the group:

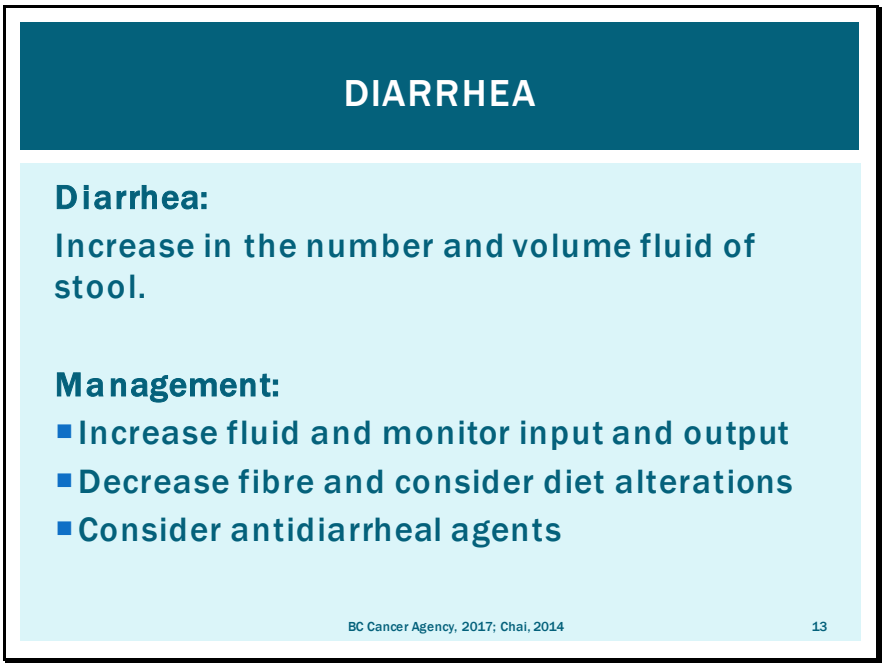
- Who would be important to consult with in planning care?

Examples: patient, family, nurse, physician, pharmacist, physiotherapist, and patient and family counselors.

- What might you consider in your education to patient and family?

Examples: education related to medications and diet modifications, exercise if tolerable, and positioning.

- What are some things to be aware of?
    - There are specific techniques to improve dyspnea caused by trapped air,
    - Opioids increase risk of constipation, and
    - Know the community resources available to patient (home O2, home support services: nursing, house cleaning).



Facilitator Comments:

- Cancer related diarrhea is often caused by cancer treatment and can be serious, even life threatening. For example, diarrhea can be related to both chemotherapy and immunotherapy, but both need to be treated differently.
- Diarrhea can also be caused by some support medications and by radiation to the abdominal and pelvic regions. Understanding the underlying cause of diarrhea is essential to recommend and provide safe support to patients.
- It is important when planning care to think proactively and try to prevent and minimize diarrhea when possible.
- Supportive care may sometimes involve educating the patient and family regarding diet, and use of medication for prophylaxis.

Ask:

- Who would be important to consult with in planning care?

Examples: patient, family, nurse, physician, dietician, and pharmacist.

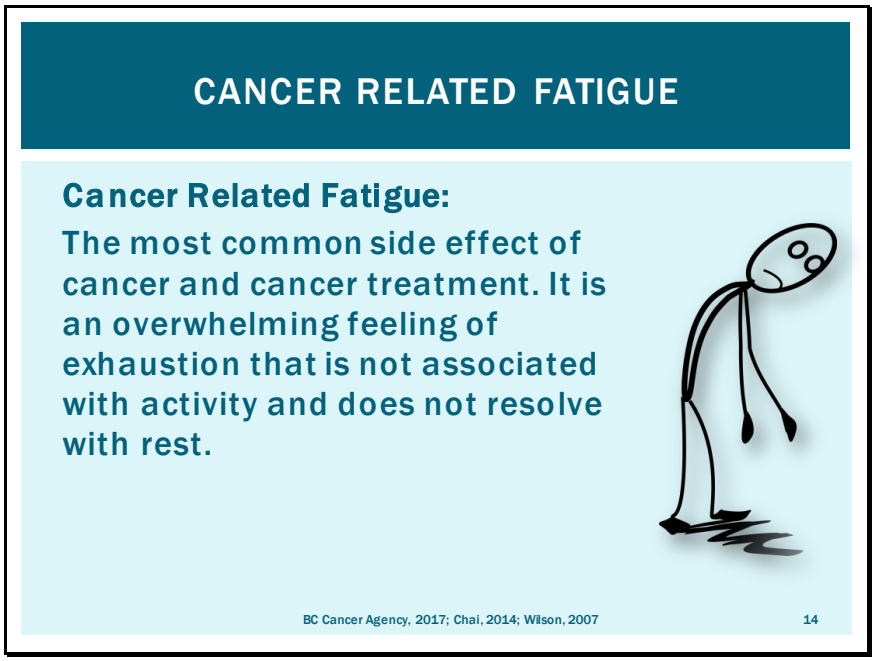
- What might you consider in your education to patient and family?

Examples: medication teaching, diet modifications, and how to measure intake/output.

What are some things to be aware of?

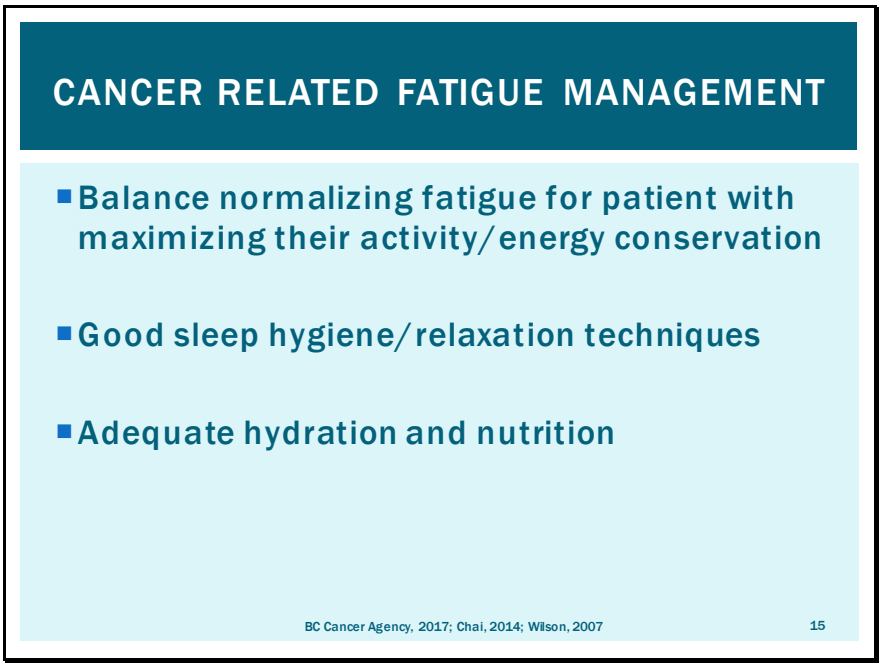
Examples:

- History of normal bowel routine for patient.
- The type of cancer and cancer treatment.
- Appropriate follow up plan to check if diarrhea resolved or need more urgent attention.
- Protocol dose modifications for anticancer agents.



Facilitator Comments:

- Fatigue is an expected side effect of cancer treatments. During treatment, and up to one year following, Cancer Related Fatigue is reported as being as high as 61-100% (Wilson, 2007).
- Fatigue worsens with cumulative and concurrent treatments.



Facilitator Comments:

- Patients need to maintain activity to the best of their ability in order to reduce or minimize fatigue. This is often a difficult balance to maintain.
- Even though fatigue occurs frequently, it is important to rule out or correct any underlying causes of fatigue, such as anemia or depression.
- Ongoing assessment and care plan modification is an essential component to ensure that people on cancer treatment are maintaining optimum wellness.

Questions to ask the group:

- How would you work as a team to ensure a patient with fatigue is being supported?
    - Need to assess where support is needed for patients.
    - You may need to collaborate with/refer a physiotherapist to maximize activity.
    - You may also need to work with community resources to ensure at home supports are in place (e.g., meals and care needs are being met).
- What are some ideas around energy banking?
    - Priority setting, delegation, and exercise modification.

FEVER AND NEUTROPENIA

Fever:

Temperature >38.3 or > 38 for an hour or longer

Neutropenia:

abnormally low neutrophils, puts patient at risk of infection

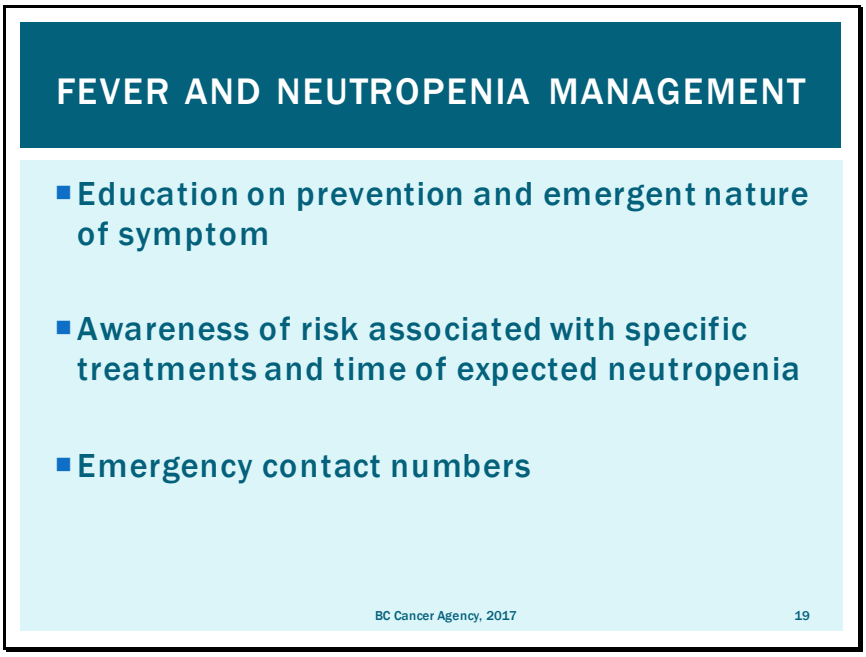
Febrile Neutropenia:

Fever and neutropenia together

BC Cancer Agency, 2017; de Naurois et al., 2010 18

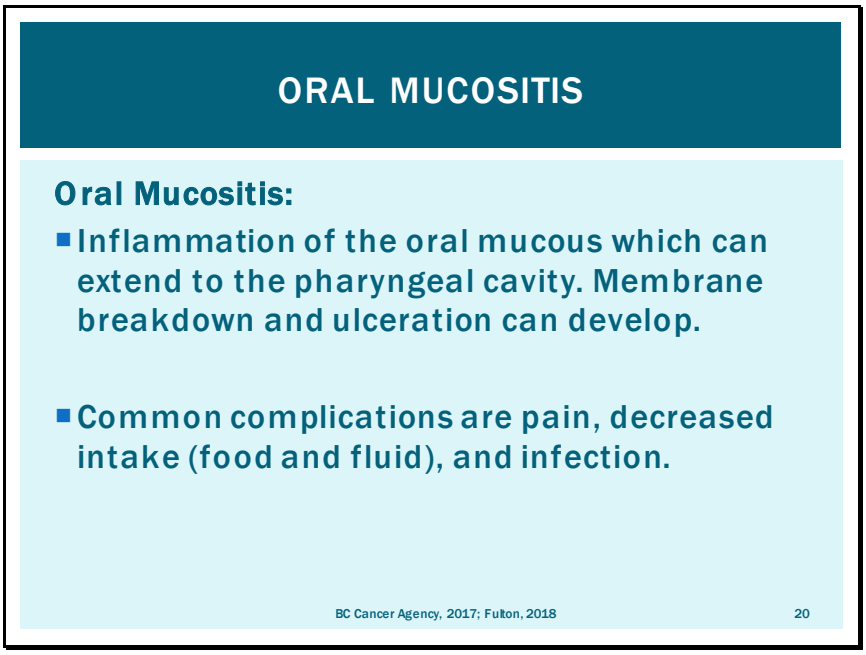
Facilitator Comments:

- Febrile neutropenia is considered an oncologic emergency and can be life-threatening. HCPs and patients need to understand the importance of seeking immediate medical attention.
- Although mortality from febrile neutropenia has reduced significantly in recent years, it still ranges from 5-11% depending on the type of malignancy (higher in haematologic than solid tumours). These mortality rates are even higher with proven bacterial infections in the bloodstream (de Naurois et al., 2010).



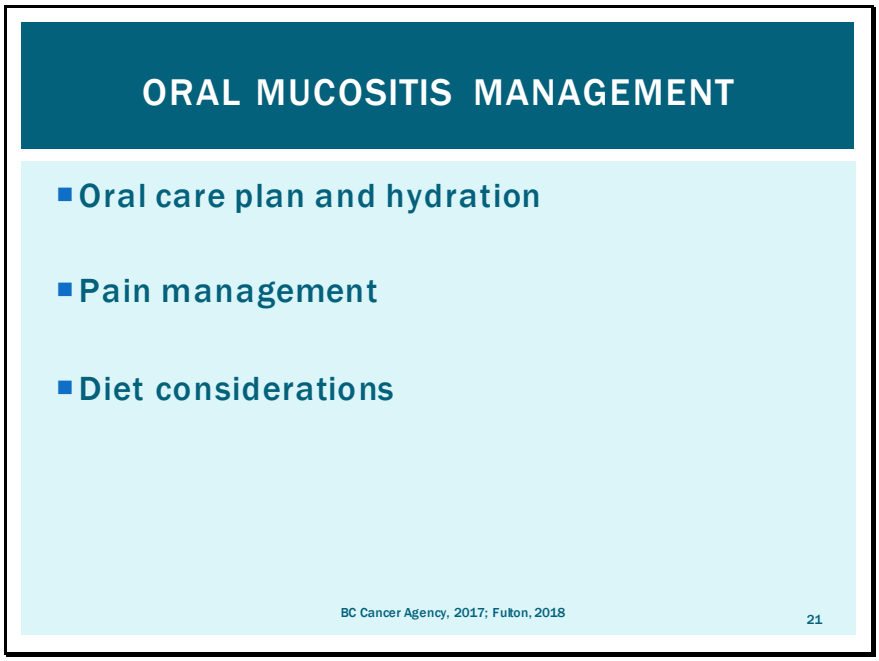
Facilitator Comments:

- Successes in reducing rates of infection have been directly related to having evidence based policies, procedures and guidelines in place that support HCPs and staff.
- All members of the oncology team have a role in promptly responding to a patient with a fever by ensuring that they get the necessary care in a timely manner.
- Early introduction, and continued repetition of education on prevention and seeking emergent care are key in reducing adverse outcomes from febrile neutropenia.
- In cases where febrile neutropenia are present or suspected. HCPs need education on responding in appropriate timeframes and following evidence based protocols for fluid and antibiotic regimens
- Organizations are responsible to ensure that education, guidelines and protocols are available to all HCPs. They are also responsible to monitor that the HCPs are completing the education and following protocols as intended.



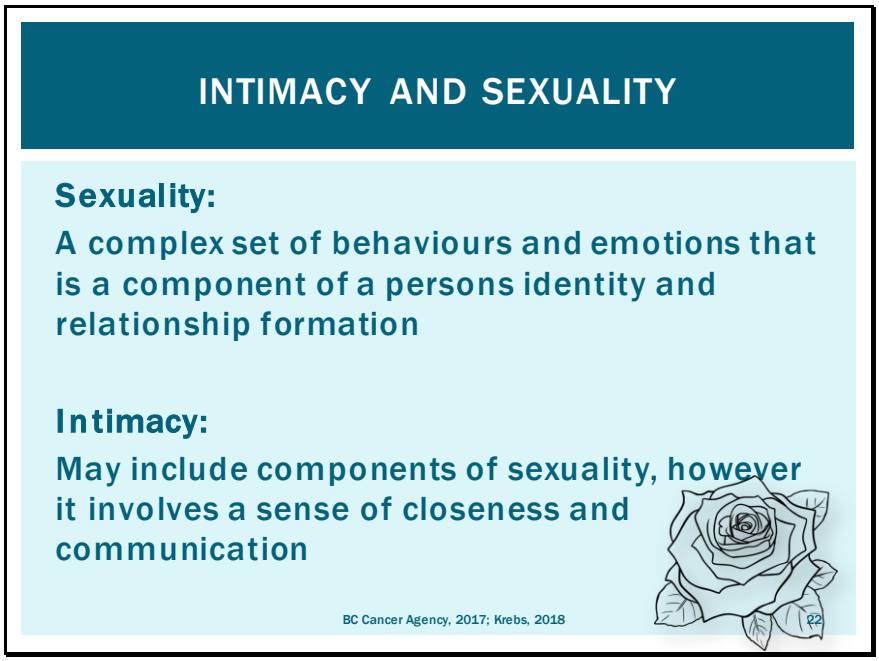
Facilitator Comments:

- Oral mucositis is often a painful and dose limiting side effect of systemic and radiation therapy. Prevention of this symptom is not possible; however providing supportive care such as good oral hygiene and pain control reduces the chance of secondary complications such as infection, and can greatly improve quality of life.
- In contrast to some symptoms, being young puts you at higher risk for this side effect. This is associated with the more rapid rate of epithelial mitosis and epidermal growth factors in the mucosal lining.
- Increased age and patients with impaired renal function can also put a person at increased risk due to slower drug excretion. The increased time of circulating drug also increase the risk of oral mucositis.



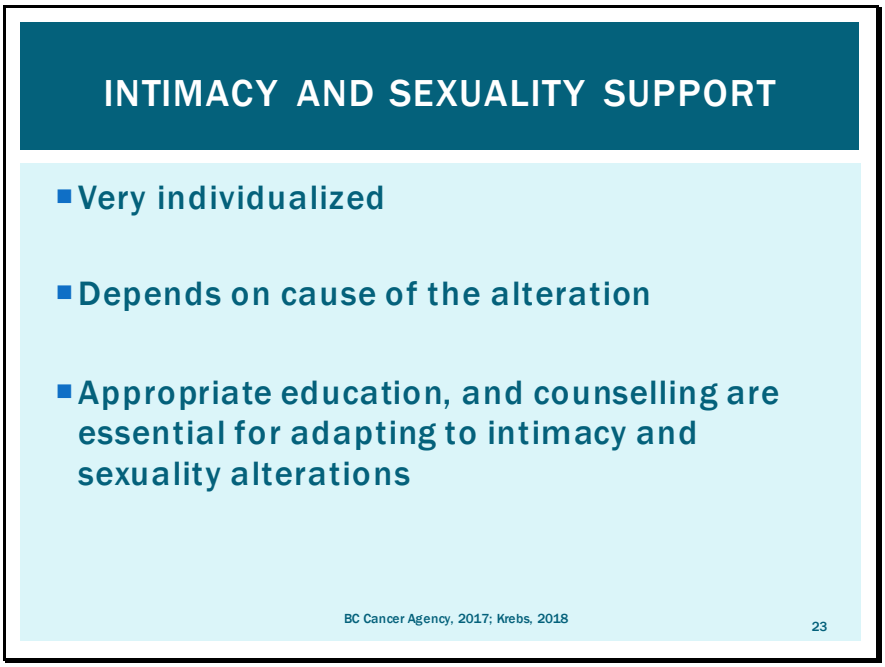
Facilitator Comments:

- Developing an oral care plan and establishing a baseline assessment is an important component of continued care and monitoring of patients at risk of developing oral mucositis.
- Things that may seem simple, such as the type of bristles on your toothbrush and whether or not flossing is appropriate, are really not straight forward and patients often need information and support to make these decisions.
- There are also a variety of oral rinses that patients can choose from for different reasons. Saline and baking soda rinses can be used to moisten the oral cavity and assist with hygiene. Medicated rinses that contain ingredients such as fungicides and lidocaine are also sometimes prescribed for pain and treatment of infection.
- If patients are having pain associated with their oral mucositis, pain management is essential to ensure comfort is maximized and diet and hydration are maintained.
- A dietician is often helpful to collaborate with when determining diet recommendations. Common diet recommendations are to increase fluids and to avoid:
    - Hotly spiced foods,
    - Hard foods that may damage mucous membranes (e.g. chips, crackers), and
    - Alcohol and acidic food.



Facilitator Comments:

First read slide then:
Regardless of age, people receiving cancer treatment may have to cope with issues such as altered body image, intimacy changes and communication with their partners.

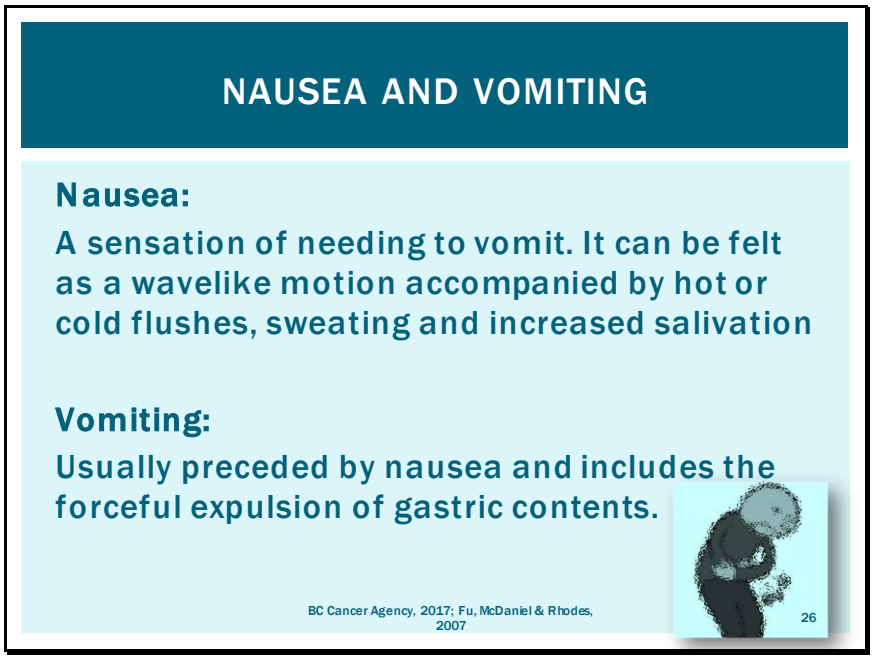


Facilitator Comments:

•Intimacy and sexuality needs are individual, however may include common concerns depending on age group of the patients. For example young adults may be concerned with fertility issues post treatment, whereas adults who have had their children, may be struggling with unwanted changes that have occurred from treatment such as induced menopause or erectile dysfunction.
•People often need to be given permission to talk about their concerns. The BCCA Intimacy and Sexuality Symptom Management Guideline include a 4-step model (P-LI-SS-IT), to assist HCPs in supporting patients in the area of intimacy and sexuality.

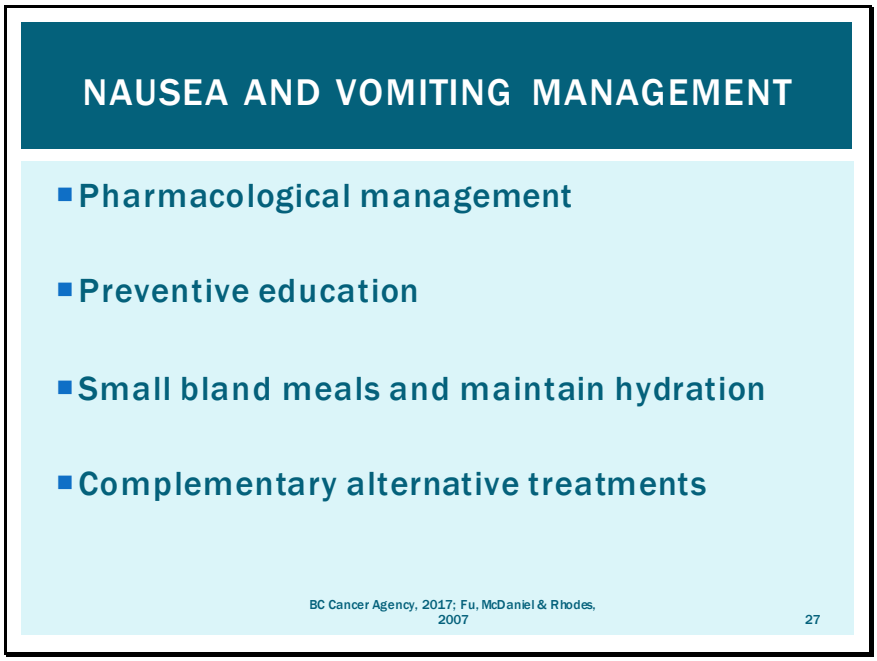
Questions to consider asking the group:
What do you think some of the goals for people facing intimacy and sexuality concerns might be? Examples of answers:
- Pain control (E.g. may have vaginal dryness or need dilatation post radiation).
- To restore intimacy with their partner.
- To receive support in coping with altered body image.

What role does the HCP have in supporting them? Examples of answers:
- Raising the topic,
- Providing resources/education to help make informed choices,
- Assessment,
- Ensuring a private location is available to discuss concerns,
- Making referrals to the appropriate team members, and
- Providing culturally sensitive support.



Facilitator Comments:

- Nausea and vomiting remain one of the biggest fears for people undergoing systemic therapy.
- Although there are many improvements to managing this symptom in the development of new antiemetics, nausea is a complicated process that has subjective components as well as known triggers and nausea centres in the body. Nausea that is associated with cancer treatment can be acute (within 24 hrs), delayed (after 24 hrs), or anticipatory in nature.
- Anticipatory nausea can occur with chemotherapy and other systemic therapy treatments. This type of nausea is difficult to treat because it involves emotion and memory of previous experiences, and usually starts prior to the initiation of treatment.



Facilitator Comments:

- Many HCPs on the team may be beneficial in supporting the patient with nausea and vomiting. Physicians, pharmacists, patient and family counselors, nurses, dieticians are examples of HCPs who can collaborate with the patient to determine an individual plan of care.
- Depending on the patient's wishes, community supports to provide complementary and alternative treatments may also be beneficial (E.g. meditation, message, and acupuncture).
- Prevention is key, and cannot be emphasized enough to patients. Taking antiemetic medications on schedule, and not waiting for nausea to occur, is a foundational principle of nausea management in cancer treatment.
- Related to prevention is communication. HCPs need to work with patients in follow-up and assessment to get a complete picture of nausea and vomiting to be able to adapt plans and medication to those that best respond to the nausea triggers. It can be helpful for patients to keep a journal of their nausea to accurately communicate back to the HCPs supporting them.

Facilitator Comments:

•Pain is a common occurrence in cancer, and although the World Health Organization (WHO, 2015) estimates that 90% of cancer pain can be controlled, it often remains undermanaged.
•Understanding concepts such as Total Pain which expands the perception of pain to include physical, psychological, social, emotional, and spiritual components, is important in cancer and palliative care.

Facilitator Comments:

- Education is essential so that patients understand the importance of reporting pain.
- Added to this, HCPs need to routinely assess cancer pain in patients. Assessments include not just the nature and experience of pain, but also what barriers may exist for the patient in having their pain managed.
- Initial management of pain should occur by general staff using validated assessment tools and guidelines, which are essential in pain management consistency.
    - Usually analgesics are ordered by a physician, starting at what they would consider reasonable according to the assessment. NSAIDs and acetaminophen may be ordered singularly or in combination.
    - For more severe pain, the management would follow the Pain Relief Ladder (WHO, 2017).
- An important part of follow-up is to assess the effectiveness of the recommended treatments and adapt as appropriate.
- If attempts to manage pain are unsuccessful, the next step would be to include pain experts. At BCCA, this would be the Pain and Symptom Management and Palliative Care team (PSMP). The PSMP team consists of nurses who have PSMP and advanced pain management training, pharmacists, and physicians who specialize in palliative care. Patient and family counselors and psychiatry are consulted as needed.
- Evidence supports non-pharmacological and alternative methods to pain relief when appropriate. Examples of these are:
    - Heat and/or ice,
    - Meditation and breathing exercises,
    - Light exercise, and acupuncture.

SLEEP-WAKE DISTURBANCE

Sleep-Wake Disturbance:

An abnormal pattern of sleep disruption at night that impacts ability to function at day.

BC Cancer Agency, 2017; Carter, 2007 33

Facilitator Comments:

- There are many aspects of cancer and cancer treatment that can disrupt sleep patterns. Stress, pain, daytime sleeping (often from fatigue side-effect), and medication side-effects are some examples of these.

Facilitator Comments:

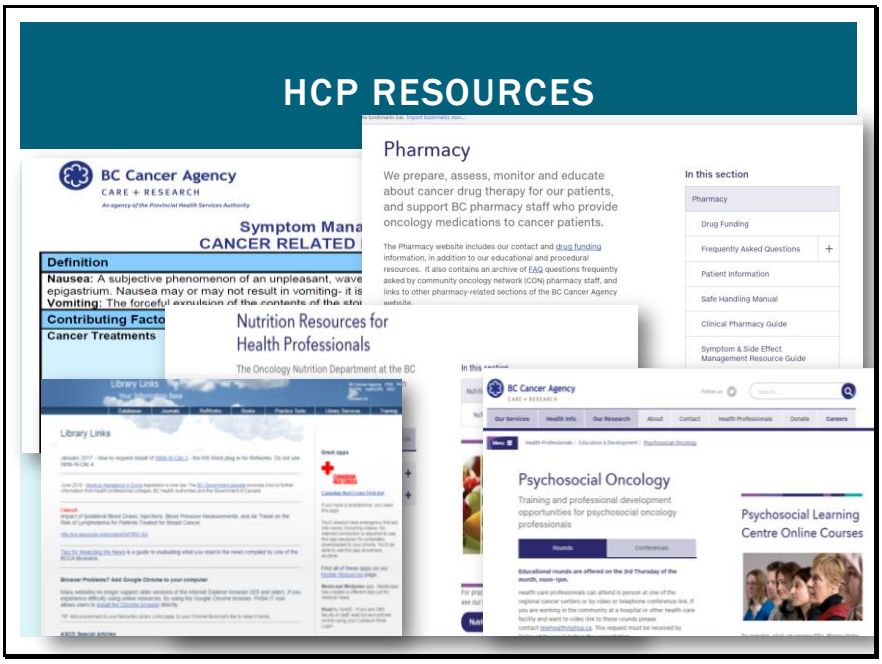
- Sleep is often disrupted for multiple reasons or symptoms. It is important to complete a thorough assessment and treat underlying problems to have success in reducing sleep disturbances.
- Examples of stimulants that may affect sleep are caffeine, alcohol, and nicotine.

Although medication is sometimes necessary, there are many non-pharmacological or complementary treatments that are helpful. Examples of these are:

- Sleep hygiene routine,
- Sleep log or journal,
- Meditation, and
- Cognitive behavioural therapies.

Questions to consider asking group:

- What are some of the experiences that you have with normal sleep disruption?
- What would this be like for a person with cancer who has a continuous pattern of sleep-wake disturbance?



Facilitator Comments:

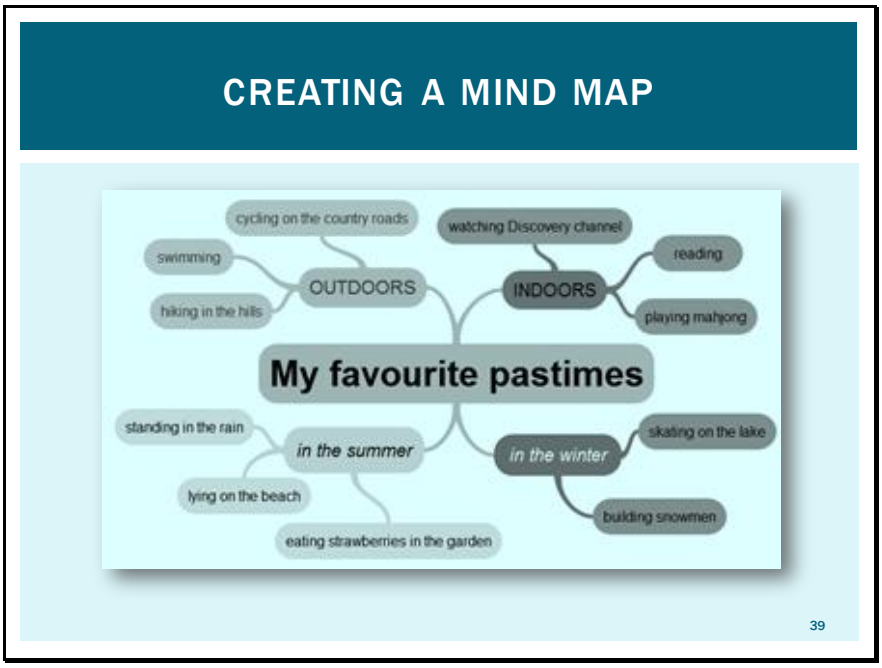
*Note: This slide allows you to individually advance each resource example one at a time. This provides the class with a visual of each website resource.

- There are many helpful resources on the BCCA website.
- As a HCP starting oncology practice at BCCA it is important to know what these resources are and how they can best support your practice.
- Although there are many evidence informed resources available, a challenge is knowing where to find these resources in a timely manner when caring for patients.
    - One of the resources used to inform this presentation was the Symptom Management Guidelines (SMGs). Along with supporting you in assessing and recommending both independent and collaborative interventions, the SMGs provide active links to patient and HCP resources.
    - The BCCA library links has several databases for journals and clinical support tools such as Up-to-date.
    - There are also many other webpages from your interdisciplinary colleagues that provide resources such as pharmacy and nutrition.
- It is important to spend time navigating the website to find and familiarize yourself with these resources.
- When working in the clinical areas with your interprofessional colleagues, ask for their support to find resources that they commonly use in their practice.
- Others who can help you are:
    - Education Resource Nurses, Radiation Therapy Educators, Clinical leaders, and the BC Cancer Agency Librarians.

Facilitator Comments:

*Note: This slide allows you to individually advance each resource example one at a time. This provides the class with a visual of each website resource.

- Similar to there being many resources for HCPs, there are also many resources on the BCCA website to support patients who need information.
- This information has been developed using health literacy guidelines by the BCCA librarians.
- Among the resources for patients and public are:
    - Resources on specific cancer types, and managing symptoms and side effects written in simple language,
    - Reputable websites that have been reviewed and approved by the BCCA librarians, and
    - Cancer pathfinders. The cancer pathfinders group information about a central topic. This can be a cancer site such as prostate cancer, or a supportive care domain such as emotional support.
- You are encouraged to work with the Education Resource Nurse and your interprofessional colleagues to support you to find appropriate information for patients. You are also reminded that the BCCA librarians are expert resource people to go to for this type of information and are available to support both staff and patients.



Facilitator Comments:

- The next activity will involve using what you have learned to brainstorm and create a mind map to determine how you will meet the needs of the patient.

Facilitator directions:

- Break into small groups of 3. Each small group should contain people from different professional backgrounds.
- Have post-it easel paper for each group and coloured markers.
- Instruct how to create a mind map (20 min creating map).
  - The patient at centre, each symptom or supportive care need is attached by a line.
  - From the symptoms draw a line to each suggestion of assistance and then discuss and draw a line to HCPs/supports/resources.
  - Learners will have to pull together what they have learned in relation to supporting symptoms and the HCP roles that were discussed in previous sessions.
  - Starting with the patient, learners will draw a connection to each symptom/care domain. Then connect that symptom to the support/resources they believe she will need, then decide on team members that could support the patient to obtain these. (i.e. patient-mouth pain: oral mucositis-education, oral care, analgesics, diet alteration- nurse, pharmacist, dietician etc.).

Debrief: First give overview of activity, to include providing rationales for their choices.

- Then discuss how determining support naturally leads to collaborative care. Discuss how/if there was role overlap & what was discussed to clarity this.

- Mind maps can be posted on wall following activity. .
- NOTE: Information is available in the *Instructions for Interprofessional Activities and Activity Handouts,* in Symptom *Management Session Activity: Creating a Mind Map.*

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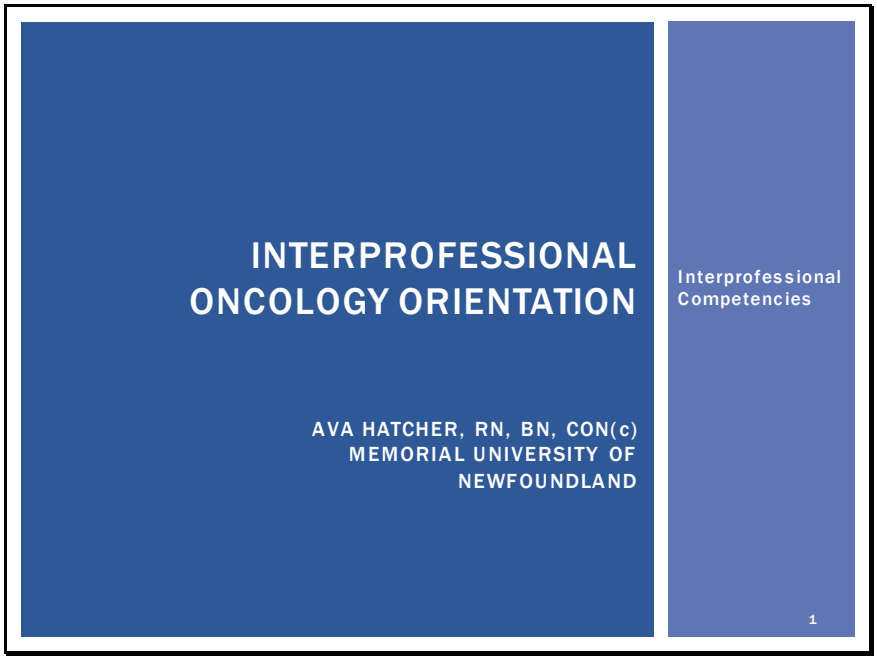
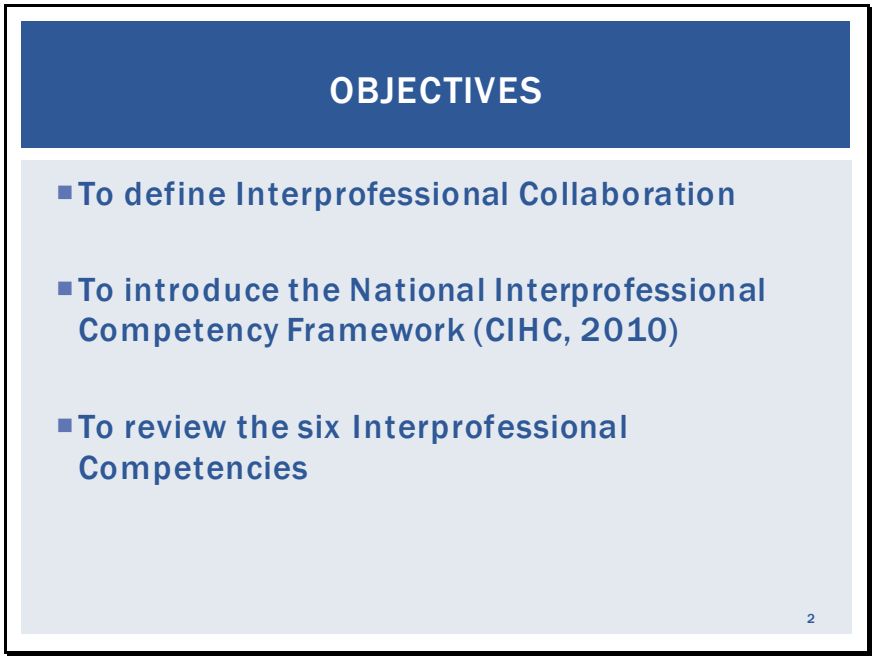
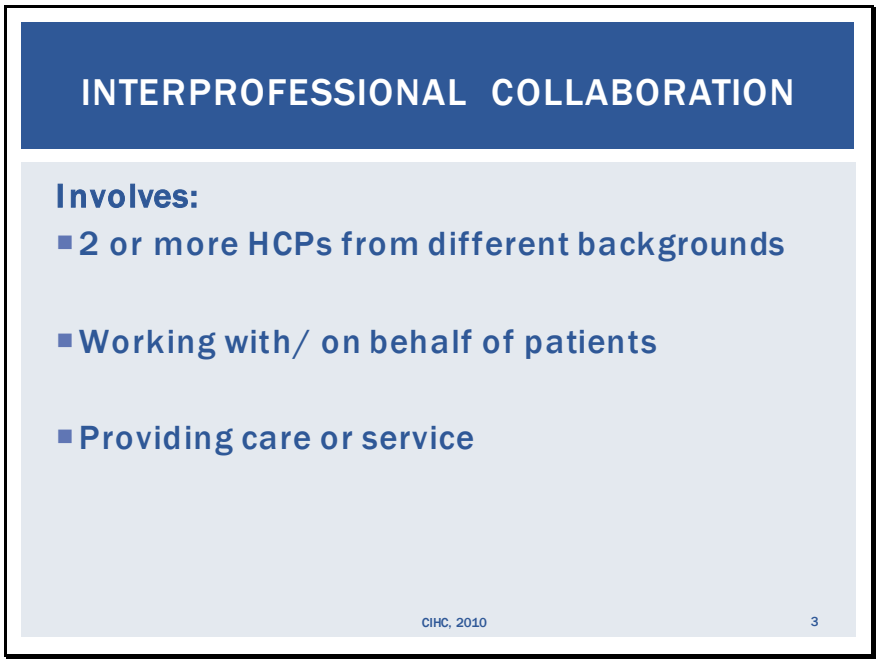

INTERPROFESSIONAL ONCOLOGY ORIENTATION
AVA HATCHER, RN, BN, CON(c)
MEMORIAL UNIVERSITY OF NEWFOUNDLAND
Interprofessional Competencies
1


OBJECTIVES
To define Interprofessional Collaboration
To introduce the National Interprofessional Competency Framework (CIHC, 2010)
To review the six Interprofessional Competencies
2



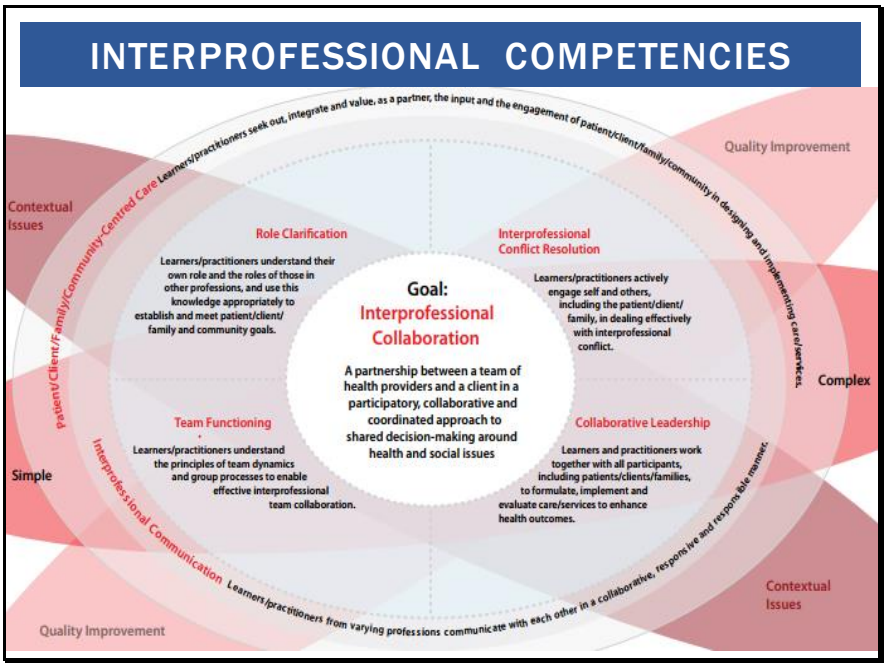
Facilitator Comments:

- Interprofessional collaboration is more than multidisciplinary professionals working alongside each other to provide care and services to patients and families. Interprofessional client-centred care requires collaboration among clients, and other health professionals to optimize the health and wellness of patients and involve them in decision-making.

- Interprofessional collaboration is considered to occur "when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, caregivers and communities to deliver the highest quality of care across settings" (World Health Organization [WHO], 2010, p. 13).

- The Canadian Interprofessional Health Collaboration developed a National Interprofessional Competency Framework (2010). The framework is in alignment with the World Health Organizations vision to improve healthcare systems and care delivery with the goal of improving health outcomes.

- Competency frameworks help to inform professionals of the skills, knowledge and behaviour required for practice success. Competencies have been developed within regulated practice and in specialty practice areas. (Can give specific examples within BCCA if people are interested: competency requirements for chemotherapy administration and general practitioner in oncology practice).



Facilitator Comments:

- The Interprofessional Competency Framework was developed out of an extensive review to provide HCPs in Canada a foundational framework for interprofessional collaborative practice (CIHC, 2010).
- The six competencies are essential for interprofessional practice.
- The framework illustrates how patients themselves and communication are the two foundational competencies that support the other four. The competencies can be applied at any level of practice experience, and the framework has been developed to support HCPs when entering practice and as they professionally develop

NOTE: Provide learners with a handout of *National Interprofessional Competencies Quick Reference Guide* for reference. Link provided in Facilitator Guide.

INTERPROFESSIONAL COMPETENCIES

1. Interprofessional Communication
2. Patient/Family/Community-Centered Care
3. Role Clarification

CIHC, 2010 5

Facilitator Comments:

- The competencies are (read the competencies from this and the next slide)

INTERPROFESSIONAL COMPETENCIES

4. Team Functioning
5. Collaborative Leadership
6. Interprofessional Conflict Resolution

CIHC, 2010 6

Facilitator Comments: *Review slide first and then consider adding comments below.

•According to the British Columbia Patient Centred Care Framework (2015) Patient-centered care:

- Ensures patients retain control over their own choices,
- Assists with autonomous decision making, and
- Supports a partnership between: individuals, families, and HCPs

Patient-centered care incorporates the following key components which are critical to cancer care:

• Self-management and shared and informed decision-making,
• An enhanced experience of health care,
• Improved information and understanding, and
• The advancement of prevention and health promotion activities.

What does this mean for interprofessional collaborative practice?

Patients, families and caregivers are supported partners who are encouraged by the interprofessional team to participate in:

•their own care and decision making,
•can choose their level of participation in decision-making (this is important to remember as we often overload people with information. We need to remember to ask how much patients want to know, and/or who they want their information shared with), and
•quality improvement and health system redesign.

The interprofessional competency of patient/client/community centred care for the novice practitioner starts with decision making and care planning. As you gain experience, and competencies, it extends to influencing organizational systems. At BCCA we encourage you to bring patient concerns and voices forward to influence system change.

Facilitator Comments:

- Interprofessional communication occurs when HCPs communicate with each other and patients and families in a transparent, collaborative, and respectful manner. Interprofessional communication creates trusting relationships within teams and with the people we serve.
- As in all effective communication, verbal and non-verbal communication as well as active listening is essential. The goal of interprofessional communication is to build respectful relationships within the care team and with patients and families. Other skills necessary to share expertise and create new knowledge and understanding within the team which can be used in many combinations are "…negotiating, consulting, interacting, discussing or debating" (CIHC, 2010, p. 16).
- A common understanding of care planning is necessary to communicate interprofessionally as the goal of collaboration is to establish a plan that supports patient goals and priorities. Communicating that plan occurs in many forms. Documentation in the medical record is required along with communication among the team.

Questions to consider asking the group:

- Who would like to share a time when communication in a clinical setting did not go well? Which of the interprofessional communication skills could have helped?
- Why do you think that "competent use of information technology (IT)" is among the descriptors? What are some IT communication examples that could be used at BCCA?
    - Provincial organization. There are many specialists that need to be collaborated with. We use, email, telephone, and inter-office messaging systems.
    - Geography, a lot of appointments occur through videolink or Movi (Citrix).
    - Communicating through the electronic medical record (EMR) is also essential.

Facilitator Comments:

Role clarification is necessary for all team members. HCPs need to understand and be able to clearly articulate their own role and skill set to their colleagues, as well as have an understanding of their colleagues' role. You should be able to:

- Adapt your language and terminology as appropriate to the level of your audience when describing your role and function on the healthcare team
- Provide culturally appropriate care in a timely manner. This requires HCPs to know the scope of their colleagues and who to consult/collaborate with. This is essential when working with the patient to determine how to meet priorities.
- At the same time, role clarification facilitates this happening in an efficient manner that can prevent duplication of work.

Not only must you be able to define your role, and that of others, but you must also be able to integrate this knowledge into how care delivery occurs.

"To be able to work to their full scope of practice, individuals must frequently determine who has the knowledge and skills needed to address the needs of the patients/clients to allow for a more equitable distribution of workload" (CIHC, 2010, p. 12).

- Role clarification can help in avoiding conflict that arises from role overlap. By defining areas of practice that overlap, teams can work together to share responsibility and/or clarify how work will be distributed.

Facilitator Comments:

- Interprofessional collaborative practice requires HCPs to be knowledgeable of organizational culture and group dynamics. It also requires HCPs to know what processes are in place for team work/collaboration to occur (CIHC, 2010). This is different than multidisciplinary care, where groups often work independently within their own scope of practice.
- Examples of team functioning are complex problem solving, shared care plan development and forums for team education and developing policies and programs.
- High functioning teams regularly reflect on their practice to find new ways to work together, and improve policies and system inefficiencies.

Facilitator Comments:

Collaborative leadership at the level of healthcare teams, must be supported by organizational leadership to maintain high functioning collaboration.

- This is shown through organizational vision, policies and guidelines and putting supportive resources in place for HCPs.
- Organizations can also support collaborative leadership through professional development opportunities. Examples of these are opportunities for teams to learn together, and forums for interprofessional collaboration and communication to occur. (Examples are interprofessional rounds and working groups).

At the frontline, collaborative leadership involves:

- communication between multiple stakeholders,
- the sharing of knowledge, and
- a commitment to patients and populations.

HCPs with different levels of responsibility need to take part in collaborative leadership so that they are engaged in communicating needs at the individual level, and advocating for change at the organizational level to support continuous quality care and improvement.

Collaborative leadership also comes in many forms.

- Depending on the circumstance and the individual, HCP examples of collaborative leadership can be: shared, leading self, involve group leaders or involve transformative leadership.

Facilitator Comments:

- Conflict is a part of everyday interactions with people whether it is family, colleagues or acquaintances.
- It often arises from different viewpoints or beliefs.
- Many people view conflict as negative. Conflict can however be positive for organizations, leading to increased engagement, creativity and job satisfaction (Silva et al., 2013). Healthy conflict occurs in an environment where there is mutual respect and an appreciation for the knowledge and ideas that are brought forth by other people.

Although conflict arises from many different origins, sources specific to interprofessional conflict are:

- Roles: differing accountability, and perception of role overload/ambiguity.
- Goals: differing goals that result from differing care philosophies, personal influence of values and professional socialization which lead to developing different care plans.

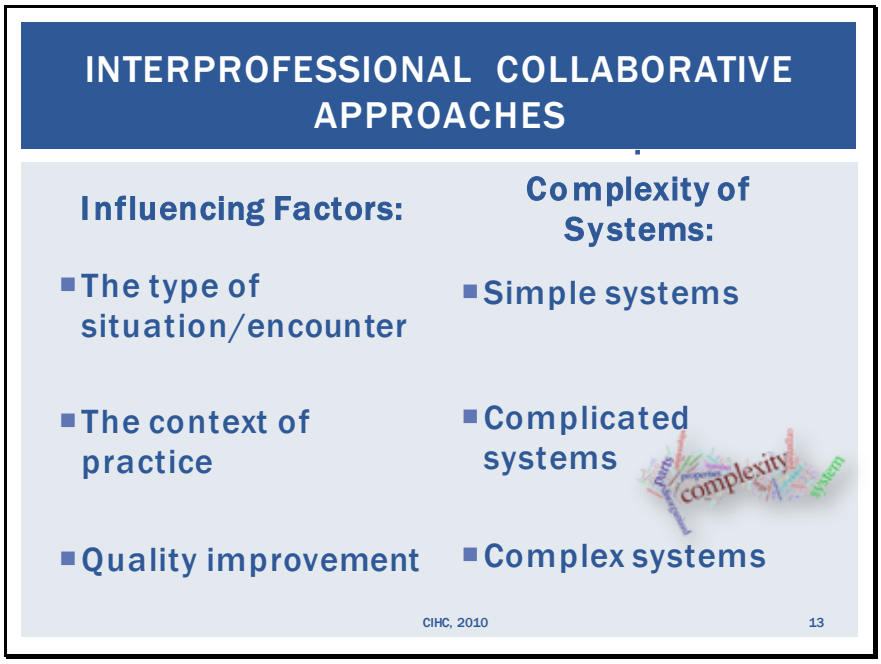
It is important to have an approach/framework to address conflict. A framework can help to:

- Set guidelines,
- Analyze the event or issue,
- Set a safe environment so team members can freely express ideas and opinions, and
- Ensure all points are heard and respectfully considered.

Maintaining patient centered care helps to reduce conflict as teams can work together to meet patient set goals and priorities. This lessens discipline specific priorities and approaches.

Team members must be committed to an interprofessional approach and finding solutions. A safe environment is necessary to discuss ideas and reach consensus on how to best develop a plan to meet patient needs. In this atmosphere of resolving interprofessional conflict, there is no room for hierarchical structures. Interprofessional conflict can in fact arise from hierarchy and HCPs must be prepared to:

- Commit to constructive dissent,
- Address and resolve conflict, and
- Evaluate and manage self-behaviours.



Facilitator Comments:

Varying Complexity: How the framework is used in practice is directly related to the level of complexity of the patient or clinical situation (read slide).

The context of the practice area informs how the framework is applied.

- Oncology requires long-term care of patients. Teams are therefore required to have a comprehensive and consistent approach to care.
- New HCPs, or experienced HCPs that are new to oncology practice, will use a basic approach to interprofessional collaboration. As their oncology experience and knowledge grows, so will the complexity and expertise of their interprofessional collaboration.

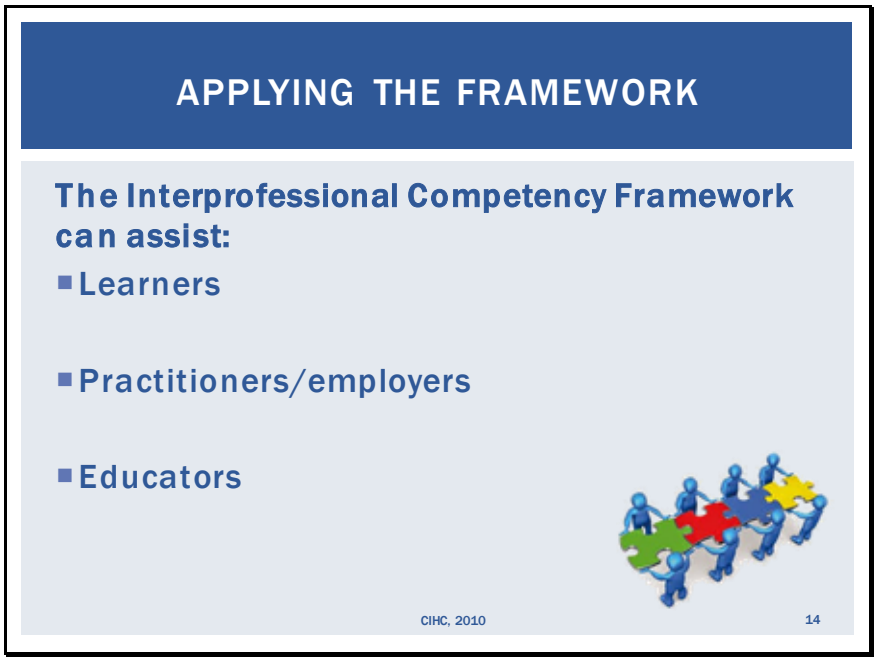
- Simple systems require an understanding of terminology and the interprofessional framework to apply to predictable situations and procedures.
- Complicated systems usually consist of multiple simple systems. So in addition to understanding terminology and the interprofessional competencies, the HCP also must be able to coordinate and apply specialized knowledge and skill.
- Complex systems contain both simple and complex systems that are interdependent. The HCP applying interprofessional competencies at this level must have the skill to adapt in changing circumstances and be prepared for uncertainty.

- An example of a simple system in an oncology setting would be a fifty year old female who is receiving treatment for breast cancer. She lives with her husband of 25 years,

and has no dependent children living at home. In addition, she has adapted well to her diagnosis, has a steady income, and is managing treatment without complications.

- A complicated system would be a sixty four year old female with the same diagnosis, who is concerned about missing work because she has no medical leave benefits and developed febrile neutropenia following her second cycle of chemotherapy.

- A complex system would be a 35 year old male with metastatic pancreatic cancer. He is married and the single income earner for his family of four young children aged two to seven. In addition he is an insulin dependent diabetic, lives a two hour commute from the cancer centre, and has a heavy symptom burden that requires hospitalization.



Facilitator Comments:

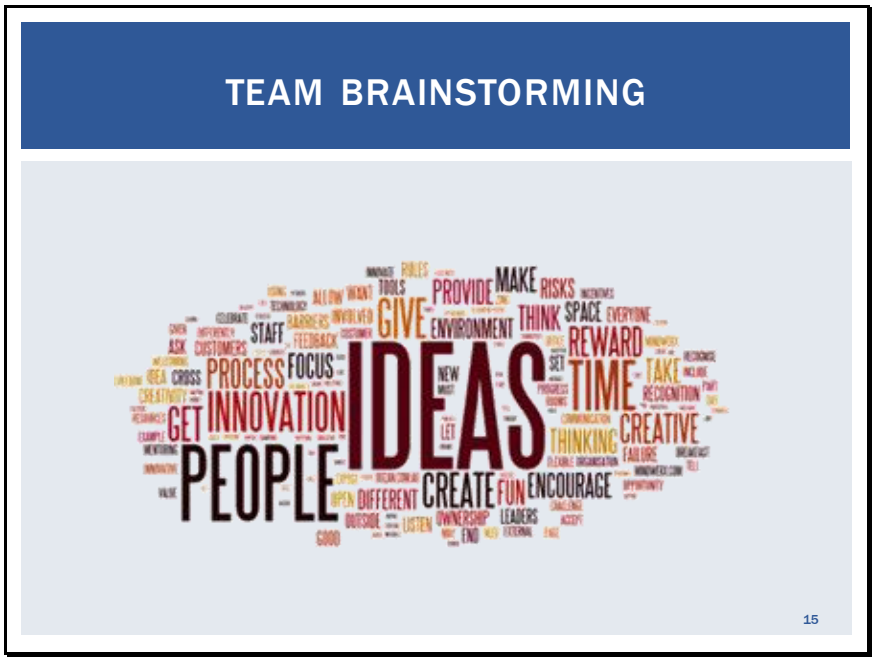
- Learners: Those wanting to use interprofessional competencies for professional development need to identify learning goals and determine activities.
- Practitioners/employers: must support and enable collaborative practice, identify indicators for quality improvement, and provide or support conflict training.
- Educators: The Framework can be used to identify relevant learning experiences and strategies, and identify learning outcomes. It can also provide structure for developing education programs and continuing competency learning activities.

The National Interprofessional Competency Framework can be used by individuals and teams, in both academic and health delivery settings. The framework has the four central domains of:

- Role clarification,
- Team functioning,
- Interprofessional conflict resolution, and
- Collaborative leadership.

In addition, there are the two domains that are foundational and support the other four. These are:

- Interprofessional communication, and
- Patient centered care.
- "The ability of learners and practitioners to collaborate has a developmental nature- each of the competencies develops over an individual's professional lifespan and all are exercised within changing practice/learning contexts" (CIHC, 2010, p. 23).



Facilitator Comments:

Team Brainstorming:

- In this activity you will work in pairs/threes (depends on size of orientation) and write your brainstorming ideas on the easel sized paper.
- After reflecting on the patient scenario, the group can discuss and write down their ideas related to the interprofessional competencies they have been given to work with.
    - They will be given 10 minutes for small group brainstorming.
    - Next they will be given 10 minutes to report back to the larger group.
    - After report back with the larger group 10 minute will be given for everyone to develop a shared care plan that combines the ideas brought forth from the different interprofessional competency brainstorming.

The scenario is included in the Instructions for Interprofessional Activities and Activity Handouts as Interprofessional Competency Framework: Team Brainstorming.

Activity supplies:

- 6 post-it easel paper. Each prepared in advance with one of the interprofessional competencies written on it.
- Permanent markers.

SCENARIO DEBRIEF

How were you able to use the Interprofessional Competencies to support Bana and Mia?

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INTERPROFESSIONAL ONCOLOGY ORIENTATION

Case Study: Facilitator Guide

Case Study Introduction

The Case Study will provide a review of key aspects of each orientation session in the context of a patient scenario. The Orientation group should be divided into three to four small groups comprised of a mix of professionals.

The Case Study is meant to be read together, one section at a time. Each section has a question for work within the small group. Once reviewed, the small groups can discuss the question and decide on the answer(s). For the multiple choice questions, the groups can choose more than one answer. The facilitator can give each group poster card letters (A, B, C, D) and following the suggested times ask the groups to raise their answer(s). Use of the poster card letters is optional. Prior to starting, please provide each group with a copy of the Interprofessional Oncology Orientation: Case Study.

Bal's Diagnosis

Baldeep (Bal) is a 56 year old independent logging truck driver who is contracted by several lumber and pulp mills in Northern BC. Bal is a practicing Sikh, and lives at home with his wife Parmjeet, three teenage children, and his elderly parents.

The symptoms that Bal developed over the last six months are intermittent constipation and lower abdominal pain. Bal has been worried about his symptoms, however, seeing a physician is difficult for him since he does not wish to speak about his bowels or have the doctor exam him. Bal also remembers the last time he went to see his physician and how confusing the information was for him.

Following a sudden onset of severe lower abdominal pain, Parmjeet insisted that Bal go to emergency. A CT scan revealed a mass in his rectal area, and Bal was referred to a surgeon for a biopsy. Two weeks later Bal received a diagnosis of Stage III adenocarcinoma of the

rectum. His surgeon told him that he would be seeing a Radiation and Medical Oncologist at the BC Cancer Agency.

Question One

When Bal arrives for his first appointment at the Cancer Centre, he tells the Radiation Oncologist that "it is my own fault that I have cancer. It's hard to eat healthy on the road and I spend too much time sitting. How long will these treatments take? I have to get back to work soon so that I can pay my bills".

Considering the Supportive Care Framework (Fitch, 2008), which of Bal's needs are most important at this moment in time? (Five minutes for groups to discuss and determine answer, five minutes to provide answers back and discuss)

a) Bal has recognized that his sedentary behaviour is a health risk and may have contributed to his cancer. HCPs need to consider his informational needs and provide information to promote an active lifestyle.

b) Bal has unmet emotional and practical needs and may need to be supported through reassurance and assistance with securing financial resources.

c) Bal's need to provide financial support to his family is a priority, which indicates that meeting social needs are important to him.

d) These comments could indicate that Bal is depressed and unable to cope. Therefore it is important to provide psychological support and refer him to a counselor.

Facilitators Comments

B is the most correct answer. Shame and self-blame are emotional responses and require supportive reassurance to help people adjust to positive coping. Similarly, having to pay bills is a real and practical concern for Bal. Bal needs to understand the timeframe of his cancer treatment. He will not get back to work quickly, and may require help securing financial support to successfully complete his treatment.

Although there is merit to choice A, it is not a correct choice in this context. Part of Bal's informational needs will be related to maintaining or increasing his activity level to reduce risk of complications and fatigue. In this moment HCPs should provide reassurance to Bal that there are many factors involved and that he is not to blame. This would help to decrease Bal's emotional distress and assist with supporting his emotional need.

C may be correct, however, further assessment is needed. Based on the information that has been given in the case so far, it would be an assumption that Bal has a social need to support his family.

D is incorrect. Further assessment would be needed to determine if Bal is depressed or has inadequate coping.

Informed by:
Supportive Care Framework (Fitch, 2008)

Bal's Treatment

Bal has seen both Oncologists and understands that he will receive chemoradiation treatment consisting of 25 fractions/5 weeks of radiation and oral Capecitabine 825mg/m2- twice a day on each radiation treatment day. This will be

followed by surgery to remove any residual cancer, and six more cycles of Capecitabine.

Two weeks into treatment, Bal develops grade III diarrhea and calls the nursing help line. Nathan is the Nurse providing telephone care that day. Although Nathan has been a Registered Nurse (RN) for two years, he has only been working at the BC Cancer Agency for four months. Prior to that, he worked on a general surgery ward at the local hospital.

Nathan has completed the BCCA chemotherapy and biotherapy certification course, and training to provide telephone care. He is familiar with the medication Capecitabine, and completes a focused assessment of Bal's main concern which is diarrhea. Nathan identified:

- The diarrhea has been present for five days.
- Bal is having seven additional watery bowel movements a day.
- His rectal area is very sore and irritated by the diarrhea.
- He is continuing to take the Capecitabine as prescribed.
- Bal is taking Imodium according to the package directions, and not as indicated for chemotherapy related diarrhea.

- Bal has not made any changes to his diet, and although he is drinking about six glasses of water a day, he has noticed that he is only urinating twice a day (in the morning and in the evening).
- Bal stated that his urine is dark yellow.

Question Two

Nathan informs Bal that he will need to discuss the concerns with some other members of the team. He has reassured Bal that following the discussion he will be called back and provided with advice and instruction on dealing with the diarrhea.

Considering the information that Nathan has gathered, what would you consider the interprofessional complexity to be? (Five minutes for groups to discuss and determine answer, five minutes to provide answers back and discuss).

a) Simple systems
b) Complicated systems
c) Complex systems

Facilitators Comments

With the information provided, complicated systems, or B is the most probable answer. Though the symptom in isolation could be categorized in a simple system, Bal's diarrhea is complicated by the fact that both the chemotherapy and radiation therapy may be contributing to it. The Imodium may work, however it will be more challenging to control.

There may also be complicating factors such as, a need to re-inforce education related to safety and self-care. Bal would have been given information on side-effect management, which would have included use of Imodium for cancer related diarrhea. Therefore, the HCPs need to assess further to determine the reasons for not taking the right dose of Imodium, and his rationale for waiting five days to report this symptom. Elements in the case study for discussion are:

- Concerns for Bal:
  - Health literacy, and
  - Cultural concerns regarding difficulty to bring forward concerns about his bowels and feces.
- Concerns for HCPs:

- How was Bal's understanding of self-management assessed?
- Does he understand the seriousness of these side effects?

Informed by:
National Interprofessional Competency Framework (CIHC, 2010).

Question Three

How can Nathan use the Symptom Management Guideline (SMG): Diarrhea, in combination with the interprofessional competencies to support Bal? (Five minutes for groups to discuss and determine answer, five minutes to provide answers back and discuss).

a) The SMG can provide Nathan with further assessment questions. These can be shared with other HCPs to instruct their practice.

b) Along with nursing interventions, the SMGs have links to supportive care documents from other professions that can be used to support Bal's information needs.

c) The diarrhea SMG outlines independent interventions and those needing collaboration with other HCPs. This would be helpful to assist with collaborating in a timely manner.

d) Nathan would need to be aware of other HCPs scope of practice and the team processes at the centre to know how to best share the SMG with other team members.

Facilitator Comments

A is incorrect. Although the SMG has a focused assessment section that provides nurses with focused assessment questions, it is a supportive guideline and is not intended to instruct the practice of other HCPs.

B, C, and D are all correct.

B: SMGs do have active links to supportive care documents that are current and evidence based. Examples of these are the nutrition services patient handout on increasing fluid intake.

C: All SMGs provide preventive care and educational interventions that are within a RNs scope of practice to use independently. There are also interventions that can be used in collaboration with other HCPs, such as suggested lab work.

D: An important competency in interprofessional collaboration is role clarity. Understanding the role and scope of practice of the other HCPs on your team, along with team processes within your organization, will inform how you use all resources to support patients and your work as a team.

Informed by:
Symptom Management Guidelines, (BC Cancer Agency, 2014).

National Interprofessional Competency Framework, (CIHC, 2010).

A Team Huddle

Nathan asked a senior Oncology Nurse named Cheryl, a General Practitioner in Oncology (GPO) named Jenna, and a Pharmacist named Matteo to huddle with him to discuss his assessment of Bal's diarrhea. After providing the

assessment data, Jenna asked Nathan if he felt he had completed a thorough assessment of Bal.

Nathan said that he felt that he could not fully assess if Bal was dehydrated without completing a physical assessment and vital signs. He also stated that Bal should have known better than to wait so long before reporting his symptoms. This was basic information provided to him in the new patient teaching session.

Jenna stated that from her perspective, a full assessment would require blood work to assess Bal's electrolytes. Matteo agreed with the team and said that any medication recommendations to treat the diarrhea could not be made without knowing Bal's vital signs and electrolyte levels.

Question Four

Which of the following statements relating to the Interprofessional Competencies are true? (Five minutes for groups to discuss and determine answer, five minutes to provide answers back and discuss).

a) By huddling with the interprofessional team members, Nathan was able to increase his knowledge and clarity of their roles to determine how to best address Bal's needs.

b) By working together, Nathan was able to determine that the role of the pharmacist was unnecessary for this collaboration.

c) By arranging for team collaboration through a huddle, Nathan was able to demonstrate collaborative leadership through facilitating team processes and decision making.

d) Nathan was able to demonstrate interprofessional communication through clearly stating his telephone assessment of Bal.

Facilitators Comments

A and C are the most correct. Nathan is fairly new to the team. By huddling with other team members, he was able to gain knowledge from the other disciplines and increase role clarity and responsibility. Nathan also showed collaborative leadership through bringing the group

together to address concerns in a timely fashion, and facilitate care of the patient.

B is incorrect. Matteo, the pharmacist, was able to contribute knowledge to the decision making process. The recommendation to gather more data before treating with medication was important.

D is only partially correct. To be able to clearly relay Bal's assessment was an important part of interprofessional communication. Additional components of interprofessional communication such as, active listening, building rapport and relationships, and negotiating are also required. Nathan also demonstrated these qualities.

Informed by:
National Interprofessional Competencies Framework, (CIHC, 2010).

Providing Feedback

Cheryl is feeling conflicted over what transpired in the team discussion. On the one hand, she was pleased that Nathan had shown leadership and gave clear communication of Bal's symptoms. She was concerned, however, with Nathan's comments that "Bal should have known better than to wait so long before reporting his symptoms as this was basic information provided in his new patient teaching session". Cheryl believes that this would be a good opportunity to reinforce Fitch's (2008) Supportive Care Framework as well as the National Interprofessional Competency Framework (CIHC, 2010).

Cheryl asks Nathan how he felt things went in the huddle. Nathan stated that he appreciated everyone's input and felt that he was able to take the information that was shared to develop a care plan with Bal. Cheryl agreed and asked Nathan if he was open to her giving some feedback. Nathan was receptive to this, and told Cheryl that he would meet with her once he finished his call to Bal.

Question Five

How can Cheryl use the Supportive Care Framework and National Interprofessional Competencies as a base for her feedback to Nathan? Discuss with your group the feedback that you think Cheryl can provide to Nathan, and how she should go about delivering this.

Facilitators Comments

Discussion points for supportive care:

- Encourage Nathan to assess the reasons Bal may have not called in sooner. Most likely due to having unmet supportive care needs.
    - Informational: HCPs can take a curious approach to assessing what information was understood and what the gaps are.
    - Emotional: Has fear or anxiety interfered with Bal reporting his symptoms? Is there mistrust with healthcare professionals?
    - Spiritual: There may be cultural/spiritual issues that are preventing Bal from seeking assistance with his symptoms.

    - Psychological: How is Bal coping with body image? Is there denial or loss issues.

Informed by:

Supportive Care Framework, (Fitch, 2008).

- In the context of Interprofessional competencies:
    - This is an opportunity for Nathan and Cheryl to approach interprofessional conflict positively.
    - Nathan may need to work on providing patient centered care and considering Bal and equal partner. This was not shown in how he is presented Bal to the interprofessional team.
    - Nathan needs to ensure that in his role as a Registered Nurse that he is delivering culturally sensitive care.
    - For interprofessional team functioning, Nathan must be professional and act ethically on behalf of the patient.

Informed by:

National Interprofessional Competencies Framework, (2010).

A Potential Treatment Delay

Despite attempts to reduce the diarrhea, Bal gets admitted to the hospital for intravenous hydration.

The next day John, a Radiation Therapist, receives a call from the medical nurse caring for Bal. The nurse tells John that Bal will not be coming to his radiation treatment because the admitting physician has decided to cancel the RT treatments for this week to "give Bal's bowels a rest".

John knows that this is not best for Bal, and that cancelling his treatments may in fact negatively impact his outcome. John tries to communicate this information to Bal's nurse, and to tell her that the admitting physician needs to speak to the Radiation Oncologist regarding Bal's treatment. The conversation does not go well and the nurse tells John "I am just following orders" and abruptly ends the telephone call.

Question Six

Work with your group to describe how the interprofessional competency that you are assigned can be used in this situation to ensure

that Bal will get the care that he needs. (Thirty minutes)

1. Communication
2. Conflict resolution
3. Role clarification
4. Collaborative Leadership
5. Patient Centered Care
6. Team Functioning

Facilitator Comments

Give each group one or two competencies to work through. Provide the groups with a copy of the *National Interprofessional Competency Framework* (CIHC, 2010), and pen and paper to write down their responses. (Ten minutes)

Allow each group to report back their thoughts on how the competency framework could be applied to improve the scenario. (Ten minutes)

Provide the opportunity for inter-group discussion on any key learning points from this question. (Ten minutes)

Conflict Resolved

Using the advice from several members of the interprofessional team, John decides that it is best to meet with the nurse in-person and walks over to the medical ward.

Through focusing on patient centered goals of care and conflict resolution techniques, John and the nurse work through the issues. In doing so they focus on the valid concerns of the admitting physician in addition to the benefit verses the potential adverse outcome associated with delaying treatment.

They request a team meeting with both physicians and Bal.

All parties agree on the following plan.

- Continue radiation treatment with the support of inpatient care until diarrhea is resolved.
- Maintain hydration with IV fluids and monitor electrolyte balance with lab work and supplements as necessary.
- Communication between physicians related to any new or ongoing concerns prior to changing

any treatment plan that affects goals of care/treatment.

Case Study Conclusion

Later that day John reflects on the situation that occurred with Bal. Although he is happy with the outcome, he wonders what support and resources should be in place to prevent this from happening in the future.

The last part of the Case Study requires some critical thinking and a challenge for your group to problem solve along with John. (Fifteen minutes to discuss and brainstorm ideas for the questions below. Fifteen minutes to debrief).

1. Reflect on the situations "A Potential Delay" and "Conflict Resolved" with your group.

2. Discuss what you think some of the gaps are.

3. Consider the Interprofessional Competencies to identify potential solutions at the:
    a. individual,
    b. organizational, and/or
    c. inter-agency levels.

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INTERPROFESSIONAL ONCOLOGY ORIENTATION

Case Study

Bal's Diagnosis

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The symptoms that Bal developed over the last six months are intermittent constipation and lower abdominal pain. Bal has been worried about his symptoms, however, seeing a physician is difficult for him since he does not wish to speak about his bowels or have the doctor exam him. Bal also remembers the last time he went to see his physician and how confusing the information was for him.

Following a sudden onset of severe lower abdominal pain, Parmjeet insisted that Bal go to emergency. A CT scan revealed a mass in his rectal area, and Bal was referred to a surgeon for a biopsy. Two weeks later Bal received a diagnosis of Stage III adenocarcinoma of the rectum. His surgeon told him that he would be seeing a Radiation and Medical Oncologist at the BC Cancer Agency.

Question One

When Bal arrives for his first appointment at the Cancer Centre, he tells the Radiation Oncologist that "it is my own fault that I have cancer. It's hard to eat healthy on the road and I spend too much time sitting. How long will these treatments take? I have to get back to work soon so that I can pay my bills".

Considering the Supportive Care Framework, which of Bal's needs are most important at this time?

a) Bal has recognized that his sedentary behaviour is a health risk that may have contributed to his cancer. HCPs need to consider his informational needs and provide information to promote an active lifestyle.

b) Bal has unmet emotional and practical needs and may need to be supported through reassurance and assistance with securing financial resources.

c) Bal's need to provide financial support to his family is a priority, which indicates that meeting social needs are important to him.

d) These comments could indicate that Bal is depressed and unable to cope. Therefore it is important to provide psychological support and refer him to a counselor.

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focused assessment of Bal's main concern which is diarrhea. Nathan identified that:

- The diarrhea has been present for five days.
- Bal is having seven additional watery bowel movements a day.
- His rectal area is very sore and irritated by the diarrhea.
- He is continuing to take the Capecitabine as prescribed.
- Bal is taking Imodium according to the package directions, and not as indicated for chemotherapy related diarrhea.
- Bal has not made any changes to his diet, and although he is drinking about six glasses of water a day, he has noticed that he is only urinating twice a day (in the morning and in the evening).
- Bal stated that his urine is dark yellow.

Question Two

Nathan informs Bal that he will need to discuss the concerns with some other members of the team. He has reassured Bal that following the discussion he will be called back and provided

with advice and instruction on dealing with the diarrhea.

Considering the information that Nathan has gathered, what would you consider the interprofessional complexity to be?

a) Simple systems
b) Complicated systems
c) Complex systems

Question Three

How can the Nathan use the Symptom Management Guideline (SMG): Diarrhea, in combination with the interprofessional competencies to support Bal?

a) The SMG can provide the Nathan with further assessment questions. These can be shared with other HCPs to instruct their practice.

b) Along with nursing interventions, the SMGs have links to supportive care documents from other professions that can be used to support Bal's information needs.

c) The diarrhea SMG outlines independent interventions and those needing collaboration with other HCPs. This would be helpful to assist with collaborating in a timely manner.

d) Nathan would need to be aware of other HCPs scope of practice and the team processes at the centre to know how to best share the SMG with other team members.

A Team Huddle

Nathan asked a senior Oncology Nurse named Cheryl, a General Practitioner in Oncology (GPO) named Jenna, and a Pharmacist named Matteo to huddle with him to discuss his assessment of Bal's diarrhea. After providing the assessment data, Jenna asked Nathan if he felt he had completed a thorough assessment of Bal.

Nathan said that he felt that he could not fully assess if Bal was dehydrated without completing a physical assessment and vital signs. He also stated that Bal should have known better than to wait so long before reporting his symptoms.

This was basic information provided to him in the new patient teaching session.

Jenna stated that from her perspective, a full assessment would require blood work to assess Bal's electrolytes. Matteo agreed with the team and said that any medication recommendations to treat the diarrhea could not be made without knowing Bal's vital signs and electrolyte levels.

Question Four

Which of the following statements relating to the Interprofessional Competencies are true?

a) By huddling with the interprofessional team members, Nathan was able to increase his knowledge and clarity of their roles to determine how to best address Bal's needs.

b) By working together, Nathan was able to determine that the role of the pharmacist was unnecessary for this collaboration.

c) By arranging for team collaboration through a huddle, Nathan was able to demonstrate collaborative leadership through facilitating team processes and decision making.

d) Nathan was able to demonstrate interprofessional communication through clearly stating his telephone assessment of Bal.

Providing Feedback

Cheryl is feeling conflicted over what transpired in the team discussion. On the one hand, she was pleased that Nathan had shown leadership and gave clear communication of Bal's symptoms. She was concerned, however, with Nathan's comments that "Bal should have known better than to wait so long before reporting his symptoms as this was basic information provided in his new patient teaching session". Cheryl believes that this would be a good opportunity to reinforce Fitch's (2008) Supportive Care Framework as well as the National Interprofessional Competency Framework (CIHC, 2010).

Cheryl asks Nathan how he felt things went in the huddle. Nathan stated that he appreciated everyone's input and felt that he was able to take the information that was shared to develop a care plan with Bal. Cheryl agreed and asked Nathan if he was open to her giving some feedback. Nathan was receptive to this told Cheryl that he would meet with her once he finished his call to Bal.

Question Five

How can Cheryl use the Supportive Care Framework and National Interprofessional Competencies as a base for her feedback to Nathan? Discuss with your group the feedback that you think Cheryl can provide to Nathan, and how she should go about delivering this.

A Potential Treatment Delay

Despite attempts to reduce the diarrhea, Bal gets admitted to the hospital for intravenous hydration.

The next day John, a Radiation Therapist, receives a call from the medical nurse caring for Bal. The nurse tells John that Bal will not be coming to his radiation treatment because the admitting physician has decided to cancel the RT treatments for this week to "give Bal's bowels a rest".

John knows that this is not best for Bal, and that cancelling his treatments may in fact negatively impact his outcome. John tries to communicate this information to Bal's nurse, and to tell her

that the admitting physician needs to speak to the Radiation Oncologist regarding Bal's treatment. The conversation does not go well and the nurse tells John "I am just following orders" and abruptly ends the telephone call.

Question Six

Work with your group to describe how the interprofessional competency that you are assigned can be used in this situation to ensure that Bal will get the care that he needs.

1. Communication
2. Conflict resolution
3. Role clarification
4. Collaborative Leadership
5. Patient Centered Care
6. Team Functioning

Conflict Resolved

Using the advice from several members of the interprofessional team, John decides that it is best to meet with the nurse in-person and walks over to the medical ward.

Through focusing on patient centered goals of care and conflict resolution techniques, John and the nurse work through the issues. In doing so they focus on the valid concerns of the admitting physician in addition to the benefit verses the potential adverse outcome associated with delaying treatment.

They request a team meeting with both physicians and Bal.

All parties agree on the following plan.

- Continue radiation treatment with the support of inpatient care until diarrhea is resolved.
- Maintain hydration with IV fluids and monitor electrolyte balance with lab work and supplements as necessary.
- Communication between physicians related to any new or ongoing concerns prior to changing any treatment plan that affects goals of care/treatment.

Case Study Conclusion

Later that day John reflects on the situation that occurred with Bal. Although he is happy with the outcome, he wonders what support and resources should be in place to prevent this from happening in the future.

The last part of the Case Study requires some critical thinking and a challenge for your group to problem solve along with John.

1. Reflect on the situations "A Potential Delay" and "Conflict Resolved" with your group.

2. Discuss what you think some of the gaps are.

3. Consider the Interprofessional Competencies to identify potential solutions at the:
    a. individual,
    b. organizational, and/or
    c. inter-agency levels.

INTERPROFESSIONAL ONCOLOGY ORIENTATION

Clinical Observation Day Guide

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CLINICAL OBSERVATION DAY

INTRODUCTION

The Clinical Observation Day will provide you with the opportunity to shadow an interprofessional team member to observe interprofessional practice and patient care within the various clinical areas throughout the BC Cancer Agency.

OBJECTIVES

The overall goal of the observation day is to provide you with opportunities to:

1. Observe interprofessional collaboration and communication in a clinical setting
2. Actively search for and access practice resources to support your interprofessional practice
3. Reflect on how your new knowledge from orientation can be applied in the clinical setting
4. Meet and start to establish relationships with members of the interprofessional team

Guiding Questions

Your mentor will assist you to seek out learning opportunities that align with the objectives of the interprofessional observation day. The following questions are meant to support and enhance your learning:

1. What patient populations are being cared for in this clinical area?

2. What other team members work in this area and how do they work together?

3. What is your role in this clinical setting?

4. What resources are available to support your interprofessional practice?

5. Where are the resources located?

6. Who can assist you with locating/accessing resources should you need help?

7. Where do you find patient information? Practice accessing this information.

Reflection Exercise

Learning is active. By reflecting on what you would do, or how you would respond in a clinical situation, you can enhance learning through articulating your thoughts in writing or discussion with your mentor (Sloan, 2017). Your mentor will plan time prior to the end of the shift to discuss your answers to the following questions and provide feedback.

What is the patient focus for your interprofessional colleagues?

What would be your role in caring for this patient?

In what areas does the role of your interprofessional colleague, and your role, overlap?

In what ways can the role overlap benefit the patients you care for?

How would you communicate in these instances to prevent duplication of work or to collaborate on developing the patients care plan?

Using the National Interprofessional Competency Framework (CIHC, 2010), how would you collaborate with the team (including the patient) to ensure the patient's needs were met?

References

BC Cancer Agency. (2011). Provincial Nursing Orientation. Professional Practice Nursing.

Canadian Interprofessional Health Collaborative. (2010). A National interprofessional competency framework. Retrieved from http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf

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NATIONAL INTERPROFESSIONAL COMPETENCY FRAMEWORK SELF-ASSESSMENT

The CIHC National Interprofessional Competency Framework[1] describes the competencies required for effective interprofessional collaboration. Six competency domains highlight the knowledge, skills, attitudes and values that together shape the judgments that are essential for interprofessional collaborative practice. These domains are:

- Role Clarification
- Team Functioning
- Patient/Client/Family/Community-Centred Care
- Collaborative Leadership
- Interprofessional Communication
- Interprofessional Conflict Management

This self-assessment survey allows you to reflect on your areas of strength in collaborative practice and areas that you may wish to strengthen. Please indicate how well you believe you attend to each of the following indicators.

Example: Competency	**Never**	**Rarely**	**Some times**	**Almost always**	**Does not apply**
Indicator #1				√	
Indicator #2			√		

[1] CIHC National Competency Framework draft (2010)

I. Role Clarification

Learners/practitioners understand their own role and the roles of those in other professions, and use this knowledge appropriately to establish and achieve patient/client/family and community goals.

Indicator	Never	Rarely	Some times	Almost always	Does not apply
Describes own role and that of others					
Recognizes and respects the diversity of other health and social care roles, responsibilities, and competencies					
Performs own roles in a culturally respectful way					
Communicates roles, knowledge, skills, and attitudes using appropriate language					
Considers the roles of others in determining own professional and interprofessional roles					
Accesses others' skills and knowledge appropriately through consultation					
Considers the roles of other in determining own professional and interprofessional roles.					
Integrates competencies/roles seamlessly into models of service delivery					

II. Patient/Client/Family/Community-Centred Care

Learners/practitioners seek out, integrate and value, as a partner, the input, and the engagement of the patient/client/family/community in designing and implementing care/services.

Indicator	Never	Rarely	Some times	Almost always	Does not apply
Supports the participation of patients/clients, their families, and/or community representatives as integral partners alongside with healthcare personnel					
Shares information with patients/clients, (or family and community)in a respectful manner and in such a way that it is understandable, encourages discussion, and enhances participation in decision-making					
Ensures that appropriate education and support is provided to patients/clients, family members and others involved with care or service					
Listens respectively to the expressed needs of all parties in shaping and delivering care or services					

III. Team Functioning

Learners/practitioners understand the principles of team work dynamics and group/team processes to enable effective interprofessional collaboration.

Indicator	Never	Rarely	Some times	Almost always	Does not apply
Understands the process of team development					

Develops a set of principles for working together that respects the ethical values of members					
Effectively facilitates discussions and interactions among team members					
Participates, and is respectful of all members' participation, in collaborative decision-making					
Regularly reflects on their functioning with team learners/practitioners and patients/clients/families					
Establishes and maintains effective and healthy working relationships with learners/practitioners, patients/clients, and families, whether or not a formalized team exists					
Respects team ethics, including confidentiality, resource allocation, and professionalism					

IV. Collaborative Leadership

Learners/practitioners understand and can apply leadership principles that support a collaborative practice model. This domain supports shared decision-making as well as leadership but it also implies continued individual accountability for one's own actions, responsibilities and roles as explicitly defined within one's professional/disciplinary scope of practice.

Indicator	**Never**	**Rarely**	**Some times**	**Almost always**	**Does not apply**
Works with others to enable effective patient/client outcomes					
Advancement of interdependent working relationships among all participants					

Facilitation of effective team processes					
Facilitation of effective decision-making					
Establishment of a climate for collaborative practice among all participants					
Co-creation of a climate for shared leadership and collaborative practice					
Application of collaborative decision-making principles					
Integration of the principles of continuous quality improvement to work processes and outcomes					

v. Interprofessional Communication

Learners/practitioners from different professions communicate with each other in a collaborative, responsive and responsible manner.

Indicator	Never	Rarely	Some times	Almost always	Does not apply
Establishes team work communication principles					
Actively listens to other team members including patients/clients/families					
Communicates to ensure common understanding of care decisions					
Develops trusting relationships with patients/clients/families and other team members					
Effectively uses information and communication technology to improve interprofessional patient/client/community-centred care					

VI. Interprofessional Conflict Management

Learners/practitioners actively engage self and others, including the client/patient/family, in positively and constructively addressing disagreements as they arise.

Indicator	Never	Rarely	Some times	Almost always	Does not apply
Values the potential positive nature of conflict					
Recognizes the potential for conflict to occur and taking constructive steps to address it					
Identifies common situations that are likely to lead to disagreements or conflicts, including role ambiguity, power gradients, and differences in goals					
Knows and understands strategies to deal with conflict					
Sets guidelines for addressing disagreements					
Effectively works to address and resolve disagreements, including analyzing the causes of conflict and working to reach an acceptable solution					
Establishes a safe environment in which to express diverse opinions					
Develops a level of consensus among those with differing views; allowing all members to feel their viewpoints have been heard no matter what the outcome					

Adapted from CIHC National Competency Framework (CIHC, 2010)

1) Canadian Interprofessional Health Collaborative. (2010). A National interprofessional competency framework. Retrieved from http://www.cihc.ca